



GUNKUL

not only the energy, we care

LEADING THE INTEGRATED SUSTAINABLE ENERGY TRANSITION

Form 56-1 One Report 2021

We believe that

Contributing back to the society

is not only a responsibility but a commitment

Produce and
distribute of equipment
for electrical with
technology and
innovation

Provide renewable
energy for government
agencies and
private sectors

Deliver the one stop
services of EPC
and O&M with
the world class
standard

Integration of
the construction
knowledge and
expertise for
our customer





Way to Live More Sustainability

Non-stop developing technology and creating
innovations for sustainable development

Provide a technology
system that is suitable
for unusual conditions
or situations

Use renewable
energy efficiently
by technology
and innovation

Extend its capital
strength by expanding
its renewable
energy businesses

Create sustainable
development in
an environmentally
friendly way

Create a strong
society and live
together in a
balanced way

We care

Fundamental

of the business

Balance business
growth with
environmentally
friendly innovation



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Vision

To be a leader in integrated energy business covering renewable energy, electrical equipment, and power system, with cutting-edge technology and innovation for sustainable infrastructure development, and to be a global player in cannabis business with desire to improve quality of life and good wellness.



Mission

Renewable Energy

Establish renewable energy power plants with high standards and efficiency while prioritizing society, local community and the environment.

Cannabis

Produce hemp/cannabis in accordance with GAP and GMP standards so that it can be utilized in a wide range of products that improve quality of life, allowing customers to benefit the most.

Sales

To procure and deliver high quality power systems, energy saving products, cannabis products, distribution channels and render the services to fulfill customers' demand.

Technology

To develop the IT system and adopt the new technology and innovation to improve business efficiency in management, production, and services as well as develop new products and services to fulfill all demands of business partners.

Returns

Balance and maximize the shareholders and other stakeholders' returns.

People Management

Enhance employees' capability and broaden their knowledge and skills to extensive level in order to be in line with the Company's core competencies. All employees will be treated thoroughly and fairly, with human rights as a cornerstone.

Management Framework

Business structuring and management in accordance with good corporate governance principles, while maintaining a sense of responsibility for the economy, society, and environment.



Corporate Culture

We GROWTH together



Goal

Determination to achieve goals



Reliability

To be reliable and professional at work



Ownership

Caring and unity



Wisdom Learning

Learning constantly causing intelligence and adaptation



Technology and Innovation

Exposure to technology and extending innovation



Honesty and Governance

Honest, transparent and dedicated to the responsibilities

New Journey for Tomorrow

Become Gunkul Companion

Renewable Energy for Sustainability

Produce and distribute renewable energy electricity in both domestically and internationally, comprising solar, wind, and biomass energy, to reduce greenhouse gas emissions and enhance the amount of effort invested into combating climate change.

Total Solution of Engineering and Turnkey

Provide comprehensive engineering, maintenance, procurement, installation and construction services for renewable energy power plants, power stations, transmission lines, and grounding systems, submarine cable microgrid system, energy storage system, and related intelligent device systems.

High Voltage Equipment

Produce, procure and sell electrical equipment for power stations, including medium to high-voltage transmission lines rated at 115 kV, grounding equipment, equipment for electricity transmission lines and distribution systems, and a variety of tools and personal protective equipment, as well as energy-saving and alternative energy products, both domestically and internationally.

Ecosystem Business Platform & Innovation

Focus on developing an ecosystem business platform that incorporates new technologies to create value-added to the business. Provide opportunities for the Company and business partners to expand beyond their boundaries in order to maximize their customer base. Additionally, there will be products and services available to meet the need of each party as well as exploring new channels to strengthen the business and become a sustainable leader in the energy business.

Cannabis

Increase opportunities and add value to the business to become the New S Curve by leveraging the potential of existing projects with plans of cultivating hemp and cannabis in a greenhouse system for highest quality control. Focus on a professional hemp and cannabis businesses for Thai people's health.



Business Overview

Gunkul Engineering Public Company Limited (the “Company”) or GUNKUL engages in renewable energy, integrated electrical system and equipment for sustainable infrastructure. The Company is now expanding into hemp and cannabis businesses using cutting-edge technology and innovation to improve people’s quality of life and better health and infrastructure.

Throughout the past, the Company has been committed to the sustainable its energy business, with balancing on the environment, society, and stakeholders, under the principle of good corporate governance. The Company aims for a Net-Zero-Carbon society by being a leader in renewable energy, innovation, and digital energy platform development.

The Company continues to expand and grow to meet the needs of consumers in the renewable energy business with solar power plants while also expanding to wind power plants; investing in foreign countries such as Japan, Malaysia, and Vietnam; expanding from low-voltage to high-voltage power plants and diversifying its customer base to the private sector (Private PPA). Additionally, a digital disruption plays a significant role in motivating the business to develop innovations and integrated energy digital platforms that contribute to the country’s infrastructure development and energy sustainability. In 2021, the Company began expanding its business into hemp and cannabis businesses, which represents an opportunity to add value and prepare for the industry’s New S-Curve. This expansion includes a comprehensive hemp and cannabis business plan for the Thai people’s health, which is a critical foundation for living.

Total Capacity

642

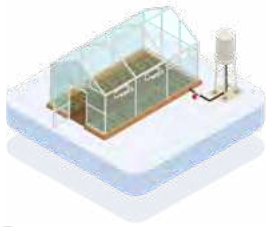
megawatts across 4 countries

Currently, the Company has a total capacity of 642 megawatts in four countries and aims to increase its capacity to at least 1,000 megawatts in Asian countries by 2023.



Objectives, Goals and Long-Term Strategies (3-5 years)

Aiming to build a strong operational foundation along with the development of the “New S-Curve” for sustainable growth and long-term goal achievement.



1.

Creating value to the business by expanding into high-value businesses such as hemp business.



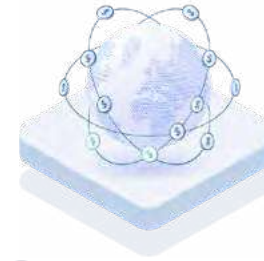
2.

Applying technology and creating innovations in all dimensions to support business expansion, increase competitiveness and reach more diverse customer groups as well as driving the organization and society towards the New Ecosystem of the energy system.



3.

Diversification of investment in order to complete range of products to fulfil the needs of a wider group of customers.



4.

Collaborate with business partners or Mergers and Acquisitions (M&A) both domestically and internationally to accelerate growth and promptly align with the industry and the global trend.



5.

Encourage the independent growth of each business group by promoting spin off strategy for efficient management and increase ability to deliver solid and long-term sustainable growth.



Dividend Policy

The Company has a dividend policy of not less than 40 percent of net profit from separate financial statements after deducting corporate income tax, legal reserve and other reserves. However, the Company may pay dividend less than the rate specified above if necessity, depending on working capital required for operation, business expansion plan and other factors related to the operation of the Company.

Key Financial Highlights

Financial Position

Unit: Million Baht	December 31, 2019	December 31, 2020	December 31, 2021
Total assets	39,041.54	46,032.16	42,485.35
Total liabilities	27,708.63	33,556.84	29,202.13
Total equity	11,332.92	12,475.31	13,283.22

Statement of comprehensive income

Unit: Million Baht	2019	2020	2021
Total revenue	7,195.26 ¹⁾	10,974.54 ¹⁾	9,868.13
EBITDA	4,310.77	5,809.93	4,951.87
Profit (Loss) for the year	2,222.29	3,425.29	2,251.52
Profit (Loss) from normal operation	2,222.29	1,188.42	2,251.52
Profit (Loss) of the parent company	2,147.33	3,412.34	2,229.27

Note ¹⁾ Total revenue from normal operation accounted for THB 7,175.37 million in 2019 and THB 8,737.68 million in 2020.

Revenue Proportion

Unit: Million Baht	2019	2020	2021
Revenue from sale	1,526.50	1,495.88	1,474.97
Revenue from sale of electricity	4,504.39	4,093.36	4,760.50
Revenue from rendering of services and construction services	1,067.68	2,146.63	2,112.60
Revenue from sale of assets under finance lease	-	913.48	970.09
Net foreign exchange gain ¹⁾	19.89	(13.87)	99.71
Gain on change in fair value of derivatives ¹⁾	-	(13.22)	377.40
Gain on bargain purchase ¹⁾	-	259.27	-
Gain on sale of investment in subsidiary ¹⁾	-	1,977.60	-
Other income	76.80	88.33	72.86
Total revenue	7,195.26	10,947.46	9,868.13

Note ¹⁾ Revenue identified in the table as special revenue from net foreign exchange gain, gain on change in fair value of derivatives, gain on bargain purchase and gain on sale of investment in subsidiary.

Financial Ratios

Unit: Million Baht	Unit	2019	2020 ¹⁾	2021
Liquidity Ratio	Times	0.89	0.91	0.84
Gross Profit Margin	%	51.39	35.16	40.19
Operating Profit Margin	%	44.10	25.40	34.55
Net Profit Margin	%	30.89	13.60	22.82
Net Profit Margin from Normal Operation	%	39.56	24.11	29.75
Return on Equity	%	19.61	9.53	16.95
Return on Assets	%	5.69	2.58	5.30
Debt to Equity Ratio	Times	2.44	2.69	2.20

Note ¹⁾ Excluding Gain on bargain purchase and Gain on sale of investment in subsidiary

Dividend Payment

Year	2019	2020	2021		
Performance Period	1 Jan – 31 Dec	1 Jan – 31 Dec	1 Jan – 30 Jun (Interim)	1 Jan – 31 Dec and Retained Earnings	Total Dividend Payment
Basic earnings per share (in Baht)					
– Separate financial statements	0.10	0.25	0.03	0.25	
Dividend Payment (Baht per share)	0.136	0.182	0.06	0.12 ¹⁾	0.18
Dividend Payout Ratio (%)					
– Separate financial statements	134.14	72.82		48.82	73.28

Note ¹⁾ The dividend payment of the year 2021 is subject to the 2022 Annual General Meeting of Shareholders' approval on April 27, 2022.

Financial Highlights 2021

(Unit: Million Baht)

53,295.19

Market Cap
(March 16, 2022)

9,868.13

Total Revenue



42,485.35

Total Assets

4,951.87

EBITDA



Outstanding Performance and Milestones in 2021



March

- TRIS Rating Company Limited has upgraded the corporate credit rating from BBB to BBB+, and raising the rating of the unsubordinated, unsecured bonds from BBB- to BBB.



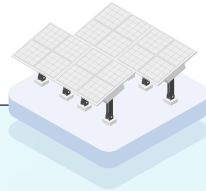
April

- The Company approved the cannabis business plan and approved the establishment of a company to support such business operation. The establishment of the company will be held in the form of a holding company, with an initial registered capital of THB 50,000,000.00 and 2 subsidiaries.



May

- The Company paid cash dividends for the year ended December 31, 2020 at the rate of THB 0.182 per share, totaling cash dividend payment not exceeding THB 1,600,000,000.00 on May 24, 2021.



July

- Future Energy Corporation Co., Ltd. ("FE"), a subsidiary of the Company, jointly established a joint venture company with Origin Energy Co., Ltd., a subsidiary of Origin Property Public Co., Ltd. ("ORI"), with a registered capital of THB 1,000,000.00 to jointly develop and invest in projects to sell electricity from solar rooftop, EV charger, and parity energy trading in condominiums and villages that Origin Energy and or its associated company are the developers, construction, and management companies.



September

- The Company paid an interim dividend for the half-year performance from January 1, 2021, to June 30, 2021, by paying cash dividend at the rate of THB 0.06 per share, totaling cash dividend payment not exceeding THB 535,000,000.00 on September 9, 2021.



October

- The Company invested 50 percent in THCG Group Co., Ltd. ("THCG") with a value of THB 250,000,000 through an investment by G.K. Hemp Group Co., Ltd. ("GKHG") (a subsidiary in which the Company holds 100 percent of the shares), resulting in THCG being a joint venture company to operate hemp and cannabis cultivation businesses for distribution, including production and selling products that are derived from hemp and cannabis.
- G.K. Smart Farming Co., Ltd., a subsidiary of the Company, has been considered for approval for a license to import narcotics of category 5, specifically hemp, from the Food and Drug Administration for commercial or industrial purposes. The type of hemp that is licensed is the seeds from the United States of America.



December

- G.K. Smart Farming Co., Ltd., a subsidiary of the Company, has been considered for approval for a license to produce (plant) narcotics of category 5, specifically hemp, by the Food and Drug Administration for commercial or industrial purposes. The planting pattern is a general planting plant (Greenhouse).

Awards and Achievements

1. The Company was selected, for the first time, by the SET, as one of Thailand Sustainability Investment (THSI) for the year 2021 since the SET established this Sustainable Investment list in 2015. The Company is considered as a listed company that commits to operating in a sustainable manner, with environmental and social responsibility concern, and in compliance with corporate governance principles (Environmental, Social and Governance: ESG).



2. The Company was assessed by Thai Institute of Directors Association (IOD) for Corporate Governance Report of Thai Listed Companies: CGR of the year 2021 as a listed company with an Excellent CG Scoring of 95 points and a score of “Excellent” in every category for the 5th year consecutively. The average score of each category are as follows:



Comparison of Corporate Governance Scorecard for the past 3 years (percent)

Catagory	2019	2020	2021
1. Rights of Shareholders	93	100	100
2. Equitable Treatment of Shareholders	98	95	95
3. Role of Stakeholders	94	94	94
4. Disclosure and Transparency	97	99	99
5. Responsibilities of the Board	91	93	93
Average Score	94	95	95

3. Gunkul Engineering Public Company Limited, Gunkul Power Development Co., Ltd., Future Electrical Control Co., Ltd., G.K. Assembly Co., Ltd. and G.K. Power Products Co., Ltd., totaling 5 companies, **received Thailand Labor Management Excellence Award 2021** from the Department of Labor Protection and Welfare, Ministry of Labor, as an outstanding business operation in labor relations and labor welfare.



4. The Company received Sustainability Disclosure Award for the year 2021 from Thaipat Institute.



5. Ms. Sopacha Dhumrongpiyawut, Chairman of the Executive Committee, **received the Sustainability Rising Star Award 2021 from the Asia Corporate Excellence and Sustainability Award (ACES)**, organized by MORS Group, a large organization in Asia that promotes and assists various organizations for sustainable development.



6. Ms. Naruechon Dhumrongpiyawut, Chief Operating Officer, Strategic Investment and Innovation, **received an award for outstanding female executives in the private sector (Large enterprises) for the year 2021** from the Department of Labor Protection and Welfare, Ministry of Labor, under the concept of “Women’s workers join forces to overcome the crisis, driving the sustainable Thai economy”.



Message from Chairman of the Board of Directors

Dear our Shareholders,

“I would like to encourage everyone to be able to overcome various crises and return to living their lives, which includes building a business that can grow rapidly upon its return”.

“not only the energy, we care”

In the year 2021, industries and businesses all across the world have been confronted with the challenge and effects of the COVID-19 pandemic, which result in a shift in consumer’s behavior. This has an impact on the global ecosystem, economy, social structure, and environment. In order for business operations to continue, the Company must modify its behavior and style of doing business in accordance with the scenario, including implementing disease control measures, Work from Home measures, and major business restructuring.

In order to enhance business potential, the Company has also collaborated and combined expertise and experience with a number of alliances. The Company believes that it can accelerate the growth of the business without limitation to continue to be a leader in renewable energy business, electrical equipment and electrical systems, and a fully integrated digital energy platform with modern technology and innovations that strives to improve people’s quality of life, health, and infrastructure sustainability.

In addition, the Company is also seeking new opportunities to add value to the business by laying the groundwork for the New S-Curve with new economic crops by diversifying into hemp and cannabis businesses aimed at improving Thai people’s health, which are expected to generate return for the company starting in 2022.



Throughout the past 40 years, the Company has operated in accordance with the principles of sustainable development, taking into account environmental, social, and good corporate governance responsibilities. The Company has a strong commitment to developing, adjusting, and operating the business in order to achieve continuous and stable growth for the benefit of all stakeholders. On behalf of the Board of Directors, we would like to thank the managements, employees, as well as customers, financial institutions, partners, business partners, shareholders and all stakeholders which has always promoted and supported the Company’s operations to achieve its business goals. On behalf of the Board of Directors, I would like to encourage everyone to be able to overcome various crises and return to living their lives, which includes building a business that can grow rapidly upon its return.

“not only the energy, we care”

Dr. Gunkul Dhumrongpiyawut
Chairman of the Board of Directors

Message from Chief Executive Officer

Dear our Shareholders,

“we would like to thank our shareholders, customers, business partners, financial institutions, government agencies, community enterprises, and all stakeholders who play an important role in the Company’s success and pride, including giving confidence and always trusting”.

The Corona Virus epidemic is a new threat that has never previously occurred. It had an impact on the entire world’s population and severely threw the global economy into crisis. Gunkul Engineering Public Company Limited (the “Company”) has been closely monitoring and assessing the situation since the pandemic began and has adopted numerous risk-prevention measures as we focus on hygiene and safety of employees and all stakeholders.

The Company’s business performance remains strong and continues to expand with no sign of slowing down. The operating results from the normal operation of the Company’s group have increased for the seventh consecutive year. The Company has set a business growth target of not less than 20% for the next three years. According to COP26 World Leader Summit, Thailand’s Prime Minister has pledged to reduce Carbon Dioxide emissions and increase the share of renewable energy. Achieving such goals will have a favorable impact on the overall picture of the country’s energy business operators and Thailand’s Power Development Plan (PDP) in accordance with the aforementioned policy which plan to increase the purchasing of electricity from solar and wind energy in the near term. The Company trust that under the framework and objective to reduce Carbon Dioxide Emissions and the expansion of renewable energy from industrial operators to the household level especially the production of electricity from solar energy will significantly increase the demand for the Company’s business. The government is also required by the aforementioned expansion to construct a framework for the development of the transmission line system in order to secure the transmission line system’s stability in both the distribution and purchase of power. With a range of future breakthroughs, such as the conversion of automotive advances from the combustion engine system to the engine powered by battery power in the form of electric vehicles (Electric Vehicle), the usage of fossil fuels will decrease, and more electric power will be produced.

From the above important factors, 2021 is a year of significant organizational restructuring. In order to support the dynamics of important changes in the energy business and related businesses, the Company has established key business lines in accordance with its vision and mission to continue sustainable business operations as follows:

1. Renewable Energy Business Group
2. Engineering and Turnkey Business Group
3. High-Voltage Equipment Business Group
4. Ecosystem Business Platform & Innovation Business Group
5. Cannabis Business

In additions, Cannabis Business get benefit from the leniency of the Category 5 of Narcotics Law. This has created a significant opportunity for the Company to expand the business to the development of products containing CBD extracted from hemp flowers for use in patient treatment and as a component in beverage and cosmetic products. The Company’s decision to enter this market is influenced by a new trend alert in taking care of Thai people’s health.

The Company’s business restructuring will result in the creation of the New S-Curve, which is a critical objective that must be pursued in order to meet expectations. The Company’s main plan for the year 2022 will be to focus on expansion through partnering with business partners and promoting each other for mutual benefit, such as the Origin Property Public Company Limited, Jay Mart Public Company Limited, and SCB Ten Ex Company Limited (SCB10X) by Siam Commercial Bank Public Company Limited, among others.

On behalf of the Board of Directors, management, and employees of Gunkul Engineering Public Company Limited, we would like to thank our shareholders, customers, business partners, financial institutions, government agencies, community enterprises, and all stakeholders who play an important role in the Company’s success and pride, including giving confidence and always trusting that the Company will adhere to the principles of good governance as well as good corporate governance to conduct business with this level of responsibility to the economy, society, and environment in perpetuity.



Dr. Somboon Aueatchasai
Chief Executive Officer

Board of Directors

- 01. Dr. Gunkul Dhumrongpiyawut**
Chairman of the Board of Directors (Non-Executive Director)
- 02. Dr. Chongrak Rarueysong**
Director / Independent Director / Chairman of the Audit Committee / Member of the Good Corporate Governance Committee
- 03. Associate Professor Dr. Panarat Panmanee**
Director / Independent Director / Member of the Audit Committee
- 04. Gen. Tarnchaiyan Srisuwan**
Director / Independent Director
- 05. Mr. Tarakorn Angpubate**
Director / Independent Director / Member of the Audit Committee / Chairman of the Risk Management Committee
- 06. Mr. Kris Chantanotoke**
Director / Independent Director
- 07. Ms. Sopacha Dhumrongpiyawut**
Director / Chairman of the Executive Committee / Member of the Risk Management Committee
- 08. Dr. Somboon Aueatchasai**
Director / Executive Director / Secretary to the Board of Directors / Chief Executive Officer (CEO)
- 09. Ms. Naruechon Dhumrongpiyawut**
Director / Executive Director / Chief Operating Officer, Strategic Investment and Sustainable Energy Business
- 10. Mrs. Areewan Chaloezman**
Director / Executive Director / Chief Operating Officer, High Voltage Equipment Business
- 11. Mr. Chaloezman Sricharoen**
Director / Executive Director / Vice President, Sales and Marketing

Remark: Ms. Chantira Jongjamareeseethong is the Company Secretary



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11.

Audit Committee

01. Dr. Chongrak Rarueysong ¹⁾

Chairman of the Audit Committee (Independent Director)

02. Associate Professor Dr. Panarat Panmanee ^{1) 2) 3)}

Member of the Audit Committee (Independent Director)

03. Mr. Tarakorn Angpubate ¹⁾

Member of the Audit Committee (Independent Director)

Remark: ¹⁾ An Independent Director with knowledge and experience in reviewing on the company's financial statement

²⁾ An Independent Director with a degree in Accounting

³⁾ A Female Independent Director

with Mr. Tanetsiri Farkmitr as the Secretary



01.



02.



03.

Risk Management Committee

01. Mr. Tarakorn Angpubate

Chairman of the Risk Management Committee
(Independent Director)

02. Ms. Sopacha Dhumrongpiyawut

Member of the Risk Management Committee

03. Mr. Somchai Trairatanapirom

Member of the Risk Management Committee
(Independent Director)

04. Mr. Thitipong Techaratanayuenyong

Member of the Risk Management Committee and
Secretary



01.



02.



03.



04.

Nomination and Remuneration Committee

- 01. Pol.Maj.Gen. Visit Sukarasep**
Chairman of the Nomination and Remuneration Committee (Independent Director)
- 02. Mr. Decha Chooligorn**
Member of the Nomination and Remuneration Committee (Independent Director)
- 03. Mr. Hathai Uthai**
Member of the Nomination and Remuneration Committee (Independent Director)
- 04. Mrs. Somluk Kanuenghet**
Member of the Nomination and Remuneration Committee and Secretary



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Good Corporate Governance Committee

- 01. Mr. Somchai Trairatapanom**
Chairman of the Good Corporate Governance Committee (Independent Director)
- 02. Dr. Chongrak Rarueysong**
Member of the Good Corporate Governance Committee (Independent Director)
- 03. Mr. Pongtep Thithapand**
Member of the Good Corporate Governance Committee (Independent Director)



01.



02.



03.

Remark: Ms. Chantira Jongjamareeseethong is the Secretary

Executive Committee

01. Ms. Sopacha Dhumrongpiyawut

Chairman of the Executive Committee

02. Dr. Somboon Aueatchasai

Member of the Executive Committee

03. Ms. Naruechon Dhumrongpiyawut

Member of the Executive Committee

04. Mrs. Areewan Chaloemdan

Member of the Executive Committee

05. Mr. Chaloempon Sricharoen

Member of the Executive Committee

Remark: Ms. Chantira Jongjamareeseethong is the Secretary



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Management

01. Ms. Sopacha Dhumrongpiyawut

Chairman of the Executive Committee

02. Dr. Somboon Aueatchasai

Chief Executive Officer (CEO)

03. Dr. Phongsakorn Damnoen

Chief Operating Officer, Energy and Cannabis Business

04. Ms. Naruechon Dhumrongpiyawut

Chief Operating Officer, Strategic Investment and Sustainable Energy Business

05. Mrs. Areewan Chaloeindan

Chief Operating Officer, High Voltage Equipment Business

06. Mr. Chaisiri Wattanacharnnarong

Chief Operating Officer, Engineering and Turnkey Business

07. Mr. Thitipong Techaratanayuenyong

Chief Financial Officer (CFO)

08. Mr. Theerapab Punyasakhon

Chief Operating Officer, Business Support

09. Mrs. Somluk Kanuenghet

Senior Vice President, Human Resources

10. Mrs. Nattawan Wongchan

Senior Vice President, Business Support (Finance, Information Technology)

11. Ms. Suttirat Tangnorakul

Senior Vice President, Accounting

12. Ms. Chantra Jongjamareeseethong

Senior Vice President, Office of CEO and Company Secretary

13. Mr. Chaloepon Sricharoen

Vice President, Sales and Marketing

14. Mr. Tanetsiri Farkmitr

Vice President, Internal Audit



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Part 1

Business Operation and Operating Results

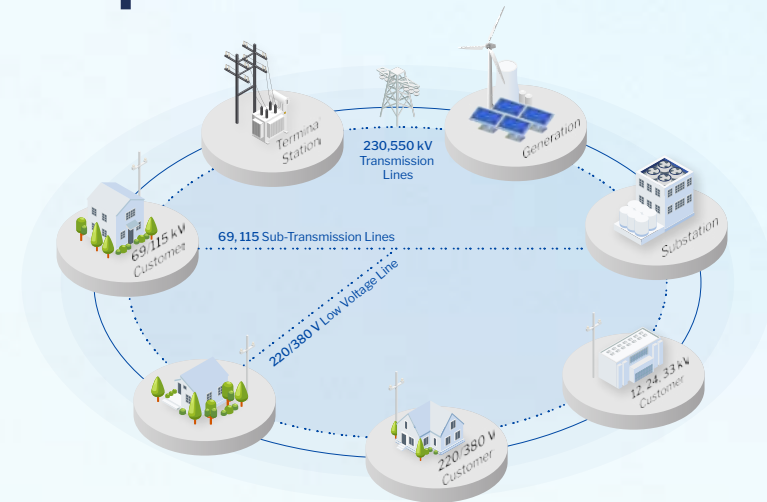
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1. Operational Structure of the Group

1.1 Policy and Business Overview

Gunkul Engineering Public Company Limited (the “Company”) engages over all features of renewable energy, including equipment and electrical systems, and has progressed into the cannabis business by using modern technology and innovation to improve people’s quality of life, health, and sustainable infrastructure.

The Company was established in 1982 from the business of importing and distributing equipment for electrical systems and other related equipment to various public and private agencies. Afterwards, the Company had expanded the business of equipment for the electrical system fully covering production, procurement and distribution as well as starting to expand into other businesses, such as engineering, procurement, construction (EPC) services for electric station, electric system and renewable energy power plant and the maintenance of power plants of both public and private agencies. The Company was foreseeing the trend of increasing demand for electricity from renewable energy. Therefore, the Company had expanded its business scope into renewable energy business. The Company’s first solar power plant project started the commercial operation in 2011. The Company focused on expanding its energy business based on sustainable business practices that focus on the environment, society, and stakeholders, under the good corporate governance principles and in line with the power generation development plan and the renewable and alternative energy development plan. Due to the global trend of moving towards a Net Zero Carbon society, the Company aims to improve both quality, standards, and safety to become one of the leaders in renewable energy, innovation and energy digital platform.



Throughout the Company’s 40-year history, the Company was transformed to a public company limited in 2009 and its securities were listed for trading on the Stock Exchange of Thailand (SET) on October 19, 2010 under the name GUNKUL, resulting in the Company’s significant growth. In addition, with a strong financial position experience and expertise of the Company and collaboration with leading partners, the Company never stop to seek business opportunities to increase operational potential and increase business value for stable and sustainable returns. The Company has continuously expanded its business to cover the needs of consumers. For the renewable energy business, it has been extended to wind power plants. Investments have been expanded to foreign countries such as Japan, Malaysia and Vietnam and expanding the customer base to the private sector (Private PPA). In addition, digital disruption is an important factors driving the company to develop innovations and a comprehensive digital energy platform in order to make a difference in the development of the country’s infrastructure and energy sustainability. Recently, in 2021, the Company began expanding its business into the hemp and cannabis business which is a business opportunity from new economic crops to create added value and prepare for the New-S Curve of the business by using the Company’s former potential. The Company plans to operate a comprehensive hemp and cannabis business for the health of Thai people which is fundamental to life. The Company plans to grow hemp in the greenhouse system for the highest level of quality control which is expected to be able to produce and gradually recognize income from 2022 onwards.

In this regard, the Company commits to conduct business along with maintaining the balance of economy, society and environment driving the organization towards sustainable development (<https://www.gunkul.com/storage/download/cg/2022/20220321-gunkul-sustainability-development-en.pdf>) and have a goal of operating so that all stakeholders can access and understand energy consumption providing an understanding that energy is tangible and able to utilize energy to its fullest potential with the concept of “not only the energy, we care” which operates 5 main business groups as follows:

Renewable Energy Business

Solar power plant, wind power plant and provide operation and maintenance services for power plants Solar power plant, wind power plant and provide operation and maintenance services for power plants



Engineering and Turnkey Business

Construction of renewable energy power plants, power stations, transmission lines, grounding systems, submarine cable, microgrid system, and energy storage system



Cannabis Business

Comprehensive hemp and cannabis business



Ecosystem Business Platform and Innovation

Ecosystem business and innovation that fosters the Company's business dealings with partners



High Voltage Equipment Business

Production, procurement and distribution of electrical equipment, energy saving products and alternative energy

1.1.1 Vision, Mission, Corporate Culture, Company Goals and Strategies

Vision To be a leader in integrated energy business covering renewable energy, electrical equipment, and power system, with cutting-edge technology and innovation for sustainable infrastructure development, and to be a global player in cannabis business with desire to improve quality of life and good wellness.

Mission

1	Renewable Energy	Establish renewable energy power plants with high standards and efficiency while prioritizing society, local community and the environment.
	Cannabis	Produce hemp/cannabis in accordance with GAP and GMP standards so that it can be utilized in a wide range of products that improve quality of life, allowing customers to benefit the most.
2	Sales	To procure and deliver high quality power systems, energy saving products, cannabis products, distribution channels and render the services to fulfill customers' demand.
3	Technology	To develop the IT system and adopt the new technology and innovation to improve business efficiency in management, production, and services as well as develop new products and services to fulfill all demands of business partners.
4	Returns	Balance and maximize the shareholders and other stakeholders' returns.
5	People Management	Enhance employees' capability and broaden their knowledge and skills to extensive level in order to be in line with the Company's core competencies. All employees will be treated thoroughly and fairly, with human rights as a cornerstone.
6	Management Framework	Business structuring and management in accordance with good corporate governance principles, while maintaining a sense of responsibility for the economy, society, and environment.

Corporate Culture

We GROWTH together

G

Goal

Determination to achieve goals

R

Reliability

To be reliable and professional at work

O

Ownership

Caring and unity

W

Wisdom Learning

Learning constantly causing intelligence and adaptation

T

Technology and Innovation

Exposure to technology and extending innovation

H

Honesty and Governance

Honest, transparent and dedicated to the responsibilities

Objectives, Goals, and Strategies of the Company's Operations

1. Commitment to maintain a business growth target of not less than 20% per year.
2. Set a target of purchasing electricity in renewable energy (PPA) for an additional 100-150 megawatts to increase the cumulative PPA share of not less than 850 megawatts.
3. Greenhouse gas management in accordance with the government's position on climate change of the country by setting goals to reduce carbon dioxide emissions from business operations in accordance with international guidelines and standards in order to move towards a low-carbon society.
4. Manage to reduce the impact of the COVID-19 situation by focusing on the safety of employees, business continuity and contribution to the community and society.
5. Establish the foundation and support the growth of each business group to support the spin-off business, expand and build business alliances to extend and enhance the potential growth of the subsidiaries and associated.
6. Expand investments and develop new businesses diversification and business expansion, creating a New S-Curve, resulting in an expansion of revenue base and profitability.



Objectives, goals and long-term strategies (3-5 years)

Aiming to build a strong operational foundation along with the development of the business that is "New S-Curve" in order to create stable, continuous growth and achieve long-term goals.



1.

Creating value to the business by expanding into high-value businesses such as hemp business.



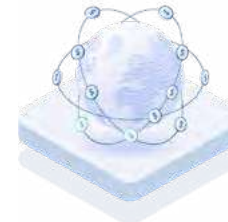
2.

Applying technology and creating innovations in all dimensions to support business expansion, increase competitiveness and reach more diverse customer groups as well as driving the organization and society towards the New Ecosystem of the energy system.



3.

Diversification of investment in order to complete range of products to fulfil the needs of a wider group of customers.



4.

Collaborate with business partners or Mergers and Acquisitions (M&A) both domestically and internationally to accelerate growth and promptly align with the industry and the global trend.



5.

Encourage the independent growth of each business group by promoting spin off strategy for efficient management and increase ability to deliver solid and long-term sustainable growth.

1.1.2 Material Changes and Developments in the Past Three Years

Year	Key Events
2019	
April	Kimitsu Solar Power Plant Project, Japan with a total capacity of 33.50 Megawatt (MW). (38.26 MW: Installed Capacity) has already started its commercial operations. The project produces and sells electricity from solar power to TEPCO Energy Partner, Co., Inc. ("TEPCO EP") for a period of 20 years concession period at JPY 36 per unit in a feed-in tariff (FiT) scheme from the commercial operation date (COD).
May	The Company paid stock and cash dividends for the year ended December 31, 2018 by paying a stock dividend at the rate of 5 existing shares per 1 ordinary share, totaling not exceeding THB 370,931,074.75 and paying cash dividends at the rate of THB 0.01 per share, totaling a cash dividend of not exceeding THB 75,000,000.00 on May 15, 2019.
December	The Company invested in an additional 33 percent of ordinary shares in Infinite Alternative Energy Co., Ltd. ("IAE"), hold 99.99% stake in Rang Ngern Solution Co., Ltd. ("RNS"), which operates solar power plants and has received a power purchase agreement for a solar power plant project (PPA).
2020	
February	Bright Green Power Co., Ltd. ("BGP"), a subsidiary of the Company, invested in 2 solar power plant projects with a total size of 60 MW, namely the Tri Viet 1 Solar Power Plant and the Bach Khoa A Chau 1 Solar Power Plant Project in Vietnam (the Project) through the investment in 100% of ordinary shares in Singapore An Yang Pte. Ltd. ("SGAY") and Singapore Yun Yang Pte. Ltd. ("SGYY"), who are the ultimate shareholders in the Project for a period of 20 years concession period at USD 0.0935 per unit in a FiT scheme starting from COD date on May 28, 2019.

Year	Key Events
March	<p>The Company approved the 2nd Treasury Stock project for liquidity management purposes with details as follows:</p> <p>The maximum amount that used for share repurchase Not exceeding THB 1,100,000,000.00</p> <p>The number of shares to be repurchase Not exceeding 440,000,000 shares (Representing not exceeding 5.01% of the issued and paid-up capital)</p> <p>Methods for buying back shares SET</p> <p>Period April 1, 2020 to September 30, 2020</p> <p>The number of shares repurchased 0 Share</p>
May	The Company paid a cash dividend for the year ended December 31, 2019 and retained earnings for the year ended 2018 at the rate of THB 0.136 per share, not exceeding THB 1,200,000,000.00 in May 15, 2020.
September	The Company sold the Utsunomiya Solar Power Plant Project, Japan, with a capacity of 66.78 MW by selling 100% of the investment in GD Solar Utsunomiya Godo Kaisha ("GD Solar") at a sale value of JPY 5,964,930,000.00, or equivalent to THB 1,679,921,130.69.
November	The Company invested in the Phong Dien II Solar Power Plant project with a total capacity of 50 MWp in Vietnam through the investment in 100 percent% ordinary shares of Doan Son Thuy Investment JSC ("DST") with a project investment value of USD 39,850,000.00, or equivalent to THB 1,258,582,550.00.

Year	Key Events
December	<p>Bright Green Power Co., Ltd. ("BGP"), a subsidiary of the Company, acquired 100% ordinary shares of INT Energy Pte. Ltd. ("INT") to invest in a solar power plant project with a total capacity of 50 MWp in Vietnam, which was held by Tan Chau Energy Joint Stock Company ("TCE") with a project investment value of USD 47,140,000.00, or equivalent to THB 1,471,097,980.00.</p> <p>Phong Dien II Solar Power Plant project, located in Thua Thien Hue Province, Socialist Republic of Vietnam, already completed the commercial operation with a total capacity of 50 MWp and produces and sells electricity from solar power to Vietnam Electricity ("EVN"), at USD 0.0709 per unit in FiT scheme, with 20 years concession period started from the COD.</p> <p>The Company sold the Iwakuni Solar Power Plant Project, Japan, with a capacity of 75 MW by selling 100 percent of its investment in East Japan Solar 13 Godo Kaisha Company ("EJS 13") with a selling value of JPY 9,942,653,495.00, or equivalent to THB 2,863,842,142.09.</p> <p>LSSPV Solar Power Plant Project located in Terengganu, Malaysia with the contracted electric quantity of 29.99 MW and the installed power is 39.0297 MW, already completed the commercial operation. This is a project that produces and sells electricity from solar power to the Tenaga Nasional Berhad ("TNB") at MYR 0.38 per kilowatt hour in FiT scheme with 21 years concession period started from COD.</p>
2021	
March	<p>TRIS Rating Company Limited has upgraded the corporate credit to the Company from BBB level to BBB + level, and raising the rating of the unsubordinated, unsecured bonds from BBB- level to BBB level.</p>
April	<p>The Company approved the hemp business plan and approved the establishment of a company to support such business operation. The establishment of the Company will be held in the form of a holding company, with an initial registered capital of THB 50,000,000.00 and 2 subsidiaries.</p>

Year	Key Events
May	<p>The Company paid cash dividends for the year ended December 31, 2020 at the rate of THB 0.182 per share, totaling cash dividend payment not exceeding THB 1,600,000,000.00 on May 24, 2021.</p>
July	<p>Future Energy Corporation Co., Ltd. ("FE"), a subsidiary of the Company, jointly established a joint venture company with Origin Energy Co., Ltd., a subsidiary of Origin Property Public Company Limited ("ORI"), with a registered capital of THB 1,000,000.00 to jointly develop and invest in projects to sell electricity from solar rooftop, EV charger, and parity energy trading in condominiums and villages that Origin Energy and or its associated are the developers, construction, and management companies.</p>
September	<p>The Company paid an interim dividend for the half-year performance from January 1, 2021, to June 30, 2021, by paying cash dividends at the rate of THB 0.06 per share, totaling cash dividend payment not exceeding THB 535,000,000.00 on September 9, 2021.</p>
October	<p>The Company invested 50% in THCG Group Co., Ltd. ("THCG") with a value of THB 250,000,000 through an investment by G.K. Hemp Group Co., Ltd. ("GKHG") (a subsidiary in which the Company holds 100% of the shares), resulting in THCG being a joint venture company to operate hemp and cannabis cultivation businesses for distribution, including production and selling products that are derived from hemp and cannabis.</p> <p>G.K. Smart Farming Co., Ltd., a subsidiary of the Company, has been considered for approval for a license to import narcotics of category 5, specifically hemp, from the Food and Drug Administration for commercial or industrial purposes. The type of hemp that is licensed is the seeds from the United States of America.</p>
December	<p>G.K. Smart Farming Co., Ltd., a subsidiary of the Company, has been considered for approval for a license to produce (plant) narcotics of category 5, specifically hemp, by the Food and Drug Administration for commercial or industrial purposes. The planting pattern is a general planting plant (Greenhouse).</p>

1.1.3 Use of Proceeds from Fundraising Purposes

As of December 31, 2021, the Company has outstanding balances of issued debentures in the amount of THB 5,948.7 million, which means to finance the investments in solar power projects both domestic and international, rooftop solar power projects and wind power projects under the Thailand Power Development Plan 2018 – 2037 revised No. 1 (PDP 2018 REV.1), new investment, as well as to fund working capital of the Company. The Company has used the fund received from the issuance and offering of all debentures according to objectives stated in the securities offering with details of the debentures that are still not due as shown in Note 15 to the financial statements.

In this regard, the Company operates in accordance with the law, regulations or rules set forth in the SEC Notification and/or Capital Market Supervisory Board or other regulations related to.

1.1.4 The Company's Obligations according to Debentures Issuance

The Company has no financial obligations on each series of offered debentures as specified in the Debenture Filings and other related documents of each debenture series.

1.1.5 General Information of the Company

Name (Thai)	บริษัท กันกุลเอ็นจิเนียริง จำกัด (มหาชน)
Name (English)	Gunkul Engineering Public Company Limited
Symbol	GUNKUL
Head Office Address	1177 Pearl Bangkok Building, 8th Floor, Phahonyothin Road, Phayathai, Phayathai, Bangkok 10400
Sector	Energy and Utilities
Company Registration Number	0107552000146
Telephone	(+66)2 242 5800
Website	www.gunkul.com
Types of Shares Issued	Ordinary Shares
Registered Capital	THB 2,220,632,743.50
Paid-up Capital	THB 2,220,632,743.50
Number of Paid-up Shares	8,882,530,974 Shares
Par Value	THB 0.25



1.2 Nature of Business

1.2.1 Revenue Structure

Revenue Structure by Business Unit

Revenue Type	2019		2020		2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
1. Sales	1,526.50	21.21	1,495.88	13.66	1,474.97	14.95
2. Electricity sales	4,504.39	62.60	4,093.36	37.39	4,760.50	48.24
3. Construction and services revenue	1,067.68	14.84	2,146.63	19.61	2,112.60	21.41
4. Revenue from the capital lease agreement	-	-	913.48	8.34	970.09	9.83
5. Extra ordinary items ¹⁾	19.89	0.28	2,209.78	20.19	477.11	4.83
6. Other income	76.80	1.07	88.33	0.81	72.86	0.74
Total Income	7,195.26	100.00	10,947.46	100.00	9,868.13	100.00

Note ¹⁾ Extra ordinary items means gain on exchange rate, gain on changes in value of financial assets designated at fair value, gain on negotiating purchase price and gain on disposal of investment in subsidiaries

Revenue Structure by Customer Groups

Revenue Type	2019		2020		2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
1. Government customers						
- Income from sales of equipment for electrical systems and renewable energy systems and income from services	1,087.69	15.32	3,555.92	41.11	2,425.75	26.03
- Income from electricity sales	4,504.40	63.46	4,093.35	47.33	5,830.58	61.50
2. Private customers						
- Income from sales of equipment for electric system and renewable energy systems	515.42	7.26	263.22	3.04	229.71	2.47
- Income from construction of power plants	979.95	13.80	728.10	8.42	930.00	9.98
3. Foreign customers	11.11	0.16	8.75	0.10	2.12	0.02
Total	7,098.57	100.00	8,649.34	100.00	9,318.16	100.00

Note Excluding income from extra ordinary items and other income

1.2.2 Information about Business Groups, Procurement and Distribution, Product or Service Characteristics and Innovation Development

1. Renewable Energy Business

Nature of Business

The Company and the Group operates the business of producing and distributing electricity from renewable energy to both the public and private sectors according to the government's policy to promote the production and use of electricity from renewable energy. This reduces dependence on energy imports and to increase energy security. The Company and the Group see an opportunity to develop and invest in renewable energy related businesses which is a business group with high growth potential and has low operating risks which is a stable and continuous source of income for the Group in the long term. Therefore, the Company's scope of business has expanded business from supplying and distributing renewable energy-related equipment to producing and distributing electricity generated by renewable energy sources such as solar and wind, both domestically and internationally, details are as follows:

1. Solar Power Plant

1.1 Solar Farm or Solar Ground

Conducts business of producing and distributing electricity generated by solar energy, which is a power plant operated on the ground which is operated by subsidiaries and joint venture companies both domestically and internationally, with a total capacity of 371.1 megawatts.

1) Solar power plant project in the country, details are as follows:

The Group's solar energy projects include Rang Ngern Solution Co., Ltd., Eco Thai Energy Co., Ltd., NK Power Solar Co., Ltd., and BMP Solar Co., Ltd., which are all subsidiaries, as well as Gunkul Powergen Co., Ltd. and G-Power Source Co., Ltd., a joint venture company with contracts to sell electricity to the Provincial Electricity Authority (PEA), totaling 23 projects with a total capacity of 157.9 MW which has been commercialized.

However, ground-based solar energy projects are exempt from corporate income tax based on the privilege obtained, as described by the Board of Investment of Thailand ("BOI"), which summarizes the number of years and tax exemption in two group:

Group 1 : Adder

Year	Tax Rate (percent)	
	Exempt Tax	Corporate Income Tax Payable
Year 1 - Year 8	100	0
Year 9 - Year 13	50	10
Year 13 onwards	0	20

Group 2 : Feed in Tariff "FIT"

Year	Tax Rate (percent)	
	Exempt Tax	Corporate Income Tax Payable
Year 1 - Year 8	100	0
Year 8 onwards	0	20

2) Solar power plant projects overseas, there are 7 projects as follow;

Japan

The Company and the Group have invested in 2 ground-mounted solar energy projects in Japan, namely Sendai Okura GD Daiichi Godo Kaisha ("SND") and Kimitsu Mega Solar Godo Kaisha ("KMT"). It has a contract to sell power to Tohoku Electric Power Co., Inc. ("Tohoku Electric") and TEPCO Energy Partners Co., Inc. ("TEPCO EP") respectively, with a combined capacity of 65.25 megawatts which has all been commercialized. The details can be summarized as follow:

Project	Capacity (MW)	Project Site (according to Application)	Power Purchase Rate Feed-in-Tariff (FIT)	Commercial Operation Date
Sendai Okura GD Daiichi Godo Kaisha "SND"				
1	31.75	Sendai, Miyagi	JPY 36 per GWh	Quarter 4 of the year 2018
Kimitsu Mega Solar Godo Kaisha "KMT"				
2	33.50	Kitmitsu, Chiba	JPY 36 per GWh	Quarter 2 of the year 2019
Total	65.25			

Malaysia

The Company and the Group have invested in 1 ground-mounted solar power plant project in Malaysia, Kenyir Gunkul Solar Sdn Bhd ("KGS"), which has a power purchase agreement with Malaysia's electricity authority, Tenaga Nasional Berhad ("TNB"). The contracted capacity is 29.99 megawatts and the installed capacity is 39.0297 megawatts and it has been commercialized. The details can be summarized as follow:

Project	Capacity (MW)	Project Site (according to Application)	Power Purchase Rate Feed-in-Tariff (FIT)	Commercial Operation Date
Kenyir Gunkul Solar Sdn Bhd				
1	29.99	Paka, Terengganu	MYR 0.38 per kWh	December 2020
Total	29.99			

Vietnam

The Company and the Group have invested in 4 ground-mounted solar energy projects in Vietnam, namely Tri Viet Tay Ninh Joint Stock Company, Bach Khoa A Chau Tay Ninh Joint Stock Company, Doan Son Thuy Investment Joint Stock Company, and Tan Chau Energy Joint Stock Company, all of which have a power purchase agreement with Vietnam Electricity (“EVN”), the country’s electricity authorization. The entire installed capacity is 160 megawatts, all of which have been commercialized. The details can be summarized as follow:

Project	Capacity (MW)	Project Site (according to Application)	Power Purchase Rate Feed-in-Tariff (FIT)	Commercial Operation Date
Bach Khoa A Chau Tay Ninh Joint Stock Company				
1	30	Tay Ninh Province	USD 0.0935 GWh	Quarter 2 of the year 2019
Tri Viet Tay Ninh Joint Stock Company				
2	30	Tay Ninh Province	USD 0.0935 GWh	Quarter 2 of the year 2019
Tan Chau Energy Joint Stock Company				
3	50	Tay Ninh Province	USD 0.0709 GWh	Quarter 4 of the year 2020
Doan Son Thuy Investment Joint Stock Company (100.00% proportion)				
4	50	Thua Thien Hue Province	USD 0.0709 GWh	Quarter 4 of the year 2020
Total	160			

In addition, the Company and the Group have additional investment plan in Vietnam and other countries such as Taiwan, which have potential investment and business opportunities.

1.2 Solar PV Rooftop Power Plant

According to the cabinet meeting on August 13, 2013, it was determined to acknowledge the resolution passed by the National Energy Policy Council (NEPC) on July 16, 2013, agreeing to approve the purchase of power from rooftop photovoltaic system with a capacity of photovoltaic panels totaled 200 MWp, with 100 MWp dedicated to residential structures and another 100 MWp to commercial and industrial buildings. The Company has begun to commercially distribute the electricity under power grid network in 2013 with the Feed-in Tariff purchase rate with 25 years term under such project. The Company has co-invested in numerous projects across the country, simultaneously, Gunkul Power Development Company Limited was formed to facilitate the building of solar photovoltaic rooftop power plants through collaborative investment. Ready to begin construction on the following projects:

MWp refers to the maximum megawatts of the photovoltaic panel at Standard Test Condition

kWp refers to the maximum kilowatts of the photovoltaic panel at Standard Test Condition

1) Rooftop solar power project for sale to the Provincial Electricity Authority (PEA) and the Metropolitan Electricity Authority (MEA), details as follows:

- Solar Rooftop Project with PEA

The Company and the Group have operated 3 rooftop solar power plant projects with PEA, namely Gunkul Solar Power 2 Co., Ltd., WHA Gunkul Green Solar Roof 17 Co., Ltd. and Green Line Energy Co., Ltd. with a total installed power of 2,533.68 kWp, which has been commercialized.

- Solar Rooftop Project with MEA

The Company and the Group have partnered with MEA totalling 10 solar rooftop projects, namely WHA Gunkul Green Solar Roof 1 Co., Ltd., WHA Green Solar Roof 3 Co., Ltd., WHA Gunkul Green Solar Roof 6 Co., Ltd., Solar Energy Society Co., Ltd., Siam Gunkul Solar Energy Co., Ltd., Gunkul Solar Roof 1 Co., Ltd., TS Power Energy Co., Ltd., and Mont RM Co., Ltd., with a combined installed capacity of 6,300.44 kWp that has been commercially operated.

2) Solar rooftop projects for the private power purchase agreement

The Company has jointly invested in projects in many provinces across the country. At the same time, Solar Energy Society Co., Ltd. was established to support the competitive price of electricity for industrial plants (Private Power Purchase Agreement: PPPA). Solar Energy Society Co., Ltd. will invest in the construction of solar PV Rooftop and sell electricity to the customers at points of PV Rooftop installation across the country. At present, the Company has gained the trust from various group of customers such as industrial factories, department stores, printing houses and private companies, etc. The total Solar Rooftop installed capacity is more than 82,141.88 kWp.



3) Solar Rooftop Project for Self-Consumption

Since the BOI has issued the Board of Investment Announcement No. 9/2017 regarding investment promotion measures to improve production efficiency with the objective of modifying machines to conserve energy and utilize renewable energy to reduce the impact on the environment, the promoted person will be exempt from corporate income tax for 3 years, representing 50% of the investment, including exemption from import duty on machinery which stimulated large amount of participants in the industrial sector for applying in such project. Additionally, other business groups that utilize a lot of electricity without being promoted, are interested in installing solar panels to generate electricity from renewable energy for their own use within their own agencies or organizations (Self-Consumption). The Company is aware of the growing trend of such demand and has no obligation to sell power to government agency. The Company therefore foresee the opportunity and accelerated investment in the business of generating electricity from solar power installed on the industrial roof on commercial building group, residential housing group, organizations and government agencies, and other business groups that use a lot of electricity. In addition, customers who have unused land plots can also use such land to build a power generation project on the ground for their own use within the organization. Currently, the Company has gained trust from many customers that selected the Company to be the operator of the said project with a variety of customer groups, such as the Electricity Generating Authority, factory, department stores, printing houses, private companies and hospitals, etc. The total installed capacity of Solar Rooftop Project for Self-Consumption is more than 99,998.64 kWp.



Additionally, the Company set up a subsidiary in 2019 under the brand GRoof to respond to and advertise particularly for residential solar rooftop customers because the Company anticipates the market for such consumers growing due to increased demand. With the cost of solar power production systems continuing to decrease and awareness of solar rooftop systems growing, the Company is convinced that the Residential Solar Rooftop market has a significant development growth potential. Currently, the Company offers packages for customers looking for solar systems starting from 2 kilowatts with accessibility in both on-grid and hybrid configurations with acclimated battery system.

1.3 Floating Solar Farm

The Company has studied and applied expertise and experience to design and operate a floating solar energy producing business that will put solar panels on the water in addition to placing the solar panel on the ground and roof. By using cutting-edge technology, solar panels energy generation can thus be put on the water and is capable of withstanding variations in sea level and wind speed without impact on the power generation level and adheres to safety criteria. Additionally, it can assist in reducing water evaporation which is ideal for ponds that require water storage throughout the year. Moreover, the evaporation of water contributes to the cooling of the heat generated by the solar panel. This also improves the efficiency of solar panels in terms of generating electricity. For water sources that are suitable to be reservoirs, dams, or wells, the area above the water can be utilized for beneficial purposes, thereby minimizing the use of land that could be developed in another way.

At the moment, the Company has operated 2 floating solar power plants, namely the project of the Electricity Generating Authority of Thailand (EGAT), Sirindhorn Dam, and the project of Prachinburi Glass Industry Co., Ltd. with a total capacity of 952.8 kWp, which has been commercialized.



The picture shows the solar power plant project installed on the water at Sirindhorn Dam, size 256 kilowatts



Picture showing the solar power plant project, installed on the water at Prachinburi Glass Industry Co., Ltd. Size 696.80 kW

2. Wind Farm

Wind energy is a form of natural energy that is generated by temperature differences, atmospheric pressure and the rotational force of the Earth. These are the variables that affect wind speed and wind energy. At the moment, a greater emphasis is being placed on and utilization of wind energy due to the fact that wind energy is a clean source of energy with no energy costs. As a result, it is used as a source of alternative energy in a number of countries including Thailand despite its proximity to the equator, resulting in a low to moderate wind speed. However, Thailand continues to pay attention on wind energy development by investigating potential wind energy sources and conducts research and development on low-speed wind turbines that are appropriate for the country's wind potential and promotes the use of high-efficiency wind turbines from both domestic and international manufacturers. In accordance with the renewable energy and alternative energy development plans contained in the PDP 2018 REV.1 plan, which sets a target of promoting the production of 1,485 megawatts of new wind energy, accelerate the schedule for purchasing electricity from wind energy from 2034 to 2022, 90 megawatts per year during the years 2022-2024.

Through government policies that promote energy security along with its strategy of environmentally friendly growth (Green Growth), the Company is cognizant of its involvement in the development of renewable energy projects to contribute to Thailand's environmental sustainability by assisting in the reduction of greenhouse gas emissions. The Group has applied to PEA and EGAT for electricity distribution rights for 4 wind power plant projects, namely Wind Energy Development Co., Ltd., Greenovation Power Co., Ltd., and Korat Wind Energy Co., Ltd. with a total capacity of 170 megawatts. The details can be summarized as follow:

Project	Capacity (MW)	Project Site (according to Application)	Commercial Operation Date according to Power Purchase Agreement
Wind Energy Development Co., Ltd. "WED" (a subsidiary, the Company holds 99% of the registered capital)			
1	2.0	Tambon Huai Bong, Amphoe Dan Khun Thot, Nakhon Ratchasima	March 2016
	8.0	Tambon Huai Bong, Amphoe Dan Khun Thot, Nakhon Ratchasima	March 2016
2	50.0	Tambon Huai Bong, Amphoe Dan Khun Thot, Nakhon Ratchasima	December 2016
	60.0		
Greenovation Power Co., Ltd. "GNP" (a subsidiary, the Company holds 99% of the registered capital)			
3	60.0	Tambon Huai Bong, Amphoe Dan Khun Thot, Nakhon Ratchasima	March 2018
	60.0		
Korat Wing Energy Co., Ltd. "KWE" (a subsidiary, the Company holds 99% of the registered capital)			
4	50.0	Tambon Nong Nam Sai, Amphoe Si Khio, Nakhon Ratchasima	June 2018
	50.0		
Total	170		

The aforementioned projects obtain a promotional certificate from the BOI exempting corporate income tax on net profits derived from business operations for a period of 8 years beginning on the date of income generation and ending on the date of income termination. After that the business will

receive a corporate income tax reduction equal to 50% of the normal rate for 5-year period. The tax rate is as follows:

Year	Tax Rate (percent)	
	Exempt Tax	Corporate Income Tax Payable
Year 1- Year 8	100	0
Year 9- Year 13	50	10
From the 13th year onwards	0	20

3. Operation and Maintenance of Power Plants Business

The Company has gained trust from external customers and partners to act as a service provider for the operation and maintenance of power plants following the completion of the solar power plant's construction (Operation and Maintenance Agreement). This enables the production operation to be controlled and the electricity distribution efficiency of rooftop and ground-mounted solar power plants to be maintained. Currently, the Company maintains power plants for 90 companies and 112 projects totaling 240.635 megawatts.

Industry, Market, and Competition

An overview of Thailand's electrical system

In Thailand, the electricity generation and transmission industries operate under an Enhanced Single-Buyer Model (ESB), which means that EGAT (Electricity Generating Authority of Thailand or EGAT) is both the producer and purchaser of electricity that distributes into the system exclusively. Related entity can be found by the following:

1. Power Producers

Power producers in Thailand's electrical system are classified into 6 categories: EGAT, major power producers (IPPs), small power producers (SPPs), very small power producers (VSPPs), and other producers including government agencies such as the Department of Alternative Energy Development and Efficiency which utilize renewable energy source that generates electricity via a small hydroelectric dam and imports electricity from other countries.

EGAT serves as both the largest producer and purchaser of electricity generated by other producers including purchasing electricity from neighboring countries such as Lao People's Democratic Republic and Malaysia, monopolizing the country's transmission line system (Transmission System), and determining the amount of electricity that each power plant must supply to the country's electricity transmission system in order to meet the country's electricity demand at any given time.

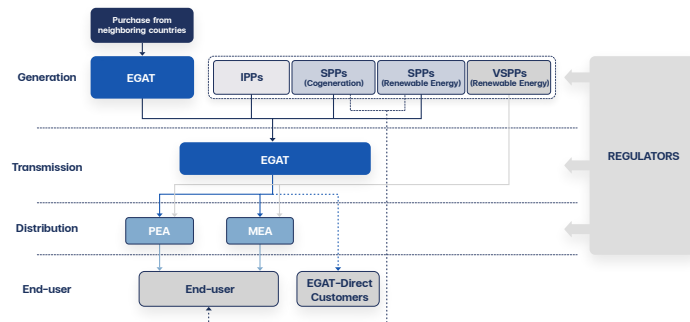
2. Power Distributors

EGAT will distribute electricity to two state enterprises, namely the Metropolitan Electricity Authority (MEA) and Provincial Electricity Authority (PEA), which are responsible for distributing electricity to the industrial sector business and household sectors in various areas of the country. Additionally, EGAT also sells electricity directly to some customers as well.

In the process of transmission of electricity from power plants to MEA and PEA, the voltage must be adjusted appropriately to minimize the loss from transmission over long distances. After that, MEA and PEA will deliver electricity to users through a voltage distribution system in order to convert the voltage level to a lower level that consumers can use. MEA is responsible for the distribution electricity in Bangkok, Nonthaburi and Samut Prakan areas, while PEA is responsible for the distribution of electricity in other provinces other than the above 3 provinces.

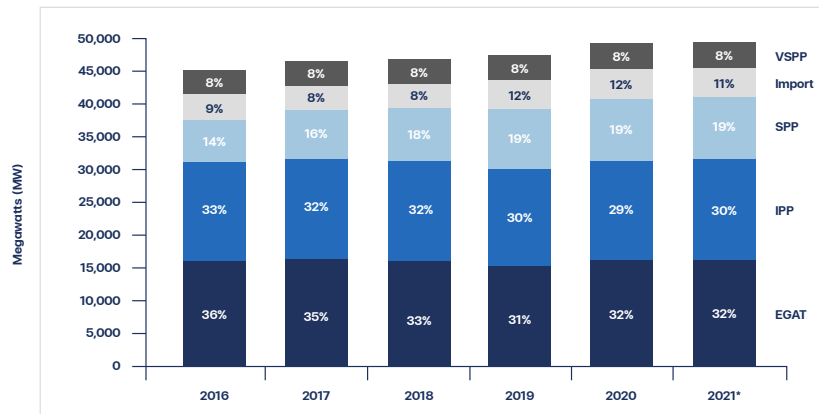
3. Electricity Supply Structure

Consumers of electricity consist of different types of electricity users such as industrial sector, business sector, residential sector, etc.



Source: EPPO, compiled by Krungthai Research

Thailand's private sector plays a sequential role in energy generation as you could see from the Data in November 2021. Private power producer contributes 57% of total contracted capacity which increased from 56% in 2020. They can be categorized by: IPP 30%, SPP 19%, VSPP 8%, while EGAT generates and imports electricity from neighboring countries for 43% in aggregate.



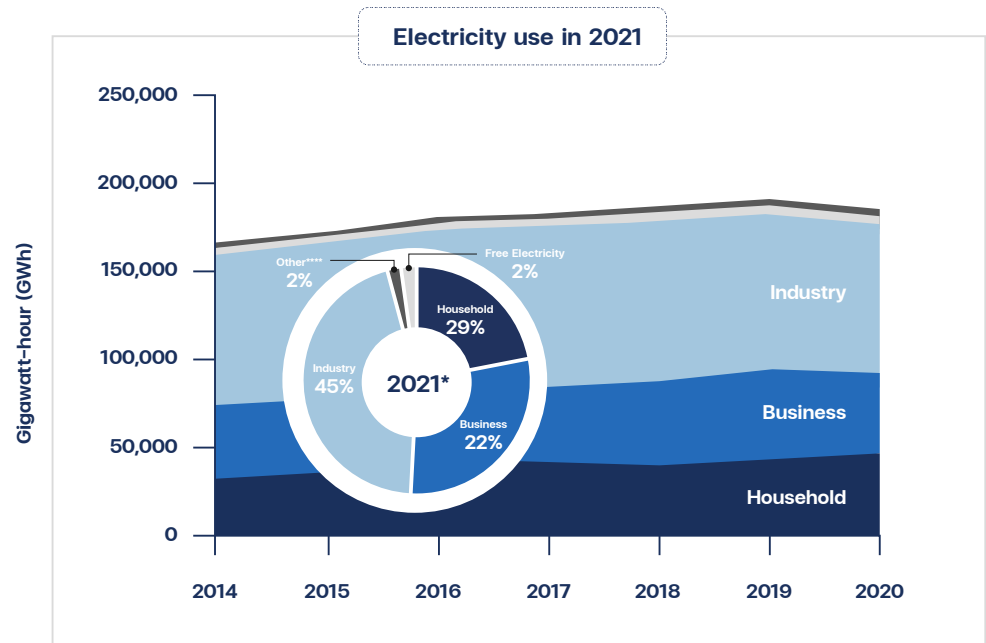
Source: Office of Energy Policy and Planning, Ministry of Energy

The growth direction of the power generation industry depends on the following main factors:

- Electricity demand is directly related to economic conditions.** The announcement of the Eastern Economic Corridor (EEC) development project in 2017 encourages significant government investment in infrastructure, such as the construction of a high-speed electric tram system, construction of highways to connect industrial factory areas to transportation routes, etc., in order to promote prosperity and investment in industrial factories located in strategic transportation locations. This has a direct effect on the tendency to increase the demand for electric power.

However, in 2021, the demand for the system's maximum power of 30,135.30 megawatts becomes apparent in April. The electricity consumption in 2021 increased by 1.8% in (data as of November 2021), with business electricity consumption falling by 5.8% as a result of the third COVID-19 outbreak wave. Household sector's consumption increased by 2.8%, while the industrial sector's expanded by 5.4%, compared to the unusually low growth seen in the same period last year, which was impacted by the first wave of the COVID-19 outbreak in April 2020. This is in conjunction with the expansion of product exports as a result of the global economy's recovery and increased demand from trading partners.

Electricity Consumption Diagram



Year 2021*		
type	Growth Rate (percent)	Proportion (percent)
Household	▲ 2.8	29
Business	▼ 5.8	22
Industry	▲ 5.4	45
Non-Profit Organization**	▼ 1.9	0.1
Agriculture***	▼ 3.3	0.2
Other****	▼ 1.7	2
Free Electricity	▲ 5.7	2

Source: Office of Energy Policy and Planning, Ministry of Energy

Note * Data from Jan.-Nov. 2021

** From Oct. 2012 onwards, government agencies electricity users will be classified as small businesses / businesses, as the case may be.

*** The use of electricity in agriculture is the use of electricity for pumping water for agriculture.

**** Others include temporary electricity and others.

2. Government policies, according to the PDP 2018 REV.1 plan, focus on 3 areas as follows:

1. Economy: Promote the production of electricity at a reasonable cost to reduce the burden on electricity users. Stimulate job creation, income generation and not hinder the long-term economic and social development of the country.
2. Energy security: To Create a comprehensive development of power generation systems, power transmission systems and power distribution systems to meet the demand for electricity. Reduce dependence on foreign energy imports to create energy security at an appropriate level. Create a good quality of life from having enough electricity to everyday life.
3. Environment: Contribute to the generation of electricity from renewable and alternative energy sources and to the improvement of the power system's efficiency. Thailand is willing to set a higher bar for resolving climate issues in order to mitigate environmental impacts and achieve carbon neutrality by 2050 and net zero emissions by 2065.

The forecast of electricity demand used in the preparation of the PDP 2018 REV.1 during the year 2018 - 2037 by using projection of the long-term economic expansion (GPD) trend in 2017 - 2037, has an average of 3.8% per year, using the average population growth rate of -0.02% per year of the Office of the National Economic and Social Development Council (NESDB). It was found that the forecast values for the net total electricity demand of the 3 power utilities system and the net peak power in 2037 were approximately 367,458 million units and 53,997 megawatts, respectively.

Year	PDP 2015		PDP 2018 REV.1		Change	
	Maximum Electrical Power (Megawatts)	Electrical Power (Million units)	Maximum Electrical Power (Megawatts)	Electrical Power (Million units)	Maximum Electrical Power (Megawatts)	Electrical Power (Million units)
2018	32,429	212,515	29,969	203,203	(2,460)	(9,312)
2022	36,776	241,273	35,213	236,488	(1,563)	(4,785)
2027	41,693	273,440	41,079	277,302	(614)	3,862
2032	46,296	303,856	47,303	320,761	1,007	16,905
2037	-	-	53,997	367,458	-	-

Source: Office of Energy Policy and Planning, Ministry of Energy

According to the PDP 2018 REV.1 plan, there will be power generation capacity in the three power grids by late 2037, totaling 77,211 megawatts.

At the end of 2017, power generation capacity was total 46,090 megawatts, based on the total capacity of new power plants of 56,431 megawatts, and the discontinue of old power plants with a capacity of 25,310 megawatts during the same period.

Power generation during 2018 - 2037

- Electricity generation capacity as of December 2017	46,090	megawatts
- New electricity generation capacity during 2018 - 2037	56,431	megawatts
- Discontinued electricity generation capacity from the system during the year 2018 - 2037	(25,310)	megawatts
- Total electricity generation capacity at the end of 2037	77,211	megawatts
New electricity generation capacity during 2018 - 2037 is 56,431 megawatts, classified by type of power plants as follows:		
Renewable Energy Power Plant	18,833	megawatts
Community Power Plant	1,933	megawatts
Pumped-Back Hydroelectric Power Plant	500	megawatts
Cogeneration Power Plant	2,112	megawatts
Combined Heat Power Plant	15,096	megawatts
Coal/lignite Power Plant	1,200	megawatts
Electricity Import	5,857	megawatts
New/Replacement Power Plant	6,900	megawatts
Energy Conservation Section	4,000	megawatts
Total	56,431	megawatts

Source: PDP 2018 REV.1, Energy Policy and Planning Office, Ministry of Energy

Guidelines for preparing the PDP 2018 REV.1 plan consists of 4 main parts:

1. Power plants according to the government's promotion policy: Promote electricity production from renewable energy, such as community waste and Pracharath biomass power plants in 3 southern border provinces.
2. The main fossil fuel power plants are consisting of EGAT power plants, IPP, SPPs, and electricity purchases from abroad by (1) allocating key power plants for regional stability and divided into 7 regions, namely, the north, the northeast, and the east, the western region, the central region, the southern region and the metropolitan area. (2) main power plant allocation as necessary and sufficient which the EGAT maintain the stability of the power system in each region.
3. Renewable energy power plants, as defined in the Renewable Energy Development Plan (AEDP), include biomass, biogas, solar energy, solar buoyancy power in conjunction with hydroelectric power plant, and other renewable energy with an annual purchase target consistent with the policy of generating electricity from renewable sources and at a price not exceeding Grid Parity in order to maintain stable retail electricity prices.
4. Energy conservation policy is a component of the energy conservation plan that can demonstrate confidence in the quality of the product and can compete at prices no higher than Grid Parity.

In 2020, the PDP 2018 REV.1 plan was revised with the approval of the National Energy Policy Council and the cabinet on 19 March 2020 and 20 October 2020, respectively, with the difference from the original as follows:

- 1) Reduction of purchase on electricity generated by the community solar project.
- 2) Supporting the "Energy for All" policy in considering the purchase of electricity from the community power plants during the years 2020 – 2024.
- 3) The Pracharath biomass power plant project in 3 southern border provinces has been delayed from the plan. Therefore, the date of starting electricity trading from 2021 and 2022 with a volume of 60 megawatts per year has been postponed to 2022 and 2023 with a volume of 60 megawatts per year, as well as changing the type of producer from SPP and VSPP.
- 4) Increasing the target for biogas electricity production from PDP 2018 REV.1 at the end of 2037 with a total contracted power generation capacity of 546 megawatts to 1,183 megawatts, as well as clearly separating fuel types from wastewater/waste from plant power.
- 5) Postpone the start date of electricity trading and changing the fuel type of a large private power plant, Burapha Power Generation Co., Ltd. (formerly National Power Supply Company Limited) according to the start date of electricity trading and fuel type that the Company has signed a power purchase agreement.
- 6) Increase the stability of the upper northern region's electrical system in the Chiang Mai area, Chiang Rai, Phayao, and Lamphun Provinces by mitigating risks associated with power generation supplied via the transmission system by extending the life of Mae Moh power plant unit 9 with contracted capacity of 270 megawatts for an additional three years, deferring the plant's closure from 2022 to 2025.

- 7) Reduce the country's overall electricity generation cost by extending the life of low-cost power plants, such as Mae Moh power plant units 12-13, which were scheduled to close in 2025 to 2026.

Alternative Energy Development Plan (AEDP)

1) Power plants according to the government's promotion policy

The government's promotion of renewable energy-generated electricity is aimed at resolving common social problems, such as community waste including promoting the production of electricity from biomass and biogas in targeted areas throughout the three southern border provinces, among other things, which entails integrating collaboration between government, public and private sector to obtain local growth objectives affecting the area's stability, income distribution, and job creation. The best use of available resources to achieve operation's objectives are as follows:

- Build a system of integration and participation covering the public, community and private sectors, affecting security distributing income and employment to local communities
- Create economic growth and enhancing the wealth of the community
- Strengthen the security of electric power of the country
- Promote the use of local resources to their fullest potential
- Decentralization of authority from central to local/regional
- Create a sense of ownership in the community in the area and maintain the power transmission-distribution system

There are targets to promote renewable energy according to the potential of the area, which is based on information of alternative energy development and energy conservation, with a total target of 520 megawatts, consisting of:

- 400-megawatt waste power plant
- 120 megawatts Pracharath biomass power plants in the 3 southern border provinces,

2) New renewable energy power plants and energy conservation measures

The renewable energy power plant will consider procuring electricity from renewable sources in order to maximize the country's remaining renewable energy potential and to accommodate changing consumer behavior, including the effects of disruptive technology on the electric power industry, while continues to be consistent with the COP21 agreements consisting of utilizing biomass, biogas, and solar energy, solar buoyancy power in conjunction with hydroelectric power plants and other renewable energy sources with the objective of purchasing to keep retail electricity prices stable. Additionally, it considers future energy conservation measures that are both reliable and cost effective which can compete with renewable energy power plants.

Renewable Energy/ Energy Conservation	Contract Production Capacity (Megawatts)	Reliable Production Capacity (Megawatts)
Solar energy*	10,000	4,250
Biomass	3,376	2,296
Biogas	546	325
Solar buoyancy in conjunction with Hydroelectric power plant	2,725	1,158
Wind power	1,485	189
Industrial waste	44	26
Measures to conserve electrical energy	-	4,000
Total of the year 2037	18,176	12,244

Note*

1. There will be a solar energy project (Public Solar) 100 megawatts per year for a period of 10 years
2. Renewable energy procurement should be carried out on a competitive basis that does not exceed the average wholesale rate (Grid Parity)

Energy Efficiency Plan (EEP)

When the electricity energy conservation plan is included in the PDP plan's power allocation, it will be considered a type of power generation source focusing exclusively on electrical energy conservation that can be demonstrated to be convincing and compete on a price level not exceeding Grid Parity, with a potential for energy conservation of approximately 4,000 megawatts that can be divided into three strategies: mandatory, supporting, and promoting sectors. The strategies can be summarized as follows:

Measures/Projects	Economical Effect (Megawatts)
(1) Mandatory strategy	3,745
- Improvement and modification of machines/equipment	2,476
- Project for studying energy efficiency standards of industrial plants (Factory Energy Code: FEC)	44
- Measures to enforce building energy standards (Building Energy Code: BEC)	800

Measures/Projects	Economical Effect (Megawatts)
- Project to expand measures to reduce electricity consumption and energy efficiency	425
(2) Support strategy	256
- Combined Heat and Power	226
- Financial Measures	30
(3) Promotion strategy	-
- Energy Management	-
- A study project to prove the results of measures to reduce electricity consumption and energy efficiency	-
- A pilot project to prove the results of measures to reduce electricity consumption and energy efficiency	-
- Database system development and Big Data management	-
- Building energy awareness	-
- Developing the potential of energy personnel	-
Total	4,001

Source: PDP 2018 REV.1, Energy Policy and Planning Office, Ministry of Energy

Business overview of the production and distribution of electricity from renewable energy in Thailand

In general, Thailand's trend of renewable energy for electricity generation is stable. Due to the government's announcement that it will cease purchasing electricity generated by renewable energy sources for 8 years due to the inadequacy of transmission line capacity. Additionally, there are numerous projects that have not yet achieved commercial electricity sales. However, the government will continue to support the production of electricity from renewable sources in accordance with the PDP 2018 REV.1 plan, which will determine the proportion of electricity purchased based on the technology used. Nonetheless, it will be available for purchase in the first phase primarily from community power plants by encouraging communities to generate revenue from electricity for sale to utilities, such as community waste power plants and Pracharat biomass power plants in 3 southern border provinces.

However, the purchase price of electricity cannot exceed the current wholesale average rate in order to avoid distorting the country's electricity price structure. Additionally, the government is attempting to push and promote the integration of multiple renewable energy technologies for electricity generation (Hybrid), such as solar buoyancy combined with wind turbines and energy storage that will allow excess electricity to be used at other times.

Trends in Thailand's renewable energy business of generating and distributing electricity will move in the same direction as the renewable energy equipment business. They must rely heavily on government promotion of investment because renewable energy is typically used to generate electricity due to the higher cost of electricity generation when compared to other fuels (except nuclear power plants), investments in the commercial production and distribution of renewable energy have a long payback period and a low rate of return. Thus, the majority of electricity generated from renewable energy sources in the past has been generated from waste materials such as garbage, rice husks, or bagasse, which are less expensive, and produced at a low power level for use in the relevant industries and is not produced commercially or publicly selling in any way. However, due to current government support, and despite the switch from the old Adder system to the Feed in Tariff, electricity generated from renewable energy continues to attract the interest of electricity producers and business groups to invest in renewable energy generation or other alternative energy sources with the goal of investing in production for distribution to sell to government agencies in order to achieve the goal of renewable energy generation.

Solar energy's business involving producing and selling electricity is expected to continue growing in the future from government support which can be seen from the PDP 2018 REV.1 plan's target for electricity production. It is to generate up to 55% of electricity from solar energy (100 megawatts per year in the people's solar power project for a 10 years, equal to 10,000 megawatts). The renewable energy and energy conservation measures totaling 18,176 megawatts in addition to Thailand's potential for solar energy generation is quite high due to Thailand's close proximity to the equator. This ensures that the majority of the country receives uninterrupted sunlight throughout the year resulting in excellent electricity generation.

According to the PDP 2018 REV.1 plan, the government's purchases of electricity can be divided into 3 parts as follows:

1. Purchasing electricity from neighboring countries; Purchase of 9,000 megawatts from the Lao People's Democratic Republic, The Republic of Union of Myanmar and the Kingdom of Cambodia with the amount of the purchase has not yet been specified.
2. Purchasing 520 megawatts of renewable energy in accordance with the government's promotion policy, and purchasing 18,176 megawatts in accordance with the new renewable energy plan and the energy conservation plan.
3. Conserving energy in the electricity sector in accordance with the Energy Efficiency Plan (EEP), which includes mandatory, supporting, and promoting sectors totaling 4,000 megawatts.

In addition, the PDP 2018 REV.1 plan also focuses on promoting the use of renewable energy in the solar rooftop group of people. With the reducing cost of installing solar power plants on the roof and on the ground, the value is reduced to the point that the cost of electricity production per unit when compared to the purchase of electricity from PEA and MEA can be estimated at around 12%-30%. As a result, the demand for rooftop solar power systems has increased since 2017, especially from the private sector wishing to improve the energy use structure of the business. They desire that the Company to provide services in a variety of formats, including:

1. Appoint the Company as an investor in and supplier of electricity generated by solar systems installed on customers' roofs by establishing a discount rate for electricity sales and a payback period for the project's ultimate goal, which is the transfer of such assets to the customer at the conclusion of the project.
2. Appoint the Company as a contractor to install solar-powered electricity generation systems on the roof, whereby the customer is responsible for all investments made in this section.

With the Company's determination to be a leader in clean energy, it has expanded its business into the market for solar rooftop electricity generation (Private PPA). In 2021, the Company has already signed several rooftop solar energy project agreements with the private sector. The construction of 82,141.88 kilowatts has been completed and is currently underway. In 2022, the Company intends to increase its investment in the development of solar energy plants for sale to the private sector with the anticipated annual growth of 100 megawatts. With regards to the "Built to Suit project", it has worked with Tesco Lotus and completed 4 projects with the anticipation that there will be more customers taking interest in the future.

For the current business and distribution of wind energy electricity, the Company has completed commercial power distribution for a wind energy project with a total capacity of 170 megawatts and is planning an additional 90 megawatts. Additionally, there is a plan to increase investment in wind energy projects throughout the country with wind potential such as Vietnam which is currently undergoing construction and will be able to provide sufficient production capacity to support the Company's business significantly.

The Company's objective is to increase investment in renewable energy power plants other than solar and wind. With the potential of biomass in Thailand, in conjunction with the government's PDP 2018 REV.1 plan, which has a demand for electricity from the biomass group of 3,376 megawatts, biomass is considered to be the number 2 energy source, following solar energy. As a result, the Company sees an opportunity to expand its business of renewable energy generation that is expected to increase in size. At the moment, electricity purchased from biomass power plants is subject to an additional electricity fee or adder of 30 satang per unit which is the type of Fit-in Tariff, and require an auction for a discount on electricity. The bidder who submits the lowest discounted bid is considered the auction winner. Historically, the auction of discounted electricity was extremely competitive. There are bidders offering discounts of up to 80%, resulting in a total purchase price for electricity using the

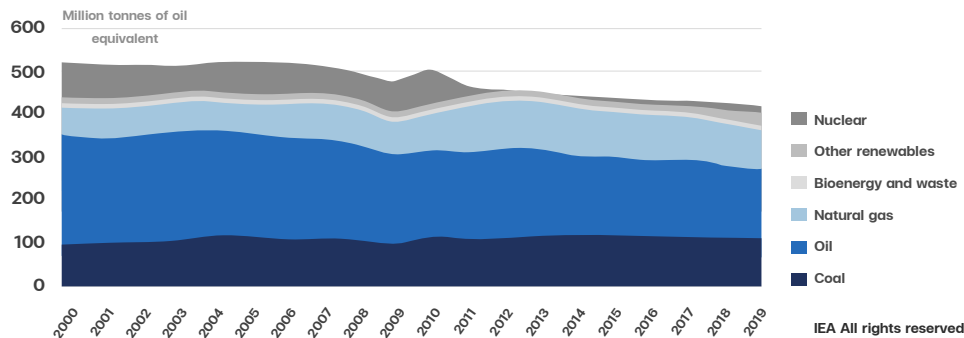
FIT of less than Baht 3 per unit, extending the payback period of biomass power plants. However, management of biomass power plants post the challenge of raw material sufficiency for power plants, competition in terms of price and volume of purchases, as well as transportation from raw material sources to biomass power plants. As a result, the Company must invest time in studying and researching suitable energy crops to establish their own farmland and eliminate the risk of relying on imported raw materials to add value and gain a competitive edge.

Additionally, the Company has a stated policy of investing in renewable energy on a global scale to increase the number of power purchase agreements considering the return on investment and the stability of long-term income, such as investment in solar power in Japan, Malaysia, and Vietnam. The Company is confident that investment in renewable energy abroad will increase significantly over the next three years, enabling it to achieve the goal of owning at least 400-500 megawatts of power plants abroad within 3 years. The Company also has a plan to increase the electricity generation capacity to 1,000 megawatts in the year 2023.

An overview of Japan's electrical system

In October 2020, the Japanese government announced that it would reduce greenhouse gas emissions to achieve the Carbon Neutral target. However, according to 2019 data, Japan still remains heavily reliant on fossil fuels for more than 88 percent of primary fuel energy as illustrated in Figure 1. In order to accomplish this goal, the government has developed an energy strategy with the goal of increasing the share of renewable energy in electricity generation to 22% - 24%, or 13% - 14% of primary fuel energy by the year 2030 as illustrated in Diagram 2, which will have the primary capacity from solar energy exceeding 60 gigawatts, which is an increase by more than 20% over the 2019 data at 50 gigawatts capacity, as illustrated in Figure 3.

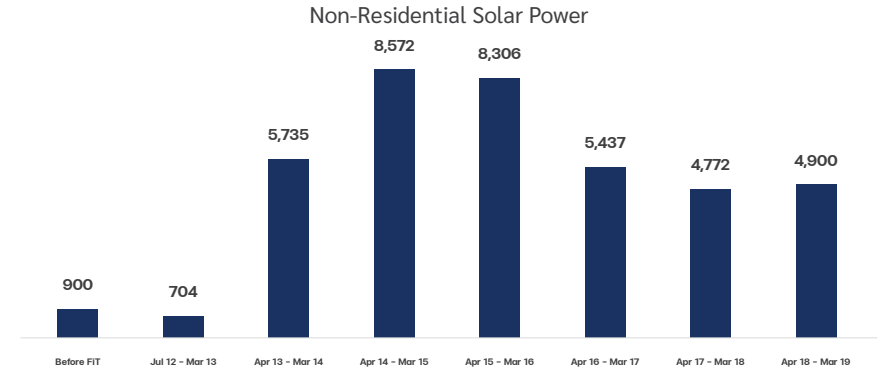
Figure 1 Main fuel consumption ratio until 2019



Source: International Energy Agency (IEA)

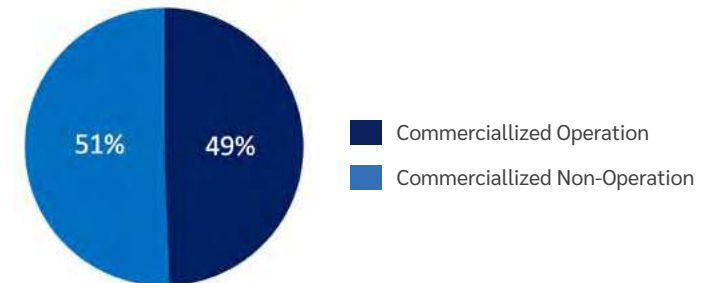
Figure 2. Plan to increase the use of renewable energy in electricity generation and its share of main fuel energy by 2030

Graph 1 The amount of power disposed of power classified by time

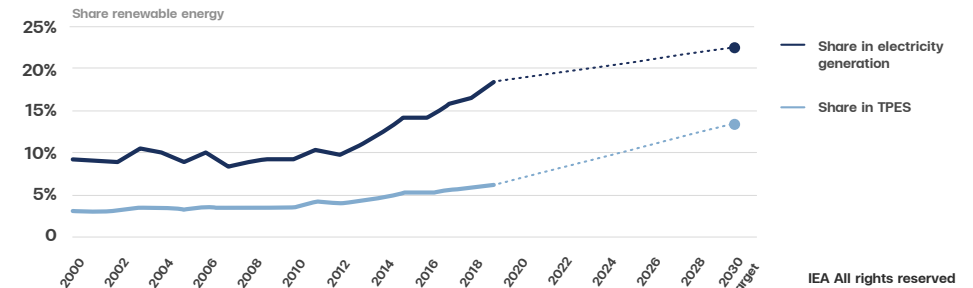


Source: Energy Status Report at home and abroad, September 2019

Graph 2 Power Plant Status Classified by Power

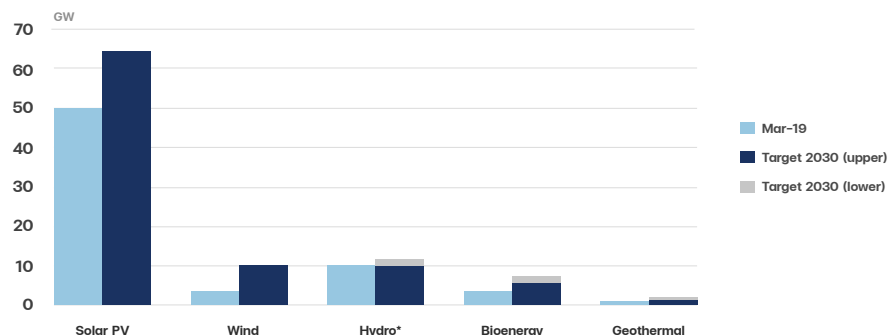


Source: Energy White Paper 2019

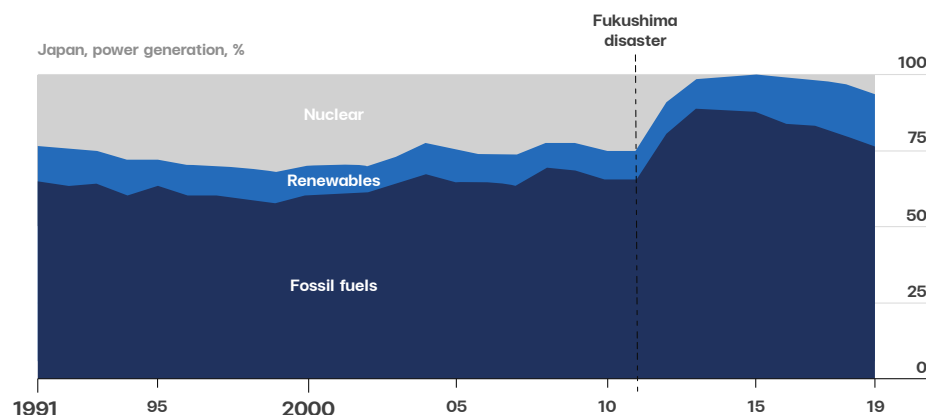


Source: International Energy Agency (IEA)

Figure 3: Number of electricity generating capacity from renewable energy in 2019 and targets in 2030



Source: International Energy Agency (IEA)



Source: International Energy Agency (IEA)

Business overview of the production and distribution of electricity from renewable energy in Japan

Running a power generation business in Japan, especially solar power, will be more challenging due to two main factors:

1. Modification of the purchase price from the FIT system to the bidding system. In other words, the Japanese government has continuously reduced the price of FIT from a high price of 40 yen/kWh in fiscal 2012 until fiscal year 2017. The government has changed the method of price determination from being determined by the government to an auction by project operators larger than 250 kilowatts in order to reduce the purchase price in line with the lower cost of solar power generation. Report of the average bid price according to the results of the last auction (10th time), in 2021 the price ceiling has been set at 10.5 yen/kWh. The average asking price of the winning bidder is 10.31 yen/kWh. The auction price tends to decline steadily from the 1st auction in 2017, which was in the range of

17.2-20 yen/kWh with a number of constraints such as increased price competition and difficult terrain to develop projects requiring high investment capital. The Company foresees that the purchase price auction policy will affect the search for new projects to invest in because the return on investment is not in accordance with the Company's investment policy.

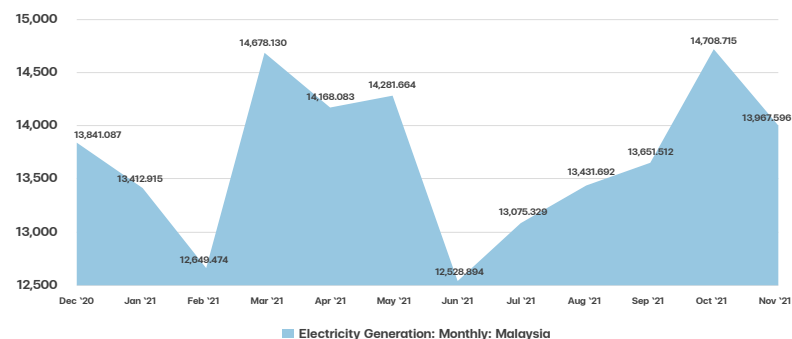
2. Measures to stimulate projects that are still under development, especially projects that were licensed before fiscal year 2015, causing the Company to sell 2 projects under development and construction to reduce the risk of delays in the project development process and construction. This may cause the period of electricity sales to be reduced from the previous projection.

However, the Japanese government maintains a policy encouraging the use of renewable energy to generate electricity especially large-scale solar and wind energy projects that legislation amending the Electricity Business Act and related statutes have been drafted in order to initiate the Feed-In-Premium (FIP) in which operators earn revenue from electricity sales in addition to receiving financial assistance throughout the FIP period. Nonetheless, the effort to define the rules further, including the standard for calculating the system's reference price must be carried out. Once approved, the draft law will take effect on April 1, 2022.

As a result, the Company continues to seek investment opportunities in Japan because it has great knowledgeable about the business environment. The Company has begun to consider investment opportunities in other alternative energy sources, primarily in response to government policies, as well as international investments.

Overview of the Malaysian Electrical System

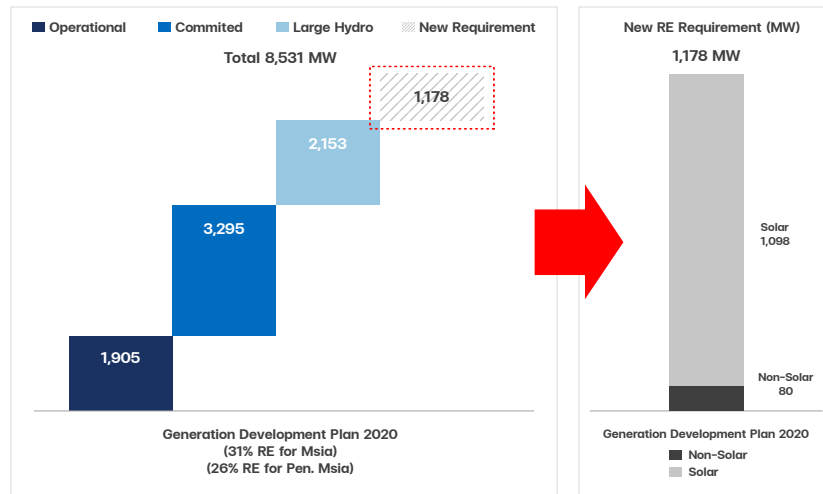
Since 2020, Malaysia's economy has been faced with the uncertainty of the COVID-19 epidemic situation which poses a huge challenge to the country's development. Analysts say the impact is likely to lead to lower electricity consumption than historically forecasts and cause moderate GDP growth for a short period in the current situation compared to global GDP. However, when comparing electricity demand from 2015 to 2020, Malaysia's electricity consumption increased from 16,822 megawatts to 18,808 megawatts, growing by 2.3 % per year. In November 2021 Malaysia uses 13,968 gigawatts of electricity per hour as shown in the picture below:



Source: CEIC data

SOURCE: WWW.CEICDATA.COM | CEIC Data

Due to the gradual economic growth, despite the slowdown caused by the COVID-19 pandemic, the government has a long-term plan to develop renewable energy generation to generate clean source of energy of 31% by 2025 which will make Malaysian have 31% source of renewable energy from its total energy source. Malaysia will need 1,178 megawatts consisting of 1,098 megawatts of solar energy and 80 megawatts of other renewable energy sources, as illustrated in the figure below. Additionally, Malaysia has set a long-term goal of increasing its clean energy generation capacity to 40%, or 2,414 megawatts, by 2035 which was projected that Solar energy will contribute for 30% of the total electricity demand.



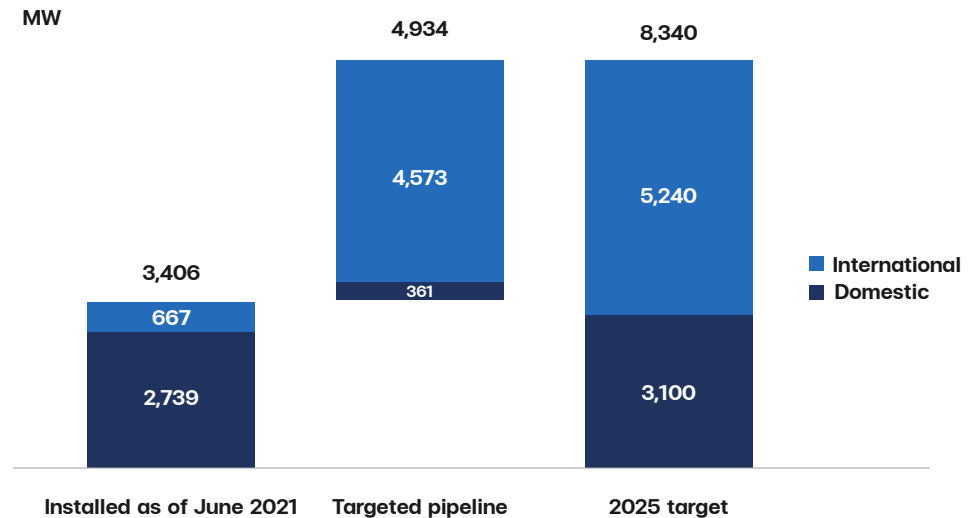
Source: Report on Peninsular Malaysia Generation Development Plan 2020 (2021 – 2039)

Malaysia is a country where the government strongly supports solar energy-based renewable energy power plants. Malaysia's government allows the private sector to participate in the ownership of large-scale solar power plants (LSS) through competitive bidding under the conditions established by government agencies. At the moment, there are LSS1 projects, LSS2 projects, and LSS3 projects. In December 2016, 19 companies won the auction for the LSS1 project, totaling 451 megawatts following by LSS2 with a total of 562 megawatts in December 2017. The Malaysian government opened up LSS3 project for auction for over 500 megawatts in December 2017 with the lowest price that the government has set per unit of electricity for the winning private sector at 0.178 Malaysian ringgit per kWh.

On the matter of supporting other renewable energy sources, the government supports rooftop solar energy generation, small hydroelectric plant, biogas plant, and a biomass power plant. Entrepreneurs in the renewable energy sector are eligible for tax benefits. Malaysia's government has set a target for renewable energy to account for 20% of total electricity generation capacity by 2025.

Overview of the business and distribution of electricity from renewable energy in Malaysia

Since 2017, Malaysia has had policies to promote the use of renewable energy, particularly solar power plants because the Malaysian government recognizes the region's potential. Additionally, the cost of solar energy plant construction has decreased significantly making the cost of solar energy generation per unit became competitive with other forms of energy generation. As a result, Malaysia's government is promoting increased solar energy generation including the expansion of the power plant's capacity and the number of authorized persons applying for a power purchase agreement. Malaysia's government intends to eliminate carbon dioxide emissions entirely by 2050, with a goal of increasing renewable energy generation to 8.3 gigawatts by 2030 from current levels. As of June 2021, there are already 3.4 GW renewable energy (Source: BloombergNEF), as illustrated in the graph below.



Source: Tenaga Nasional Berhad Analyst Briefing Presentation – Quarter 2, 2021, BloombergNEF

The Company has worked with partners who are local investors to jointly develop a 29.99 megawatts solar power plant project, Large Scale Solar PV (LSSPV), in Malaysia. Currently, the construction of the project has been completed and the power distribution has been commercialized since 31 December 2020.

Source : www.bot.or.th, www.eppo.go.th, www.egat.com, <http://www.drborworn.com/>

Overview of the power system of Vietnam

Vietnam has a continuous economic growth rate. The gross domestic product (GDP) from 2015 to 2019 averaged at 6.9%. Although in 2021, it has been heavily impacted by the COVID-19 outbreak, Vietnam still has an economic growth rate of 2.58%. It is expected that in 2022, the economic growth rate will increase to more than 6.6% (Source: IMF).

Vietnam's energy demand at the end of 2019 was 240.1-billion-kilowatt hours, which is an increase of 9.1% from 2018 while the maximum energy load (maximum load) was 38,249 megawatts (as of 21 June 2019). In 2020, the total installed capacity of the country was 69,297 megawatts, which is an increase of 25.75% compared to 2019 and in which a share of solar energy consumption was at 8,871 megawatts (accounting for 12.80%) and a share of wind power was at 518 megawatts (accounting for 0.75%).

Table of Installed capacity by types

Installed capacity by fuel types

Power source	2019		2020	
	MW	(%)	MW	(%)
Hydropower	20,283	36.81	20,774	29.98
Coal fired	19,744	35.83	21,554	31.10
Gas fired + oil fired	8,857	16.07	8,858	12.78
Wind	369	0.67	518	0.75
Solar	4,669	8.47	8,871	12.80
Rooftop solar	320	0.58	7,785	11.23
Biomass	293	0.53	365	0.53
Imported	572	1.04	572	0.83
Total	55,107	100.00	69,297	100.00

Source: 2021 Annual Report, Vietnam Electricity (EVN)

The Vietnamese government has a policy to continuously push for renewable energy from solar energy, wind energy, and others. The policy of purchasing power from the private sector which is licensed as a system of Feed in Tariff (FiT). The supply of electricity is divided by type and starting date as follows:

Type of solar power plant (Unit: US cent/ kilowatt hour)	Supply of electricity before June 30, 2019	Supply of electricity before December 31, 2020
Solar Farm	9.35	7.09
Solar Roof	-	8.38
Floating Solar	-	7.69

Type of wind power plant (Unit: US cent/ kilowatt hour)	Supply of electricity before October 31, 2021	Supply of electricity between November 1, 2021 to December 31, 2023.
Coastal wind power plant	8.5	Not announced
Offshore wind power plant	9.8	Not announced

The policy from the government after the end of the FiT system is unclear whether the government will maintain the FiT system or whether it will switch to an electricity bidding format.

Overview of the business and distribution of electricity from renewable energy in Vietnam

The Company focuses on the renewable energy business in Vietnam by focusing on solar and wind power which is a renewable energy power plant that the Company has expertise in developing and constructing. The Vietnamese government currently estimates that the country's energy consumption will increase to 234.6 terawatts in 2020 and 506 terawatts by 2030. There is a plan that the solar power generation capacity will be 17,240 megawatts in 2025 and 18,640 megawatts in 2030 and wind generation capacity will be 11,320 megawatts in 2025 and 18,010 megawatts in 2030.

Competition

The competition in the power generation business is likely to become more intense from continuous investments by major power producers. As the latest PDP plan requires the presence of the main power plant in the sector to have transmission line readiness and provide opportunities to purchase electricity from the private sector, especially fuels from renewable energy. As a result, large operators (IPP/SPP) with financial and technological potential are likely to expand their production capacity and

invest in new power plants from renewable energy. The group of construction contractors, engineering / procurement, design, and construction who has expertise in electrical installation and solar cell equipment/technology manufacturers have plans to invest in the production of electricity from renewable energy as well, thus, making the competition trend increase. However, the future of power generation business is still facing challenges from using production innovations/technology to develop power plants from various types of renewable energy such as solar, wind and hybrid in terms of production efficiency, environmental friendliness, and cost.

In addition, the policy that is open to the private sector to generate more electricity in the form of a Private Power Purchase Agreement allows consumers to produce and sell electricity by themselves, especially the production of electricity from the sun in which the current production cost is greatly reduced. Therefore, it is expected to motivate consumers to increasingly produce electricity for their own use.

However, the Company is a manufacturer and distributor of electrical equipment, as well as being a one-stop installation and maintenance service provider with cost and quality efficiency. As a result, the Company still has high competence and competitive advantages against competitors in the same market.

2. Total Solution of Engineering and Turnkey Business Nature of Business

1. Renewable Energy Power Plant Construction

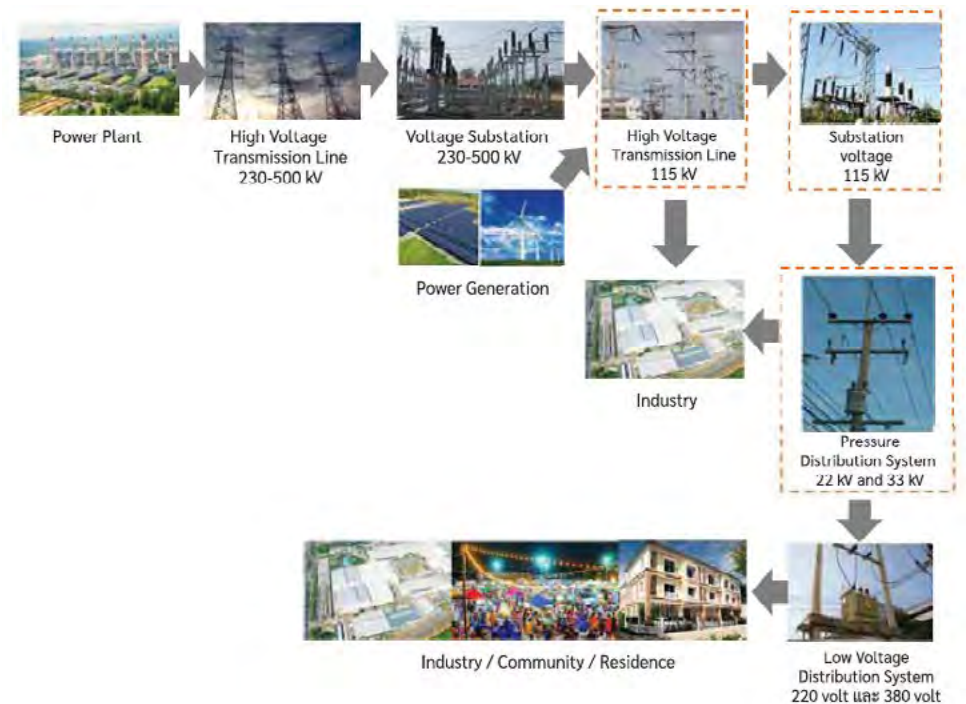


The government's policy to promote renewable energy generation together with the Company's experience in the renewable energy business, as a distributor of products used in power plants and a provider of engineering services, enables the Company to expand into a business of comprehensive

renewable energy power plant construction by providing consulting services in engineering, design, and construction of renewable energy power plants. Currently, the Company has undergone power plants construction business for associated, subsidiaries, and other companies, including those that have been completed and are under construction at a total amount of more than 372.06 MW. The electricity generation from renewable energy in Thailand is still in its infancy, therefore, it tends to grow continuously and is an opportunity for the Company to expand business..

2. Construction of Renewable Energy Power Plant, Substation, Transmission System and Underground System

The Company operates the business of constructing electrical system through Gunkul Power Development Co., Ltd. ("GPD") and Future Electrical Control Co., Ltd. ("FEC"), which are subsidiaries that the Company holds 99.99% and 99.99% of shares respectively. The services are shown in the dotted line as shown in the diagram below. GPD has been in the business of constructing solar power plants that are mounted on rooftops (Solar PV Rooftop) for usage within customers' business.



Structure of transmission system and power distribution system

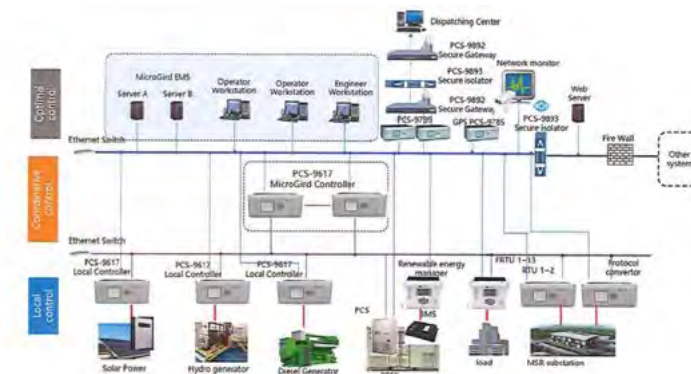
In 2021, GPD has built a solar power plant that are mounted on rooftops (Solar PV Rooftop) for customers in the government enterprises totaling 2 projects and private sector totaling 95 projects. FEC has built transmission line and sub-station, including underground electrical work for the Provincial Electricity Authority, Metropolitan Electricity Authority, and private agencies totaling 34 projects.

3. Supply and providing service of underwater cables installation and equipment associated with all types of underwater cables

As the government's and PEA's policies have planned to carry out various projects to the region to spread prosperity, promote well-being and improve the quality of life by constructing an electrical system on 61 inhabited islands and 41 inhabited islands that already have electricity, divided into an installation of diesel power plant on 5 islands, the connection of electrical system from mainland to islands via the installation of poles on 13 islands and the connection via underwater cables on 23 islands. It can be seen that some islands continue to struggle with insufficient electricity, and PEA is aware of the development of electrical systems to ensure that all areas of the country have access to adequate electrical power. In this regard, the underwater cable construction project is one of the initiatives being promoted to replace and expand the islands' power supply capacity, thereby resolving the island's power grid and power outage problems, developing electrical systems in order to increase capacity, improve the stability of the electricity supply and to meet the growing electricity demand of the islands, which are important tourist destinations with a relatively high rate of economic growth. Currently, the Company has completed the construction of 2 projects, namely the 22KV underwater cable maintenance project in Koh Si Chang, Chonburi Province and the 33 KV underwater cable construction project at Koh Phra Thong, Phang Nga Province.

4. Design, supply and installation of microgrid systems, energy storage system, and related intelligent electrical equipment

Due to the government policy and the energy network development plan in accordance with the 11th Economic and Social Development Plan, which focusing on building energy security along with the strategy to grow the quality of life that is environmentally friendly (Green Growth), the Company saw an opportunity to expand the renewable energy business in terms of proper management of renewable energy. As a result, it participated in the development and won the bidding for the Provincial Electricity Authority's Microgrid Power System Development Project in Mae Sariang District, Mae Hong Son Province, valued at 132.90 million baht. The duration of construction was 360 days. It is considered as Thailand's first pilot project.



Picture depicts the layout of the intelligent control system for Microgrid development project. Mae Sariang District, Mae Hong Son Province, Provincial Electricity Authority



Picture depicts the building that controls the intelligent electrical system, Microgrid development project. Mae Sariang District, Mae Hong Son Province, of the Provincial Electricity Authority



Picture depicts Battery Energy Storage system, size 3 megawatts/2.2 MWh Microgrid development project at Mae Sariang District, Mae Hong Son Province, of the Provincial Electricity Authority.



Industry, Market and Competition

Renewable energy power plant construction business

From the government's policy to promote renewable energy production, including Thailand's potential to produce renewable energy, companies both domestically and internationally have expressed interest in investing in the business of renewable energy generation. The Company's renewable energy power plant construction business will expand according to an increase in size and number of renewable energy power plants. As previously stated, electricity generation from renewable energy sources in Thailand has the potential to grow significantly in the future. Additionally, the Company has the potential to construct renewable energy power plants through a fully integrated EPC (Engineering, Procurement, and Construction) model, and has plans for continuous business development, both domestically and internationally.

The Group currently has a backlog of approximately 3,500 million baht by aiming to have a cumulative target of 10,000 million baht this year, and will gradually recognize revenues of 2,500 million baht this year. This is due to the diversity of projects of government sectors that arise with purposes of expanding the city and bringing power cables underground.

Competition

Numerous construction companies, both domestic and international, are bidding on renewable energy power plant construction projects at the moment. However, as the Group is experienced in the construction of solar power plants and has its own power plant, the Group has significant bargaining power with manufacturers of solar panels, wind turbines, and other power plant equipment. Additionally, the Group's own factories that developed products and equipment used in renewable energy power plants, and the Group can assist owners of renewable energy power plants with obtaining various licenses for power plant construction, including BOI, Ror.Ngor. 4, and coordination with the electricity authority and other government agencies. This results in the power plant owner placing their trust in the Company and choosing to use its services. These factors position the Company as a leader in the development of renewable energy power plants. In 2021, the Company received additional rooftop solar power plant construction projects for private customers.

3. High Voltage Equipment Business

Nature of Business

1. Business of production, procurement and distribution of equipment for electrical systems both domestically and internationally



G.K. Assembly Co., Ltd. (GKA), G.K. Power Products Co., Ltd. (GKP) and K.N.P. Supply Co., Ltd. are the Company's subsidiaries that operating business of producing, procuring, and distributing equipment for electrical system that encompass all facets of the power transmission and distribution system, from generation to consumption. The Group is widely regarded as a market leader, particularly in terms of product variety, as evidenced by the more than 5,000 products available for sale to meet the diverse needs and applications of various groups of customers, including products manufactured in the Group's factories and those procured from manufacturers whose products are recognized for their quality and standards, both from domestic and abroad, including the United States, Germany, Korea, Sweden, Japan, and the People's Republic of China, among others.

This can be classified into 5 categories based on the intended use:

1. Producing and distributing equipment for protecting and disconnecting electrical systems for distribution and transmission lines, ranging from medium to high voltage of 115kV, such as a switch that opens when an SF6 gas load is detected, which can be controlled remotely (SF6 Load Break Switch, Surge Arrester, or Remote Controlled Switch), Disconnecting switch, Fuse cutout, Air Break switch, and Transformer, etc.
2. Producing and distributing Grounding equipment and lightning protection devices (LPS) or lightning protection to prevent danger from electric leakage or external overvoltage such as Air Terminal, Exothermic Welding, etc.
3. Lighting equipment and electric energy meter such as Smart Meter, Street Lamp Set, Photo Control Switch, and Street Lighting Control Relay, etc.
4. Producing and distributing hardware, and structures used in the installation, maintenance, and expansion of distribution systems, power transmission lines, and substations ranging from medium to high voltage of 115kV for the purpose of supplying electric power to consumers, such as welding equipment, Cable, Wiring Harness, Protective Cover for the Live Part, Preformed, Cable Spacer, Connector, Cable Termination, Cable Splicing, Insulator, and the hemp greenhouse with table to create a ready-made hemp cultivation system, as well as hemp planting equipment and planting pots.

Hemp Greenhouse



Planting Table with Pots



5. Producing and distributing tool and personal safety equipment that enable the operators to work quickly and safely, such as Safety Belt for climbing, Shorting Circuit Earthing set, 22kV, 33kV, and 115kV systems, disconnect sticks, rubber gloves, industrial gloves, helmets, and measuring and testing equipment, etc.
6. Test control by an international standard-compliant test room operating system that has been certified by the National Institute of Industrial Standards for testing High Voltage equipment in accordance with the ISO/IEC 17025 test laboratory accreditation standard.



2. Business of production, procurement and distribution of Energy-Saving Products and Appropriate Alternative Energy

1. The Company manufactures, assembles, procures, and distributes light bulbs and LED lamps (LED) for use both inside and outside the building, including street lamps, floodlights, and those powered by a solar system and battery, BIPV Glass and Flexible Solar PV, which are suitable for architecture or landscape improvement. It also carries out the service of electrical system improvement in office buildings or factories; providing consulting services for managing alternative energy systems that are suitable for customers; engineering, procurement and commissioning of electrical systems or power plants such as Solar Rooftop, Solar Floating, Solar Water Pump, Solar Air Conditioner or Organic Rankine Cycle System (ORC) for Waste Heat

Recovery, etc. By operating under Gunkul Energy Solution and Lighting Co., Ltd. (GES), which was renamed from Gunkul LED Lighting Co., Ltd. in 2018 to create a more consistent image and to assist in the growth of the business, market, and customer base for a group of electricity users looking to save energy or improve the efficiency of their business's electrical system in a broader and deeper way.



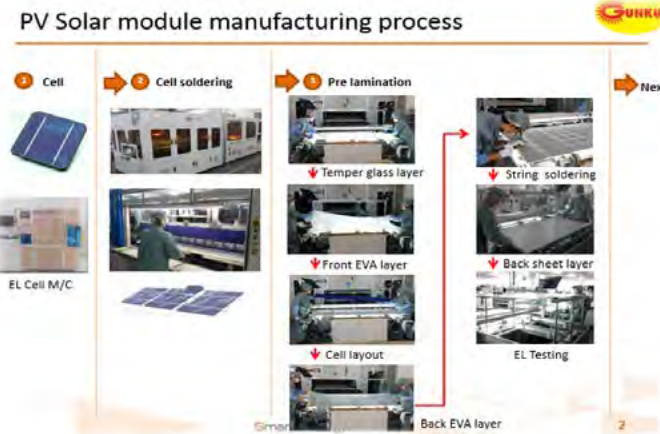
By producing products that adhere to international standards and are of superior quality, it has earned the trust of a diverse customer base, including project customers such as sugar factories, steel mill groups, hospital groups, bank groups, and warehouse rental service providers, as well as government customers, universities, and distributors in Bangkok and other provinces throughout the country.



The Company focuses on developing and increasing its competitiveness by providing comprehensive services to customers with an emphasis on energy conservation. These services are supervised by a team of expert engineers and highly experienced technicians to ensure that customers can trust the Company to deliver goods and services that meet international standards and are of the highest quality.

2. Producing and distributing solar panels, as well as procuring equipment for solar energy generation systems.

Production of solar panels according to TIS 61215 and TIS 2580 standards



The Company has improved the efficiency and manufacturing technology of solar panels to achieve a higher power output of 320Watt per panel and is constantly improving to increase the power output per panel in the future. In production, the Company adheres to international quality standards and makes use of automated mechanical production technology, which is consistent with the government's policy of accelerating the country's transition to Thailand 4.0 on renewable energy, and ensures that people have access to electricity on a continuous basis. Additionally, it also supports Thailand's energy policy.

Industry, Market and Competition

Business Overview

1. Business of production, procurement and distribution of equipment for electrical systems

The business growth trend is inextricably linked to the electricity generation business. The direction of growth is determined by the demand for electricity and the amount produced in the country, as well as the expansion of transmission lines and power distribution systems, and the government policies to develop the country's power generation. Various relevant agencies, including the Electricity Generating Authority of Thailand and the Ministry of Energy's Energy Policy and Planning Office, forecasted future electricity demand in Thailand and then established the framework for the power development plan, which will be used to plan investments in various development

projects to support the growing demand for electricity. According to information contained in the PDP 2018 REV.1 plan, the 3 power agencies, EGAT, MEA, and PEA, intend to invest in the construction of transmission lines and substations, as well as to improve and expand the electric power distribution system, including a plan to convert the aerial cable system in Bangkok area and major cities throughout the provinces to underground power cable. Additionally, there are electrical system development plans to support the establishment of special economic zones for 2 duration period in 10 border provinces; a plan to develop an undersea cable system to Koh Samui District, Surat Thani Province to improve the electrical system's stability; a power transmission system project to support the project aiming to increase the Bhumibol Dam's water capital; including an electrical system development project in accordance with Thailand Smart Grid Development Master Plan with total investment value of more than 100 billion baht. This encourages private sector to expand production capacity and investment, and together with a support from government agencies in transportation infrastructure development projects and urban public transports, namely the construction of electric trains in Bangkok and its vicinities under the 12th National Economic and Social Development Plan (2017-2021), this contributes to a continuous growth of electrical equipment industry in Thailand.

2. Business of production, acquisition, and distribution of equipment for renewable energy systems

The business of production, acquisition, and distribution of equipment for renewable energy systems tends to expand continuously, by having the government as a leader and supporting investment through the following factors:

1. The PDP 2018 REV.1 plan requires the purchase of electricity generated by renewable energy sources, which is divided into the waste power plants with a capacity of 400 MW, Pracharat biomass power plants with a capacity of 120 MW in 3 southern border provinces, and renewable energy power plants powered by biomass fuels, biogas, solar hybrid, and wind energy, as specified in the Renewable and Alternative Energy Development Plan (AEDP20218). Permission to install a solar rooftop system for distribution to factories or one's own business; or investment in a solar rooftop system for the purpose of freely distributing electricity to the private sector; and plans to purchase additional electricity from renewable sources such as biomass, biogas, solar energy, floating solar energy, or hydroelectric power plants in the future will act as a catalyst for increased investment in renewable energy, resulting in the expansion of the renewable energy equipment business.
2. The Board of Investment (BOI) has announced measures to encourage investment in order to boost production efficiency according to the Board of Investment's Notification No. 9/2017 by providing tax incentives to groups that are entitled to privilege under the Notification, such as factories, warehouses, and large buildings. Examples of projects include factories that install solar panels on their roofs and generate electricity for use in their operations to reduce reliance on electricity supplied by Thailand's Electricity Generating Authority. Currently, numerous industrial factories and warehouses are interested in participating in the project.

Competition

The Group's primary customers are the public sector, state-owned enterprises, and private businesses. In general, such customers will determine the entrepreneurs' qualifications to participate in the tender, as well as the bidders' potential and experience as suppliers of equipment for various projects. There are approximately 8-10 entrepreneurs who are bidding against the Group. Although some entrepreneurs sell a variety of products, but currently none of them can be counted as a competitor that sell products across all product categories like the Group. Additionally, since the Group is a supplier and distributor of a various range of products, entrepreneurs in various product categories are treated as the Group's partners.

Furthermore, as the electrical system is considered a fundamental component of the country's infrastructure that the government places a premium on continuous investment every year, it results in the total market value of related businesses to increase consistently according to the government's investment policy. On the other hand, the number of new entrepreneurs is limited, as the business requires capital and the ability to provide products that meet the quality requirements and standards set by customers. As a result, the business competition is not particularly vicious.

The Group is renowned for the high quality and variety of its products. Coupled with over 39 years of business experience, the Group possesses expertise in sourcing high-quality products from a variety of trade partners both domestically and internationally. Being the owner of factories also enables the Group to better control quality and cost of specific parts, and more flexible in preparing products for sale to customers. Furthermore, as the Group is an entrepreneur that focus on products' quality and conducts a continuous research and development to meet the diverse needs of customers, accordingly the Group's factories have registered their products with the Ministry of Industry and obtained industrial standards certification. As a result, the Group receives a positive reputation and has always been trusted by customers to return and use the Group's services.

For the competition in the Residential Solar Rooftop market, due to a Solar Rooftop system can generate electricity for up to 25 years, most buyers then look for a company with extensive experience in Solar Rooftop systems, is financially stable, and is capable of providing one-stop service. This enables the Company to determine that the competition can be conducted effectively.

4. Ecosystem Business Platform & Innovation Nature of Business

The Company recognizes that access to energy is a fundamental human right and every individual must be able to access, comprehend, define, and select the energy that is best for them. On September 3, 2020, the Company established a new business unit called "Gunkul Spectrum" to develop a new digital energy business focused on the energy industry, including the development of a peer-to-peer (P2P Energy Trading Platform) power trading system, a solar panel monitoring system

via unmanned aerial vehicle, an e-commerce platform for buying and selling electrical equipment, as well as searching for technicians and service providers, including EV Charging Station business. Its primary mission is to develop never-ending innovations in energy sources of the future in order to serve as a bridge that connects everyone to the next level, to a better life, to build a strong ecosystem, and to propel the Company to become the nation's first energy trendsetter.



The new business model under the Gunkul Spectrum will be developed in conjunction with the Company's existing operations, as well as by pursuing new business opportunities and expanding its customer base. Initially, the Company concentrated on B2B (Business-to-Business) and B2G (Business-to-Government) before expanding into the B2C (Business-to-Consumer) market, or market of electricity users. This is consistent with the energy industry's trend that is changing from Centralized toward Decentralized. Gunkul Spectrum is responsible for assessing the feasibility of novel energy technologies and introducing them to Thai people. The Company will transit from being a service provider to an innovator in the energy sector.

The development principle of GUNKUL SPECTRUM is divided into 3 axes:

1. Performance Enhancement: The process of introducing new ideas to improve the efficiency of an organization's operations.
2. Market Expansion: Business expansion into new markets, such as the digital platform business.
3. Leader in Energy Innovation: Being the leader in energy innovation and as Thailand's trend setter.

The objective is to examine technologies that play roles in other industries in order to develop innovative products (Product Innovation) that can be used to penetrate new markets by incorporating Blockchain, AI, Social Commerce, and IoT into the creation process. Gunkul Spectrum Innovation focuses on partnering with strong business partners and industry leaders in a variety of industries, including SCB10X, AIS SGtech (from Naresuan University), and most recently, real estate development company like Origin Property, to expand energy products that serve as a living solution.

Current Commercial Projects Development and Operation

1. VOLT ENERGY MARKETPLACE

In the ever-growing era of online trading, an e-commerce platform is another way to expand the market, increase competitiveness, and potentially create an Unfair Advantage for the business. VOLT ENERGY MARKETPLACE is a platform that brings together professional rooftop solar installers from across Thailand in an online format and provides matching services to customers interested in comprehensively installing a rooftop solar system. This can transform solar system installation from difficult to simple, convenient, and safe. It is focusing on the solar roof market in order to serve households and SMEs with installation sizes ranging from 3 kilowatts to 100 kilowatts, as well as electricity users with monthly bills ranging from 3,000 baht per month. VOLT has recently expanded its business model to include additional electrical engineering services such as general electrical system maintenance and electric vehicle charger installation in order to strengthen the platform and establish itself as a society of quality electrician.

The VOLT platform provides the following services:

- (1) Calculate the customer's energy consumption and make a preliminary recommendation for a solar rooftop installation.
- (2) Conduct a thorough comparison of local service providers (e.g. price comparison, product quality, warranty).
- (3) Act as a payment intermediary (Secured payment).
- (4) A service for inspection of the installation's quality.

Volt E-marketplace service model

The VOLT Platform's services are not limited to providing services to customers but also to providing a fair services to installers (Installer/EPC contractor) to be comfortable at work.

- (1) Expand online sales and marketing channels.
- (2) Reduce the cost of solar roof installation by eliminating unnecessary steps and promoting the installer's sales and marketing efforts.
- (3) Coordination and inquiry service.
- (4) Receipt of payment and mitigation of risk for the installer.

2. Platform for selling products at wholesale prices via GodungFaifaa.com

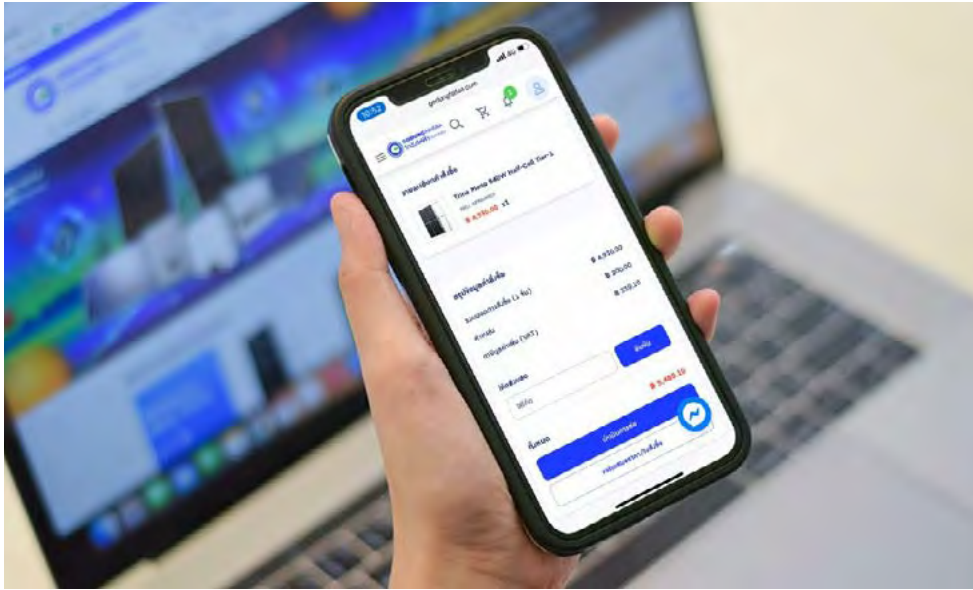
Gunkul Spectrum has collaborated with SCB10X to implement a marketplace called "Godung Faifaa" (www.GodungFaifaa.com) that serves as a one-stop shop for connecting buyers of electrical equipment (such as electrical equipment shops and contractors) with both domestic and international equipment manufacturers. This is to develop a transportation system, various payment systems, and end-to-end services in order to create a sustainable eco-system, effectively eliminate process constraints, and enable nationwide commerce. It is considered as the first wholesale online marketplace for electrical equipment in Asia.

Operating results of Godung Faifaa in 2021

After only 6-months of operation, Godung Faifaa platform generated revenue of 57.3 million baht in 2021, with an average of at least 4,000 website visitors per month, resulting in a 360 percent increase in revenue. The subscribers are solar companies that focus on the market of solar equipment installation in households and businesses of various sizes (Solar Rooftop 3 kilowatts - 20 kilowatts).

Godung Faifaa platform's objectives are as follows:

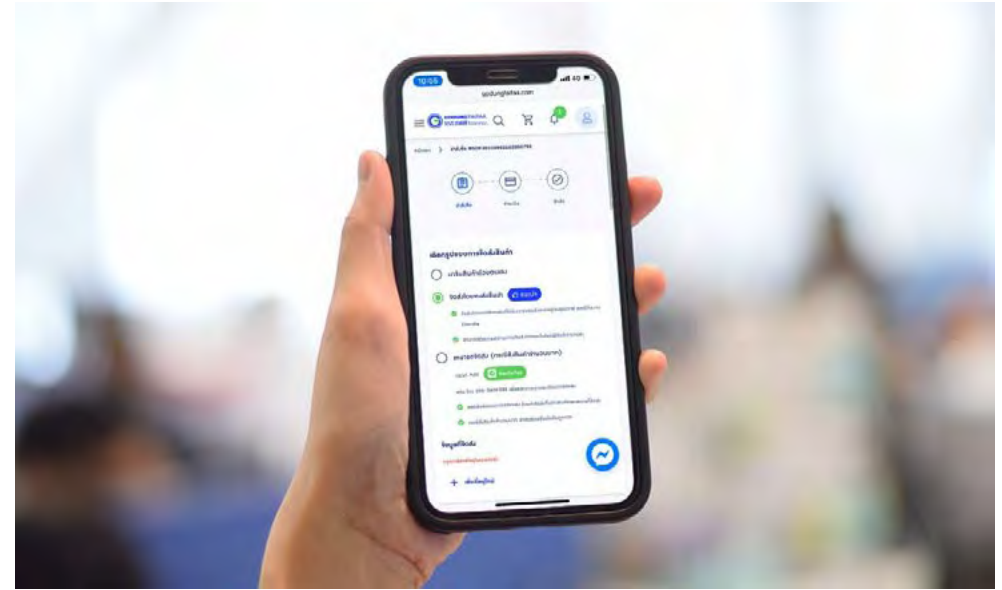
1. Godung Faifaa brings together the world's leading brands of electrical and solar equipment by dividing popular products into 4 broad categories:
 - Photovoltaic solar panels
 - Inverter
 - Battery
 - Photovoltaic solar water pump
2. The project's price proposal is no longer time consuming to prepare. It is possible to order online. No need to wait for administration.
3. Convenient and secure transportation options with shipping insurance.
4. Simple and secure payment, plus a 0% installment.



Godung Faifaa platform has 4 main strategies for 2022:

- (1) To be the nation's leading provider of comprehensive photovoltaic and electrical equipment.
- (2) Increase revenue by 800 percent, or 400 million baht in 2022.
- (3) To be the largest solar panel importer and distributor in Thailand.
- (4) Establish an eco-system conducive to the growth of solar and electricity businesses in all dimensions throughout the country

Aiming for a 400 million baht revenue in 2022, Godung Faifaa has stocked at least 5,000 additional items. Although the solar equipment continues to be the platform's primary focus in 2023, the Company will expand into other electrical product categories to meet the needs of various projects and enhance existing services such as customer service, transportation, and other financial services, with an emphasis on facilitating and providing other financial services, and providing an online shopping experience for electrical and solar devices that ensures each customer purchase.



Apart from business objectives, Godung Faifaa aspires to create a learning community that teaches customers how to purchase high-quality products and maximize their value through world-class partners such as HUAWEI and SIEMENS. HUAWEI, as the world's most popular inverter brand, offers a diverse selection of high-quality smart inverters and batteries at competitive prices, which is believed to upgrade the solar power generation system and increase access to clean energy for every household. SIEMENS offers a broader range of products including consumer unit or electrical cabinet equipment, circuit breakers, and electric vehicle chargers to meet the need of Godung Faifaa. This will enable the platform to expand and support additional groups of electricians and solar operators ranging in size from small to large.

Godung Faifaa platform employs 4 main strategies:

- (1) Best Price Offer
- (2) Real Time Process
- (3) After Sale Service and Warranty
- (4) Logistics Services (end-to-end)

From the seller's perspective, platform advantages include assisting large sellers in managing the difficulties they frequently encounter when doing business with small buyers, such as clarifying product details, inquiries, negotiating prices, and issuing various documents. From the buyer's perspective, platform advantages include ensuring them that products are directly from the manufacturer or an authorized representative and that they paid a price close to the factory price or the lowest price available on the market.



The platform is currently operational with a number of well-known brand sellers, including HUAWEI and SIEMENS, and over 200 products have joined the platform. The Company intends to expand its seller base in order to meet the needs of customers who want to find products more easily, conveniently, and affordably.

3. Drone Thermal Scan

Drone Thermal Scan is an aeronautical device used to inspect solar panels in order to keep them in good condition on a regular basis. It is critical to the power plant's profitability as it enables the efficient generation of electricity to occur continuously, allowing the plant to sell more electricity and have a longer service life.

Traditional method cannot cover all defects on the whole solar power plant

- Thermal Inspection is **traditionally** done by a hand-held thermal camera, **inspecting one panel at a time**.
- Average solar farm has **more than 30,000 panels**. To inspect all panel, **at least 1 month** is needed.
- With our innovation, it takes **only 1 hour** to gather all the data, and **1 day** to process all the data.

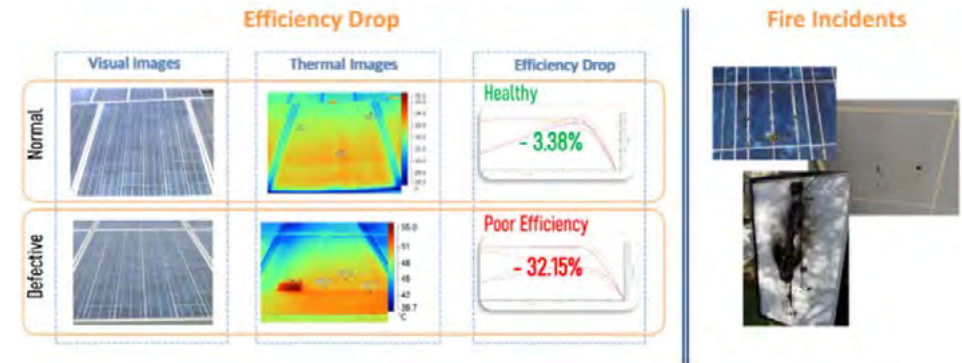


Comparison picture of maintenance of solar power plants

Gunkul Spectrum combines unmanned aerial vehicle (Drone) technology with a thermal camera (Thermal Scan) to conduct thermal scans of solar panels in order to detect hot spot which is solar panel malfunctions or any other type of damage that may have occurred and identify a panel that is not producing optimal power at full capacity. Drone Thermal Scan will take a thermal image of the solar panel and will then be able to accurately analyze the results. It can discover a solar panel that began to malfunction before it deteriorated to the point where it impacted electricity production significantly.

There are defects on solar panel which cannot be seen

These defects cause power production efficiency drop, and in some rare case, could lead to fire incidents. However, these defects can only be seen in thermal images.



Comparison of thermal cameras in operation and accurate detection of defective panels.

Thermal Drone Image Processing Procedure

- Send an unmanned aerial vehicle (UAV) equipped with a thermal imaging camera over the solar farm to collect thermal images of the solar panels.
- Collect detailed images and send them to image processing (Image Processing) in detail, integrated with artificial intelligence, to analyze damaged solar panels, such as hot spots and other types of damage, and precisely calculate the results of power generation reduction.
- Collect and report data on the efficiency of solar energy plants.
- Once the location of the damaged solar panel is determined, an effective maintenance plan can be developed that includes the replacement of the damaged component of the panel.

Previously, solar panel anomalies could be detected using a hand-held thermal camera, but this had the limitation of being slow. This means that inspecting each solar panel over a period of 2-3 months can be time consuming and costly. Thermal Drone Image Processing is believed to reduce time, cost, and increase efficiency in the verification of solar panel performance for businesses.

4. Peer-to-Peer Electricity Trading Platform

Solar rooftops now serve an increasing number in households each year. People are becoming increasingly aware of clean energy. However, solar cells can generate electricity throughout the day or only when there is sunlight. Also, electricity must be used immediately and cannot be stored for later use after it is generated, in the absence of an energy storage system. As a result, if the homeowner consumes less energy than they can generate, energy is wasted. One of the options for reducing wasted energy and increasing efficient usage of power generated from solar cell system is to sell excess electricity to electricity users who are in need of electricity at the time.

Gunkul Spectrum has been selected to participate in the Energy Regulatory Commission's (ERC) Sandbox project to develop and test the Peer-to-Peer energy trading system (Peer to Peer energy trading) for an 18-month test period. The sandbox project will combine the study and development of the energy trading system with relevant government sectors.

Recently, Gunkul Spectrum has collaborated with Origin Property to further and study business feasibility of the Origin group's housing projects by installing a solar rooftop and connecting systems throughout the complex. It will enable the residents to bid on and purchase electricity from one another (Peer-to-peer Energy Trading) at a lower price than the standard electricity rate, and contribute to the creation of value for any excess electricity that may be left over to generate revenue for residents.

5. Energy Living Solution for Residential Platform

Apart from the electricity trading business, Gunkul Spectrum has partnered with Origin Property to operate renewable/clean energy in residential projects over a 3-year period (2022-2024), with the goal of facilitating the establishment of a solar village (Solar Village) for 2 additional businesses.

(1) Solar power generation and distribution business or Private PPA (Power Purchase Agreement)

The Company shall install Solar Rooftop with equipment and maintenance services throughout the contract to generate electricity for distribution within the common area of completed condominium and residential project of BRITTANIA, thereby benefiting the common expense by lowering costs through a more economical electricity rate. Construction is expected to be completed and the system tested in the first quarter of 2022.

(2) Installation and Service of Electric Vehicle Charging Station (EV Charger Station) Business

For condominium projects that are currently in the planning stages of joint operations, the Company intends to install 100 chargers by 2022 and will continue to increase charging points for 20% per year until 1,050 chargers are installed. This will remove impediments to condominium residents' access to limited parking spaces and by responding to the trend toward electric vehicles and increasing opportunities for access to cleaner energy. The ENERGY x URBAN LIVING solution concept is emphasized in order to promote sustainable living and ultimately result in a zero-carbon ecosystem.

Industry, Market and Competition

Business Overview

The Company recognizes that all business partners and stakeholders play a critical role in ensuring the business's long-term viability and growth. Thus, an Ecosystem Business Platform & Innovation business was born through networking, assisting one another from upstream to downstream in the manufacturing process, transportation, distribution, public relations, and delivery of products and services to customers, including after-sales service. With this business ecosystem, risk will be managed, costs will be reduced, and competitive potential will be created. This is the fundamental structure for doing business together that will enable the Company, all business partners, and stakeholders to grow in a sustainable manner.

5. Cannabis Business

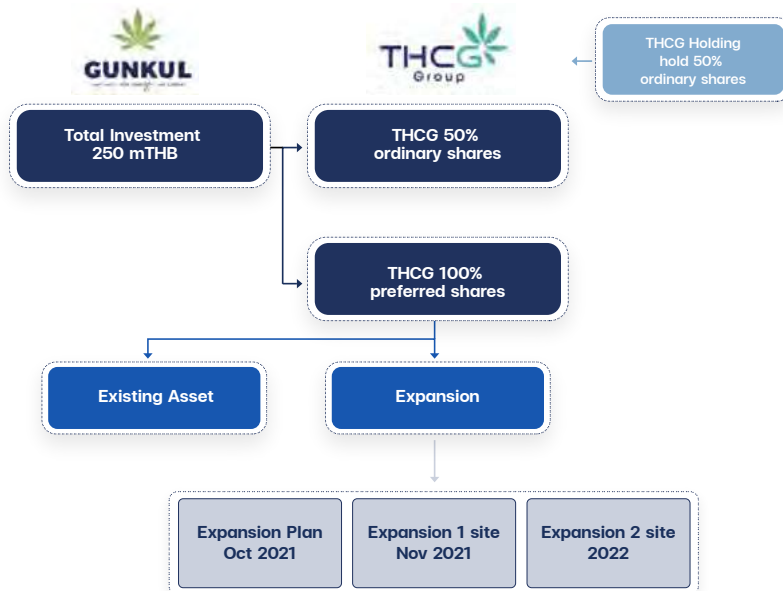
Nature of Business

The Company is aware of business opportunities that align with the national strategic plan for health promotion investments. As the Company owns unused land for the wind power plant project, therefore, after the Ministry of Public Health agreed to de-drug hemp, the Company began its hemp and cannabis business for commercial purposes. This includes the production and distribution of products from hemp and cannabis such as food and drug products, cosmetics, and herbal beverages for health. The Company intends to collaborate with partners in order to establish a leadership position in the hemp and cannabis integrated business from upstream to downstream, generating returns, adding value, and generating a significant growth rate in the Company's earnings as the foundation for developing the Company's new S-Curve.

The Company has structured and planned a comprehensive strategy for the hemp and cannabis businesses by establishing G.K.Hemp Group Co., Ltd. (GKHG) and 2 subsidiaries of GKHG, namely G.K. Smart Farming Co., Ltd. (GKSF) to procure/import and cultivate seeds using the Smart Farming system and cultivate in closed greenhouses for products with standards and high-quality. G.K. Bio Extraction Co., Ltd. (GKBE) is responsible for processing, such as the extraction of CBD or oil from hemp and cannabis seeds, which are high-quality products for use in a variety of industries, including pharmaceuticals for medical purposes, health foods, personal hygiene products, food and beverages, and others. The construction of a hemp and cannabis extraction plant is currently underway and is expected to be completed by March 2022. The initial production capacity is estimated to be between 100 and 200 kilograms of dried flowers per day. In 2022, the Company intends to increase production capacity to 1,000 kilograms per day. Additionally, on October 7, 2021, GKHG acquired 50% of the ordinary shares and increased capital in preferred shares of THCG Group Company Limited (THCG), with an investment value of not exceeding 250 million baht.



THCG is considered as a strong and potential partner because it is a leader in consulting business for hemp and cannabis cultivation, production, and distribution, including a party to contracts with the public and private sectors by having projects with licenses to operate, i.e. the Mae Sariat Project in Mae Hong Son Province, the Khao Kho Project in Phetchabun Province, and the Lom Kao Project in Phetchabun Province.



The Company's hemp and cannabis businesses have several advantages, including the following:

- The Company owns over 5,000 rai of land for wind energy projects, which is suitable for development and allocation to benefit.
- Water sources for cultivation are readily available.
- Agriculture system innovations through the use of a Smart Farming system to ensure the quality of trees meets GAP and GMP PIC/S standards.
- Solar energy is used to power a temperature control system in a closed house, thereby lowering energy costs.
- Strong partner from collaborating with experts such as consultants, growers, chemists, and herbalists with extensive international experience.

Cannabis : GUNKUL Keys Competitive Advantages



The Company has budgeted approximately 2,000 million baht for hemp and cannabis business plan between 2021 and 2022, which includes budget for greenhouses, extraction plants, and other expenses. As a result, the Company will gradually recognize revenue from hemp and cannabis businesses in 2021 and recognize revenue on a full-year basis in 2022. If all goes well as planned, the hemp and cannabis segment will be able to significantly increase revenue and profit in addition to the existing business.

Progress on licenses related to the operation of hemp and cannabis businesses.

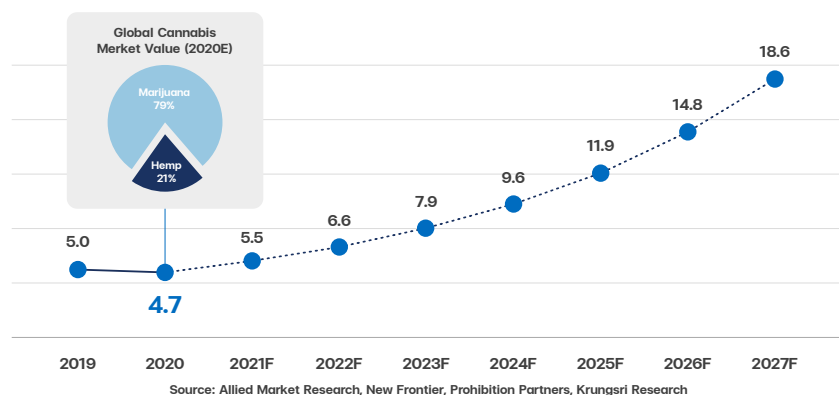
Licensee	License Type
1 G.K. Smart Farming Co., Ltd., a subsidiary in which the Company holds 99.99% of shares	License to import narcotics of category 5, only hemp for commercial or industrial purposes. The types of hemp permitted to be imported are seeds from the United States
2 G.K. Smart Farming Co., Ltd., a subsidiary in which the Company holds 99.99% of shares	License to produce (plant) narcotics of category 5, only hemp for commercial or industrial purposes. The planting pattern is a greenhouse system (Greenhouse)

Industry, Market and Competition

Business Overview

Hemp has gained a lot of attention since the government authorized the planting, production, importation, possession, and sale of seeds. With its diverse properties and benefits, it has the potential to be developed into high-value industrial products that are connected to a variety of industrial chains, including beverages, food, drugs and dietary supplements, as well as clothing and personal care products, resulting in increased economic value. This is in addition to the global market's increasing demand, as the global hemp market was worth more than 4.75 billion US dollars in 2020 and is expected to continue growing at an average rate of 21.6 percent per year until it reaches 18.6 billion US dollars in 2027. (Source: Krungsri Research Center)

Figure 3: Global Hemp Market Value (USD, bn)



Thailand Krungsri Research Center estimates the value of the Thai hemp industry as follows:

1. In 2021, the beverage industry with hemp content is expected to be worth 280 million baht, followed by food products made from hemp worth 240 million baht, medicines and dietary supplements made from hemp worth 50 million baht, and clothing made from hemp fiber worth 30 million baht. Personal care products which are in the product development phase worth approximately 600 million baht.
2. Thai hemp products are expected to experience rapid growth in the first 5 years after the government legalizes the industry. At the end of 2025, the Thai hemp market will be worth 15.8 billion baht, representing a compound annual growth rate (CAGR) of 126 percent.

Table 3 : Projection of Economic Gains from Hemp's Ingredient*

	Value (mTHB)		CAGR Growth
	Estimate 2021	Forecast 2025	
Beverage	280	7,600	128%
Food	240	5,600	120%
Pharmaceutiacs and Supplementary	50	1,240	123%
Apparel and Footwear	30	820	129%
Personal Care Products**	0.0	510	184%
Total	600	15,770	126%

Note: * Industrial value is based on the assumption that the government permits the private sector to produce all of the products and services as listed in the table.

****** Personal care products are expected to be valuable by 2022.

Source : Euromonitor, Krungsri Research

The Company believes that this business is consistent with the national strategic plan for health promotion investments. Additionally, it connects to other industries that can be further developed into downstream products such as food and drug products, cosmetics, and herbal beverages for health. As a result, the Company has decided to invest in the aforementioned business by conducting thorough research, analyzing risks, and calculating the return on investment with anticipation that such projects will generate returns, add value, and generate continuous asset and profit growth for the Company and its shareholders.

Competition

From the allure of hemp, cannabis, and the marketing gap that has existed since its inception, numerous entrepreneurs are interested in investing in hemp and cannabis-related businesses. As the Company has an advantage over competitors due to its ready-to-develop area of over 5,000 rai, a source of water for cultivation, and innovations in the agricultural system that utilize solar energy for lighting and temperature control systems in closed houses, resulting in low production costs and giving the Company a competitive edge.

1.2.3 Privileges from Investment Promotion

The Board of Investment approves the subsidiaries and associated companies to obtain several privileges as a person receiving investment promotion under the Investment Promotion Act B.E. 2520, which can be summarized as follows:

- Exemption of import duty on machinery as approved by the Board.
- Exemption from corporate income tax on net profits for a period of 8 years from the date of commencement of earning from that business. If the business incurs a loss during the specified period, it may be deducted from subsequent net profits for a period of up to five years following the end of the specified period.
- Exemption from the requirement to include dividends from the promoted businesses in the calculation of income tax during the period of corporate income tax exemption as mentioned above.
- Permission to deduct double the cost of transportation, electricity, and water bills for a period of 10 years following the date of earning income from business operations.
- Permission to deduct 25% of the cost of installing or constructing the facility in addition to the normal depreciation

The Company obtains privilege from investment promotion according to the Investment Promotion Act B.E. 2520, dividing into 2 categories with details of incentive and tax exemptions as follows:

Group 1 : Adder

Year	Tax rate (percent)	
	Exempt Tax	Corporate Income Tax Payable
Year 1 - Year 8	100	0
Year 9 - Year 13	50	10
From the 13th year onwards	0	20

Wind Energy Development Co., Ltd., Greenovation Power Co., Ltd., Korat Wind Energy Co., Ltd., NK Power Solar Co., Ltd., G-Power Source Co., Ltd., and Gunkul Chubu Powergen Co., Ltd. are subsidiaries and associated/joint ventures that have obtained this type of privilege, with the status of rights remaining tax-exempt at 100%. Except for Gunkul Chubu Powergen Co., Ltd., G-Power Source Co., Ltd., and NK Power Solar Co., Ltd., which their right to 100% tax exemption was expired and are now entitled to 50% tax exemption, effective in November 2020, August 2021, and December 2021 onwards, respectively.

Group 2 : Feed in Tariff “FiT”

Year	Tax rate (percent)	
	Exempt Tax	Corporate Income Tax Payable
Year 1 - Year 8	100	0
From the 8th year onwards	0	20

Subsidiaries and associated/joint ventures that have obtained this type of incentive consist of Rang Ngern Solution Co., Ltd., Eco Thai Energy Co., Ltd., BMP Solar Co., Ltd., Gunkul Solar Power 2 Co., Ltd., Siam Gunkul Solar Energy Co., Ltd., Solar Energy Society Co., Ltd., Gunkul Solar Roof 1 Co., Ltd., Gunkul Infinite Group Co., Ltd., WHA Gunkul Green Solar Roof 1 Co., Ltd., WHA Gunkul Green Solar Roof 3 Co., Ltd., WHA Gunkul Green Solar Roof 6 Co., Ltd., WHA Gunkul Green Solar Co., Ltd., Roof 17 Co., Ltd. All of the above-mentioned subsidiaries are still subject to a 100% tax exemption.



1.2.4 Assets used in Business Operations (See Details in Attachment 4)

Main Fixed Assets

List	Net Worth ¹⁾ (Million Baht)	Obligation
The main fixed assets used in the Company's business, subsidiaries and associated/joint ventures are land, buildings and structures, factories, warehouses, building renovation and utilities, work in progress, including machinery and factory equipment, decoration, office equipment and vehicles. These include assets that the Company, subsidiaries and associated/joint ventures have the ownership and lease for business operation.	21,004.04	<ul style="list-style-type: none"> - Assets used in business operations which is the head office of the Company, subsidiaries, and associated/joint ventures are mostly under lease agreements. Some of which are owned by the subsidiary. - Assets used in business operations which is a branch office are under both lease agreements and ownership. Land and buildings used in the operation of renewable energy power plant projects is the ownership of the subsidiary. Most of them are mortgaged with financial institutions to secure credit facilities. - Most of the vehicles are under leasing contracts.

Note ¹⁾ Only assets that the Company, subsidiaries, associated/joint ventures have ownership.



Key Lease

Contract	Counterparties	Period	Details
Land, Building and Structure Lease Agreement is the agreement for the use of assets for business operation of the Company, subsidiaries, associated/joint ventures	Details are in attachment 4.	Details are in attachment 4.	<ul style="list-style-type: none"> - Rental purpose is to be the location of head office, branch offices, factories, warehouses, archives, place for production of electricity from solar energy installed on ground and roof - Rental rate, contract renewal, contract termination as described in detail in Attachment 4.

Other intangible assets

According to the consolidated financial statements as of December 31, 2021, total intangible assets and goodwill was 3,463.50 million baht, which included software license fees of 17.22 million baht, rights to connect power distribution systems of 738.95 million baht, rights to purchase/operate electricity business contracts of 2,539.14 million baht, goodwill of 163.48 million baht, and software during installation of 4.71 million baht.

Investment Policy in Subsidiaries and Associated Company

Currently, the Company has subsidiaries, which it holds a majority stake, totaling 62 companies and has 10 associated. The Company has a policy of supervising its subsidiaries by assigning directors and executives from the Company to serve as directors and executives in the subsidiaries for the purpose of management and supervision.

For the future, the Company's investment policy will consider investing in businesses that support and benefit the Company's operations, businesses with growth potential or businesses that leverage the Company's expertise. Moreover, the Company will consider on the rate of return on investment. If the Company makes additional investments in subsidiaries, it will supervise by appointing directors to serve as representatives in the subsidiaries in proportion to their shareholding percentage. For associated, the Company retains minor control, merely appointing representatives to serve as directors. However, the number of representatives from the Company who serve as directors is proportional to the Company's shareholding percentage in each company.

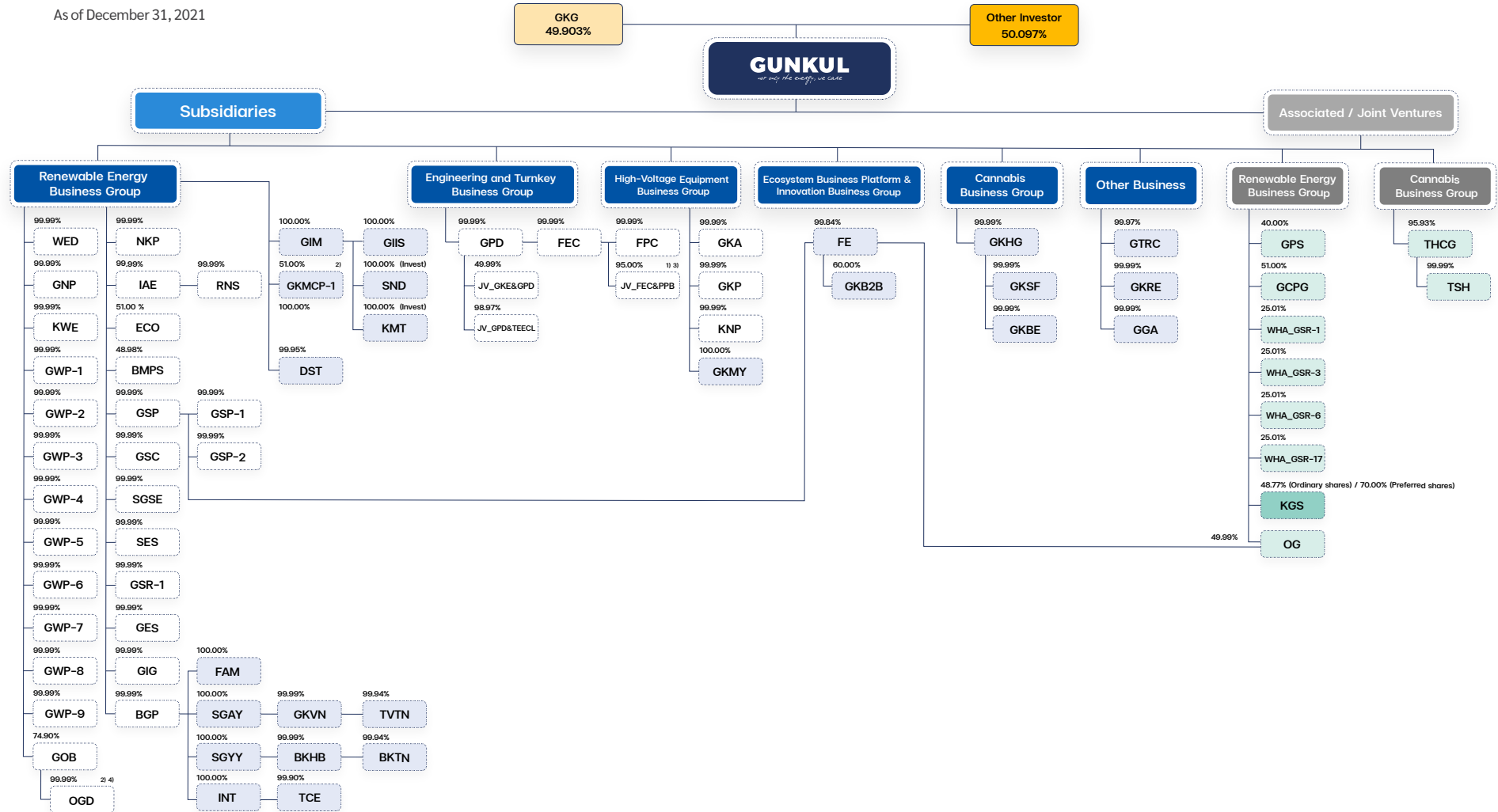
1.2.5 Undelivered Work

As of December 31, 2021, the subsidiaries had uncompleted work in the engineering and turnkey business group totaling of approximately THB 2,624.75 million.

1.3 Shareholding Structure

1.3.1 Shareholding Structure

As of December 31, 2021



Note

¹⁾ Registration of liquidation in 2021

²⁾ Registration of liquidation in 2022

³⁾ Completeness of liquidation in 2021

⁴⁾ Completeness of liquidation in 2022

Domestic Subsidiaries
Domestic Associated / Joint Ventures

Oversea Subsidiaries
Oversea Associated / Joint Ventures

(1) Subsidiaries

Company	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Number of Shares holding (Shares)	% of Holding by GUNKUL
Renewable Energy Business Group								
1. Wind Energy Development Co., Ltd.	WED	Production and distribution of electricity from wind energy of 60 MW by generating to the Electricity Generating Authority of Thailand (EGAT) and Provincial Electricity Authority (PEA)	THB	1,575,000,000.00	157,500,000	10.00	157,499,987	99.99
2. Greenovation Power Co., Ltd.	GNP	Production and distribution of electricity from wind energy of 60 MW by generating to the EGAT	THB	1,485,000,000.00	148,500,000	10.00	148,499,998	99.99
3. Korat Wind Energy Co., Ltd.	KWE	Production and distribution of electricity from wind energy of 50 MW by generating to the EGAT	THB	1,107,000,000.00	11,070,000	100.00	11,069,998	99.99
4. Gunkul Wind Power 1 Co., Ltd.	GWP-1	Production and distribution of electricity from renewable energy by generating to government agencies	THB	5,000,000.00	50,000	100.00	49,997	99.99
5. Gunkul Wind Power 2 Co., Ltd.	GWP-2	Production and distribution of electricity from renewable energy by generating to government agencies	THB	5,000,000.00	50,000	100.00	49,997	99.99
6. Gunkul Wind Power 3 Co., Ltd.	GWP-3	Production and distribution of electricity from renewable energy by generating to government agencies	THB	5,000,000.00	50,000	100.00	49,997	99.99
7. Gunkul Wind Power 4 Co., Ltd.	GWP-4	Production and distribution of electricity from renewable energy by generating to government agencies	THB	5,000,000.00	50,000	100.00	49,997	99.99
8. Gunkul Wind Power 5 Co., Ltd.	GWP-5	Production and distribution of electricity from renewable energy by generating to government agencies	THB	2,000,000.00	20,000	100.00	19,997	99.99
9. Gunkul Wind Power 6 Co., Ltd.	GWP-6	Production and distribution of electricity from renewable energy by generating to government agencies	THB	6,000,000.00	60,000	100.00	59,997	99.99
10. Gunkul Wind Power 7 Co., Ltd.	GWP-7	Production and distribution of electricity from renewable energy by generating to government agencies	THB	6,000,000.00	60,000	100.00	59,997	99.99
11. Gunkul Wind Power 8 Co., Ltd.	GWP-8	Production and distribution of electricity from renewable energy by generating to government agencies	THB	5,000,000.00	50,000	100.00	49,997	99.99



Company	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Number of Shares holding (Shares)	% of Holding by GUNKUL
12. Gunkul Wind Power 9 Co., Ltd.	GWP-9	Production and distribution of electricity from renewable energy by generating to government agencies	THB	5,000,000.00	50,000	100.00	49,997	99.99
13. NK Power Solar Co., Ltd.	NKP	Production and distribution of electricity from solar energy installed on the ground of 1 MW by generating to the PEA.	THB	2,600,000.00	Common Shares 23,060 Preferred Shares 2,940	100.00	Common Shares 23,058 Preferred Shares 2,940	99.99
14. Infinite Alternative Energy Co., Ltd.	IAE	Holding shares in Rang Ngern Solution Co., Ltd. 99.99%, which the company produces and distributes electricity from solar energy installed on the ground of 87 MW to the PEA	THB	1,564,000,000.00	15,640,000	100.00	15,639,998	99.99
15. Rang Ngern Solution Co., Ltd.	RNS	Production and distribution of electricity from solar energy installed on the ground of 87 MW by generating to the PEA.	THB	1,355,000,000.00	13,550,000	100.00	13,549,997	Shares holding by IAE 99.99
16. Eco Thai Energy Co., Ltd.	ECO	Production and distribution of electricity from solar energy installed on the ground by generating to the PEA	THB	76,500,000.00	765,000	100.00	390,150	51.00
17. BMP Solar Co., Ltd.	BMPS	Production and distribution of electricity from solar energy installed on the ground of 8.0 MW by generating to the PEA	THB	980,100.00	98,010	10.00	Preferred Shares 48,010	48.98
18. Gunkul Solar Power Co., Ltd.	GSP	Production and distribution of electricity from renewable by generating to government and private agencies	THB	599,998,800.00	5,999,988	100.00	5,999,985	99.99
19. Gunkul Solar Power 1 Co., Ltd.	GSP-1	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	100,000,000.00	1,000,000	100.00	999,997	Shares holding by GSP 99.99
20. Gunkul Solar Power 2 Co., Ltd.	GSP-2	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	100,000,000.00	1,000,000	100.00	999,997	Shares holding by GSP 99.99
21. Gunkul Solar Community Co., Ltd.	GSC	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	20,000,000.00	200,000	100.00	199,997	99.99
22. Siam Gunkul Solar Energy Co., Ltd.	SGSE	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	40,900,000.00	409,000	100.00	408,997	99.99

Company	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Number of Shares holding (Shares)	% of Holding by GUNKUL
23. Solar Energy Society Co., Ltd.	SES	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	750,000,000.00	7,500,000	100.00	7,999,997	99.99
24. Gunkul Solar Roof 1 Co., Ltd.	GSR-1	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	21,000,000.00	210,000	100.00	209,997	99.99
25. Gunkul Energy Solution and Lighting Co., Ltd.	GES	Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	100,000,000.00	1,000,000	100.00	999,998	99.99
26. Gunkul Infinite Group Co., Ltd.	GIG	Business for rent, sublease and manage property, Production and distribution of electricity from renewable energy by generating to government and private agencies	THB	314,000,000.00	3,140,000	100.00	3,139,997	99.99
27. Bright Green Power Co., Ltd.	BGP	Production and distribution of electricity from renewable energy by generating to government and private agencies, and investing in the business related to renewable energy	THB	1,356,300,000.00	13,563,000	100.00	13,562,997	99.99
28. GO Bioenergy Co., Ltd.	GOB	Investment in companies in renewable energy and biomass business by generating to government and private agencies	THB	34,300,000.00	343,000	100.00	256,906	74.90
29. Outgrow D Co., Ltd ^{2) 4)}	OGD	Production and distribution of electricity from biomass by generating to government and private agencies	THB	40,000,000.00	400,000	100.00	399,998	Shares holding by GOB 99.99
30. Gunkul International (Mauritius)	GIM	Oversea Investment	USD	109,319,578	109,319,578	1.00	109,319,578	100.00
31. Gunkul International Investment (Singapore) Pte. Ltd.	GIIS	Oversea Investment	SGD	348,829.00	348,829	1.00	348,829	Shares holding by GIM 100.00
32. Gunkul Myanmar Central Power 1 Co., Ltd. ²⁾	GKMCP-1	Production and distribution of electricity from gas engine by generating to the government agencies in Myanmar	USD	50,000.00	50,000	1.00	25,500	51.00
33. Sendai Okura GD Daiichi Godo Kaisha	SND	Production and distribution of electricity from solar energy installed on the ground of 31.75 MW by generation to Tohoku Electric Power Cp., Inc., Japan	JPY	Investment in a total amount of 2,264,509,966				100% investment

Company	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Number of Shares holding (Shares)	% of Holding by GUNKUL
34. Kimitsu Mega Solar Godo Kaisha	KMT	Production and distribution of electricity from solar energy installed on the ground of 33.50 MW by generating to Tepco Energy Partner Co., Inc., Japan	JPY	Investment in a total amount of 10,897,948,800				100% investment
35. Future Asset Management Kabushiki Kaisha	FAM	Investment in renewable energy power plant business	JPY	506,510,000.00	50,651	10,000	50,651	Shares holding by BGP 100.00
36. Singapore An Yang Pte. Ltd.	SGAY	Oversea Investment	USD	15,079,000	15,079,000	1.00	15,079,000	Shares holding by BGP 100
37. Singapore Yun Yang Pte. Ltd.	SGYY	Oversea Investment	USD	15,049,000	15,049,000	1.022	15,049,000	Shares holding by BGP 100
38. Gunkul Vietnam Joint Stock Company (Formerly named: Tri Viet Hoa Binh Joint Stock Company (TVHB))	GKVN	Oversea Investment	VND	309,179,000,000.00	3,091,790	100,000	3,091,790	Shares holding by SGAY 99.99
39. Tri Viet Tay Ninh Joint Stock Company	TVTN	Production and distribution of electricity from solar energy installed on the ground of 30 MW by generating to Vietnam Electricity Group, Vietnam.	VND	244,300,000,000.00	2,443,000	100,000	2,443,000	Shares holding by GKVN 99.94
40. Bach Khoa A Chau Hoa Binh Joint Stock Company	BKHB	Oversea Investment	VND	301,606,000,000.00	3,016,060	100,000	3,016,060	Shares holding by SGYY 99.99
41. Bach Khoa A Chau Tay Ninh Joint Stock Company	BKTN	Production and distribution of electricity from solar energy installed on the ground of 30 MW by generating to Vietnam Electricity Group, Vietnam	VND	236,600,000,000.00	2,366,000	100,000	2,366,000	Shares holding by BKHB 99.94
42. Doan Son Thuy Investment Joint Stock Company	DST	Production and distribution of electricity from solar energy installed on the ground of 50 MW by generating to Vietnam Electricity Group, Vietnam	VND	300,000,000,000.00	30,000,000	10,000	30,000,000	99.95
43. INT Energy Pte. Ltd.	INT	Oversea Investment	USD	9,100,000.00	9,242,242	0.98	9,100,000	Shares holding by BGP 100
44. Tan Chau Energy Joint Stock Company	TC	Production and distribution of electricity from solar energy installed on the ground of 50 MW by generating to Vietnam Electricity Group, Vietnam	VND	180,000,000,000.00	18,000,000	10,000	18,000,000	Shares holding by INT 99.90

Company	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Number of Shares holding (Shares)	% of Holding by GUNKUL
Engineering and Turnkey Business Group								
45. Gunkul Power Development Co., Ltd.	GPD	Engineering and Turnkey Business	THB	300,000,000.00	3,000,000	100.00	2,999,997	99.99
46. Future Electrical Control Co., Ltd.	FEC	Engineering and Turnkey Business	THB	100,000,000.00	10,000,000	10.00	9,999,998	Shares holding by GPD 99.99
47. GKE & GPD Joint Venture Co., Ltd.	JV_GKE&GPD	Engineering and Turnkey Business	THB	80,000,000.00	800,000	100.00	399,999	Shares holding by GUNKUL 49.99
							399,998	Shares holding by GPD 49.99
48. GPD & TEECL Joint Venture Co., Ltd.	JV_GPD&TEECL	Engineering and Turnkey Business	THB	1,000,000.00	10,000	100.00	9,897	Shares holding by GPD 98.97
49. G.K.Power Products Co., Ltd.	FPC	Engineering and Turnkey Business	THB	5,000,000.00	50,000	100.00	49,997	Shares holding by FEC 99.99
50. FEC & PPB Joint Venture Co., Ltd. ^{1) 3)}	JV_FEC&PPB	Engineering and Turnkey Business	THB	5,000,000.00	50,000	100.00	47,498	Shares holding by FEC 95.00
High Voltage Equipment Business Group								
51. G.K.Assembly Co., Ltd.	GKA	Production of electrical system equipment by generating to group companies, and government and private agencies	THB	200,000,000.00	2,000,000	100.00	1,999,998	99.99
52. G.K.Power Products Co., Ltd.	GKP	Production of electrical system equipment by generating to group companies, and government and private agencies	THB	100,000,000.00	100,000	1,000.00	99,998	99.99
53. K.N.P.Supply Co., Ltd.	KNP	Distribution of electrical system equipment and other systems related to public sector customers	THB	50,000,000.00	500,000	100.00	499,998	99.99
54. Gunkul Engineering (Myanmar) Co., Ltd.	GKMY	Oversea Investment	USD	50,000	50,000	1.00	50,000	100.00
Ecosystem Business Platform and Innovation Business Group								
55. Future Energy Corporation Co., Ltd.	FE	Application services, platforms and computer programs	THB	50,000,000.00	500,000	100.00	499,199	Shares holding by GSP 99.84
56. Gunkul B2B Co., Ltd.	GKB2B	Application services, platforms and computer programs	THB	50,000,000.00	500,000	100.00	299,999	Shares holding by FE 60.00

Company	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Number of Shares holding (Shares)	% of Holding by GUNKUL
Cannabis Business Group								
57. G.K. Hemp Group Co., Ltd.	GKHG	Investment in hemp and cannabis business	THB	550,000,000.00	5,500,000	100.00	5,499,997	99.99
58. G.K. Smart Farming Co., Ltd.	GKSF	Hemp and cannabis business	THB	185,000,000.00	1,850,000	100.00	1,849,997	Shares holding by GKHG 99.99
59. G.K. Bio Extraction Co., Ltd.	GKBE	Hemp and cannabis business	THB	50,000,000.00	500,000	100.00	499,997	Shares holding by GKHG 99.99
Other Business								
60. Gunkul Training Center Co., Ltd.	GTRC	Educational service, seminar management, training management and any other related to education	THB	1,000,000.00	10,000	100.00	9,997	99.97
61. G.K. Real Estate (2564) Co., Ltd.	GKRE	Real estate business	THB	60,000,000.00	600,000	100.00	599,997	99.99
62. Gunkul Grand Asset Co., Ltd.	GGA	Real estate business	THB	40,000,000.00	400,000	100.00	399,997	99.99

Note 1) Registration of dissolution on 2020 3) Registration of liquidation on 2021
2) Registration of dissolution on 2021 4) Registration of liquidation on 2022

(2) Associates/Joint Ventures

Company Name	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Shares holding (Shares)	Joint Venture	% of Holding
Renewable Energy Business Group									
1. G-Power Source Co., Ltd.	GPS	Production and distribution of electricity from solar energy of 26 MW by generating to the PEA	THB	930,000,000.00	9,300,000	100.00	3,719,998	Electricity Generating Public Co., Ltd.	40.00
2. Gunkul Chubu Powergen Co., Ltd.	GCPG	Production and distribution of electricity from solar energy of 30.9 MW by generating to the PEA	THB	992,000,000.00	9,920,000	100.00	5,059,195	Chubu Electric Power Gem B.V	51.00
3. Origin Gunkul Energy Co., Ltd.	OG	Electrical energy business	THB	1,000,000.00	100,000	10.00	49,999	Origin Energy Public Co., Ltd.	Shares holding by FE 49.99
4. WHA Gunkul Green Solar Roof 1 Co., Ltd.	WHA_GSR-1	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and Metropolitan Electricity Authority (MEA).	THB	11,500,000.00	1,150,000	10.00	287,615	WHA Corporation Public Co., Ltd.	25.01
5. WHA Gunkul Green Solar Roof 3 Co., Ltd.	WHA_GSR-3	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA.	THB	14,500,000.00	1,450,000	10.00	362,645	WHA Corporation Public Co., Ltd.	25.01
6. WHA Gunkul Green Solar Roof 6 Co., Ltd.	WHA_GSR-6	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA	THB	14,500,000.00	1,450,000	10.00	362,645	WHA Corporation Public Co., Ltd.	25.01
7. WHA Gunkul Green Solar Roof 17 Co., Ltd.	WHA_GSR-17	Production and distribution of electricity from Solar PV Rooftop by generating to the PEA and MEA.	THB	16,000,000.00	1,600,000	10.00	400,160	WHA Corporation Public Co., Ltd.	25.01



Company Name	Symbol	Type of Business	Currency	Registered Capital	Paid-up Capital (Shares)	Par value	Shares holding (Shares)	Joint Venture	% of Holding
8. Kenyir Gunkul Solar Snd Bhd	KGS	Production and distribution of electricity from solar energy installed on the ground of 29.99 MW in Malaysia	MYR	37,500,001	38,316,444	1.00 0.56-1.44	Common Shares 500,000 Preferred Shares 37,816,444	Company in Malaysia	48.77 70.00
Cannabis Business Group									
9. THCG Group Co., Ltd.	THCG	Hemp and cannabis business	THB	260,600,000.00	26,060,000	10.00	24,999,999	THCG Holding Co., Ltd.	Shares holding by GKHG 95.93
10. Thai Stick Herb Co., Ltd.	TSH	Hemp and cannabis business	THB	25,000,000.00	2,500,000	10.00	2,499,999	THCG Holding Co., Ltd.	Shares holding by THCG 99.99

1.3.2 Parties with Conflict of Interest

-None-

1.3.3 Relations with Major Shareholders' Business Group

-None-

1.3.4 Shareholders

List of top 10 major shareholders as of January 5, 2022

Number	Major Shareholder	Number of Shares (Shares)	Proportion (Percent)
1	Dhumrongpiyawut family		
	1.1 Gunkul Group Co., Ltd.	4,432,631,280	49.903
	1.2 Dr. Gunkul Dhumrongpiyawut	231,458,670	2.606
	1.3 Ms. Naruechon Dhumrongpiyawut	431,193	0.005
	Total shareholding of the Dhumrongpiyawut family	4,664,521,143	52.513
2	Thai NVDR Co., Ltd.	422,272,413	4.754
3	UOB KAY HIAN (HONG KONG) LIMITED - Client Account	134,026,303	1.509
4	Mr. Sura Kanitthaweeikul	130,000,000	1.464
5	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	123,868,842	1.395
6	Mr. Adisak Sukhumvitya	95,238,000	1.072
7	Kiatnakin Phatra Securities Public Company Limited	84,316,600	0.949
8	Mr. Prakin Sricharoen	77,700,000	0.875
9	MORGAN STANLEY & CO. INTERNATIONAL PLC	60,000,000	0.675
10	STATE STREET EUROPE LIMITED	54,472,684	0.613
	Total	5,846,415,985	65.819

List of shareholders of Gunkul Group Co., Ltd. as of January 5, 2022: registered capital of 110,000,000.00 baht;

major shareholders consisting of the Dhumrongpiyawut family holding shares in the proportion of 99.727% of the registered capital.

Number	Major Shareholder	Number of Shares (Shares)	Proportion (Percent)
1	Dhumrongpiyawut family		
	1.1 Dr. Gunkul Dhumrongpiyawut	466,000	42.364
	1.2 Ms. Naruechon Dhumrongpiyawut	211,000	19.182
	1.3 Ms. Sopacha Dhumrongpiyawut	210,000	19.091
	1.4 Mr. Apakorn Dhumrongpiyawut	210,000	19.091
	Total shareholding of the Dhumrongpiyawut family	1,097,000	99.727
2	Mr. Chaloepon Sricharoen	3,000	0.273
	Total	1,100,000	100.000

Major Shareholder's Agreement

-None-

1.4 Registered and Paid-up Capital

1.4.1 Ordinary Shares

The Company is listed on the Stock Exchange of Thailand, as of December 31, 2021, it has registered capital of THB 2,220,632,743.50, which is the issued and paid-up capital of THB 2,220,632,743.50, divided into paid-up ordinary shares of 8,882,530,974 shares with a par value of THB 0.25 per share

1.4.2 Preferred Stock

-None-

1.4.3 Shares or Convertible Securities issued as Underlying for Mutual Funds for Foreign Investors

-None-

1.5 Issuance of Other Securities

1.5.1 Convertible Securities

-None-

1.5.2 Other Debt Securities

As of December 31, 2021, the Company has outstanding balance from issuing senior unsecured debenture amounting to 5,948.7 million baht. Redemption maturity is in July 2022, April 2023, July 2024 and April 2025.

1.6 Dividend Policy

The Company has a policy to pay dividends of not less than 40 percent of net profit according to the Company's financial statements after deducting corporate income tax, legal reserve and all other reserves. However, the Company may pay dividends less than the rate specified above if necessary, depending on working capital required for operation, business expansion plan and other factors related to the management of the Company.

The subsidiaries of the Company also have a policy to pay dividends of not less than 40 percent of net profit according to the subsidiaries' financial statements after deducting corporate income tax, legal reserve and all other reserves, by considering together with cash flow, financial position, liquidity and investment plans in each period.

The resolution of the Board of Directors related to dividend payment must be proposed to the shareholders' meeting for approval. Except for interim dividend payment, the Board of Directors has the authority to approve interim dividend payment from time to time in the event that the Company has sufficient profit. Such interim dividend payment shall be reported to the shareholders in the next meeting. In this regard, the Company has disclosed the dividend payment information of the Company for the past 3 years as follows:

Year	2019	2020	2021		
Performance period	1 Jan – 31 Dec.	1 Jan – 31 Dec.	1 Jan – 30 Jun (Interim)	1 Jan – 31 Dec and Retained Earnings	Total Dividend Payment
Basic earnings per share (in Baht)					
– Separate financial statements	0.10	0.25	0.03	0.25	
Dividend Payment (Baht per share)	0.136	0.182	0.06	0.12 ¹⁾	0.18
Dividend Payout Ratio (%)					
– Separate financial statements	134.14	72.82		48.82	73.28

Note ¹⁾ The dividend payment is subject to the 2022 Annual General Meeting of Shareholders' approval on April 27, 2022.



2. Risk Management



2.1 Risk Management Policy and Plan

1) Risk Management Policy and Plan

The Company and the Group recognize the importance of systematic risk management under the principles of good corporate governance. In order to support operations to be effective and achieve sustainable goals, as well as to increase the Company's ability to adapt to the global social situation and rapidly changing challenges, which shall lead to business growth opportunities. The Company established a corporate risk management policy and implemented the process in accordance with international risk management standards based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework, and the internal audit examines the operation. This is to ensure that the operation is efficient and effective. The comprehensive management approach is linked to all operational levels, and risks are being controlled at an acceptable level. In addition, the Company has established a Risk Management Committee to perform duties of supervision, monitoring and supporting to ensure effective organization's risk management.

2) Risk Management Culture

The Company aims to promote a culture of risk management by raising awareness of risks to all employees at all operation levels. This is to prevent and mitigate negative impacts in business operations towards sustainable business operations and increase competitiveness through regular and continuous participation in risk management at all operational levels. There are guidelines for creating a risk culture through risk management and control policies, all executives and employees are encouraged to be responsible for identifying, analyzing, assessing and prioritizing the risks of the departments they are responsible for, including determining appropriate measures for risk management. This is considered as part of the responsible practice.

2.2 Risk Factors for the Company's Business Operations

The Company has assessed and analyzed key risks by considering all risk factors from both internal and external factors regularly. It covers the risks as summarized below:

2.2.1 Business Risks of the Company and the Group

1) Strategic Risk

Risk of dependence on government-sector customers

Our major customers are government-sector especially PEA, MEA and EGAT covering high-voltage equipment business group, engineering procurement and turnkey project in relation to station and high voltage transmission line.

- **High Voltage Equipment Business Group**

In 2021, the Company and its subsidiaries' factories sold products to the government's electricity agency and private agencies in Bangkok and various areas across the country. The income from sales of products to this group of customers depends on the budget for the development of production capacity and distribution of electric power from the government. The Company's revenue may be impacted if the government changes its management team or investment policy for the development of electric power generation and distribution, delays in approval for project procurement, or the Company is not selected in a government project auction. However, the major risks from changes in the government's investment policy on the development of electric power generation and distribution are still relatively low. This is because the government recognizes the importance of investment in order to improve the stability of the power system and ensure that electric power transmission continues to be reliable and sufficient to meet the growing demand for electricity in the long run according to the expansion of the domestic economy and industry. As a result, the government will continue to fund the budget for acquisition of supplies for use in the Electricity Authority's capacity expansion and power distribution system development.

The auction of government projects are organized according to product categories. Because of the associated company's diverse products and their factories' ISO 9001 quality standard, ISO 14001 environmental management system standard, ISO 17025 laboratory assessment standard, and occupational health and safety management system standard according to TIS18001 and BS OHSAS18001, many of the Company's products have been registered with the Ministry of Industry

as well as being certified by both domestic and international testing institutes, and received a license for industrial products (TIS).

These are advantages in competitive bidding in various government agencies and state enterprises procurement projects that have a policy to promote and support the selection of products that have been certified for their standardize system and manufactured from a factory with a standardized environmental management system. As a result, the Company's prospects of being chosen as the winning bidder remain high. Furthermore, the Company has over 40 years of experience in selling products to numerous power utilities. And by continually maintaining products and services in high quality, it is certain that the Company will continue to win greater trust to supply products to this group of clients as the government sector's procurement grows each year. In 2021, through its subsidiary, Future Electric Control Co., Ltd., the Company bid for more government contracts, with a total value of more than THB 5,000 million.

The Company, on the other hand, has a policy to limit the risk of relying on a small number of clients by expanding its customer base, developing and acquiring new goods and electrical system equipment, and ensuring that the clients' needs are met consistently. This is to diversify consumer groups, which not only lower the risk of relying on a small number of customers, but also open up new

business opportunities. To prepare for such policy, the Company has taken part in a product registration initiative with the Electricity Authority, as well as improving internal testing procedures to meet international standards.

- **Engineering and Turnkey Business Group related to power station and transmission line.**

The investment in the development of electric power generation and distribution of EGAT and PEA to maintain the security and stability of the power system, to meet the growing demand for electricity from the ASEAN Economic Community, and to support the government's policy of encouraging the use of renewable energy power plants, is an infrastructure investment that has grown over the last year and will continue to grow over the next three years. Power generating development has been deemed appropriate for each region's electricity consumption and production capabilities, resulting in budget allocations for the construction of a power plant as well as the development and upgrade of Thailand's transmission line system. Despite the fact that the plans for transmission line construction in each region were clear and some bidding had already begun last year, and there is a large budget for transmission line bidding this year and next year, but a slowdown in Thai economy as a result of the unrecoverable global economy will have an impact on the policy of needing to reserve

the amount of electricity with the 230-500 Kva large high-voltage transmission lines are expanded. If these projects are delayed in their implementation, the Company may be at risk for relying on government clients for revenues from the substations and transmission lines development.

Risk of power supply

The Group has signed a power purchase agreement with PEA for distribution of power at the amount specified in each contract. The contract is a Non-Firm type for reasons that in the generation of solar-base power, the amount of power generated each time cannot be specifically controlled. There are two groups of contracts: Adder and Feed-in-Tariff. According to the adder agreement, PEA will purchase all electricity produced by quantities specified for each project. The contract is five years from the date of signing the contract and automatically continues for a period of five years. PEA does not have the right to terminate the agreement. For FiT agreement, the contract term is 25 years at fixed price throughout the contract period. In case of the company comply with the conditions stated in the contract, it is considered that the Company has no risk from the inability to generate and supply electrical power. In addition of being a partner with government department, the company will certainly receive a quite high payment.

For the solar power plant project that is installed on the roof to produce and sell to private customers, the Company is the investor and giving a maintenance service for the life of the

contract (Private PPA). The Company will prevent the risk of the project yielding lower than expected. This may be due to reasons of light intensity or may be caused by such private customers who are not able to pay for electricity or purchase electricity according to the Company's goals. The Company will review the financial statements of those private clients in order to assess the growth potential of the financial and business status, whether they are able to continue to operate the business according to the project contract period of the solar energy production system that jointly signed. In addition, the Company will check the consistency of electricity usage among private customers by analyzing to design the installed capacity of the solar power generation system to be suitable and be used efficiently, without waste electricity from the system. This can be seen that the Company has a screening of customers and technical design before proceeding with the project. Therefore, the Company has a risk of loss in this type of project at a low level.

The Company has 2 solar power plant projects in Japan, which both projects have already sold electricity, with the electricity sales rate of both projects not affected by the price reduction.

The Vietnam project, which the Company has invested in last year, in which all 4 projects have already sold electricity and receive electricity bills of USD 0.0935 and 0.0709 as stipulated in the power purchase agreement.

For the solar power plant project in Malaysia, it is now able to operate the commercial power distribution since December 31, 2020 and earn a MYR 0.38 electricity charge.

Risk from new business investment

The Company has set a process for consideration and assess the risks from investing in the new project and new business before proceeding. The new investment must be assessed by the Company's internal investment risk analysis team, which includes a financial team, legal team, and management team with competent in each business area to jointly select projects for risk assessment before presenting to the Executive Committee. The Executive Committee will consider the suitability of the projects according to the Company's policy, as well as presenting to the Risk Management Committee for consideration and comprehensive risk analysis in each aspect before proposing to the Board of Directors for investment approval. This is to ensure that the Company can manage risks that may arise in order to achieve the investment goals and create value for the Company with the least impact on stakeholders and is at an acceptable risk level.

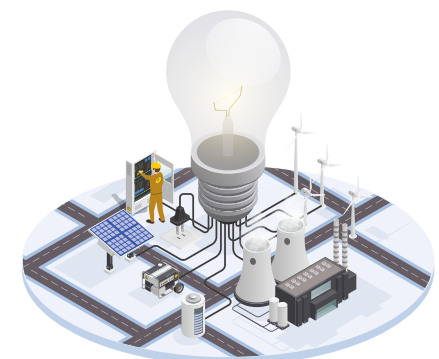
2) Operational risk

Power generation capacity risk

The power generation capacity of a solar power plant depends on three main parts: the intensity of sunlight, solar panel efficiency, and the amount of loss incurred in the power generation system. To prevent such risks that may arise, the group companies therefore select solar panel technology from well-known leading companies that are also being considered as one of the world's most recognized and efficient solar panel manufacturers.

Currently, the Company has the capacity to build solar power plants on its own, and has established an engineering team and subcontractors, as well as selecting crucial solar power plant construction equipment from manufacturers who can provide after-sales service.

As a result, the Company can lessen the risk of the power plant's construction being dependent on big contractors and it is considered as a significant step in improving managerial competitiveness and cost control, as well as power plant construction efficiency. As evidenced by the operating results for 2021, the Company was able to manage the solar power plants with greater performance than forecast. Furthermore, the Company acquired the trust of external customers and alliance shareholders evidenced by the Company being assigned to operate the power plant (Operation and Maintenance Agreement) after the electricity is supplied commercially. As a result, the Company can control and oversight its ability in distributing electricity and efficiency of the solar power plant. This is deemed to lessen the risk of not being able to guarantee the minimal amount of electricity supply for each project.



The Company has chosen high-efficiency technologies from leading and experienced manufacturers for the wind power plant project. Furthermore, for the past 4 years, the Company has been collecting local wind speed data in order to assess the viability of generating electricity from wind power before making an investment decision. In addition, to prevent risk, the Company has engaged into a maintenance contract with a turbine manufacturer to manage the power plant, including Spare Parts for a term of 10 years. Furthermore, the average wind speed in 2021 is significantly higher than in 2020, particularly during the summer and rainy seasons, when wind speeds are often low. As a result, the power generation efficiency of the 3 wind power plants can create electricity at a rate of more than 15% higher than expectation.

Risk from delay in launching the project

The availability of electricity for a solar power project depends on several factors, for instance, the relevant permitting process, power plant construction financing, the establishment of all relevant contracts in accordance with the Funding Standards, and the results of testing the power plant's operation prior to commercial power distribution. If the project cannot be completed in line with the Company's and connected parties' criteria, the project's commercial operation will be delayed or the Company will require more expenditure than anticipated. For projects that have already started construction, the Company has managed its risks by closely monitoring the progress of the project, having contractors report

progress every week, holding meetings in the construction area to see the real state of the project, and listening to contractors once a month. This enables the Company to understand the problem early on and devise a plan for resolving it. However, in the case of force majeure, the Company will place a high priority on operational stability for the next 20 years of power distribution. The Company will check the status of the solar power plant project under development on a regular basis and will select contractors after engaging with financial institutions that are funding sources first to ensure that the Company may secure loans from financial institutions. The Company has contracted with the project developer to provide support till commercial electricity distribution in order to control risks and create incentives for project developers to achieve their goals. The amount of compensation paid to the power plant project developer will be determined by the project's success. The project developer for the power plant will oversee the project development in four areas as follows:

1. Procurement of contract parties for the construction of solar power plants who have expertise and have passed the evaluation and selection process according to the criteria set by the Company and financial institutions.
2. In case of investment overseas, the Company will recruit personnel with expertise in the control and maintenance of the power plants in that country after power distribution is commercially in operation.

3. Project Management for power plant construction and application for various licenses must be complete in timely manner and in accordance with the time limit set forth in accordance with the target for commercial power distribution.
4. Project management and overall project control must be able to keep operating costs within the investment budget and completed on schedule.

As a result, the Company has implemented risk management in project management by closely monitoring progress and requiring the project developer to follow-up in a subsequent step in order to ensure the project's success.

Risk from dependency on EPC Contractor

As the construction of a solar power plant requires expertise in technologies, construction experience, ability to supply material and personnel in operation for the process to work in harmony with every part, the Company therefore hires a turnkey contractor in order to effectively control the results and giving contractors flexibility to complete the tasks according to the goals. However, hiring a turnkey contractor, on the other hand, puts the project at risk if the contractor is unable to complete the work. As a result, the Company handles the risks by selecting contractors with experience in the construction of solar power plants that meet industry requirements, signing contract to allow the Company to indemnify the amount covered by the claim conditions in accordance with industry standards, and letting the contractor to

be the one who recommends new contractors and deliver the work smoothly in the event that the contractor is unable to complete the power plant construction until the commercial operation is successful.

3) Financial Risk

Risk of exchange rate and interest rate fluctuations

With the nature of the business of the Company and the group, which consist of selling and ordering products from abroad, including investment in renewable energy businesses abroad, the group may affected by the exchange rate fluctuations. Fair value measurement in the financial statements may result in gains or losses. As a result, the following actions have been taken by the Company.



- Make forward contracts for buying and selling foreign currency (Forward Contract) according to the period of credit for import-export.
- Balance income against expenses or obligations which is foreign currency with a proportional value (Natural Hedge).
- Manage foreign currency account (Foreign Currency Deposit) in accordance with the cash flow in each phase of the company's operations.

In addition, the Company has developed a policy to hedge against exchange rate fluctuations as a guideline for risk management of the group to be effective and in the same direction.

Investment in solar power plant projects in Japan, Malaysia and Vietnam is a power purchase agreement at a fixed rate throughout the project life. The Company determined that revenue recognition in Yen, Ringgit or Dong and the project loan repayment in the same currency is deemed hedging against foreign exchange risk in the proportion of 85%, 80% and 75% of the project's investment, respectively. The risk for equity investments of 15%, 20%, and 25%, respectively, will arise from the conversion of financial statements from Yen, Ringgit, or Dong currency into Thai Baht, which will affect the profit or loss of the account but not the profit or loss from operations.

In terms of interest rate risk management, the Company has a policy of hedging at least 80%

of the risks from exchange rate and interest rate volatility using Derivatives IRS/CCS Contract for Hedging to mitigate the impact of such volatility.

Risk of damage to project assets Insurance

Insurance is a risk management alternative in which the insured (insured firm) contracts coverage with the insurer (insurer) to transfer risks from the insured (insured company) to the insurer (insurer). When harm to life and various covered properties occurs as a result of insurance premiums being collected, the insurance company is liable for compensating the insured or beneficiary (Beneficiary) as specified in the contract.

As a result, the Company has prepared a **"Construction Insurance Policy" in conjunction with third-party insurance and/or the employer's original property insurance for every projects**, including renewable energy projects, station construction projects, High Voltage Transmission Line Construction Projects, and other construction projects. This is to ensure that if any loss or damage occurs, the insurer will compensate according to the terms of the insurance policy and the agreed contract.

The Company is also aware of various risks following construction, as well as the Company's people, by executing property insurance, business interruption insurance, director and officer liability insurance, covid insurance, and other insurances to mitigate the risks that may occur.

4) Regulatory risk

Risks from the effects of changes in regulations, laws, and guidelines

Due to the activities of the energy company are governed by a number of legal and regulatory restrictions. As the Company owns and runs power facilities in oversea, namely Japan, Malaysia, and Vietnam, where the regulations are different, changes in rules and related laws may occur and could have a major impact on the Company's operations. However, the commercial power distribution has been completed for the power plant projects in foreign nations in which the Company has invested. As a result, when considering the overall picture of investment management in Japan, Malaysia, and Vietnam, the Company is now unaffected by any changes. In addition, the Company closely monitors on changes in the legislation, laws, and regulations of the countries in which it invests in order to mitigate any potential negative consequences.



Risk from being limited in the amount of power purchase (Curtailment)

Limiting the amount of electricity purchased will cause the Company to sell less electricity and affecting the income. Each country's policy on regulating the amount of electricity purchased is different. For Japan, there are three primary rules for regulating the amount of power purchased: limit the amount of electricity purchased without limitation, limit the amount of electricity purchased to 360 hours/year, and limit the amount of electricity purchased to 30 days/year. The Company's project has the shortest power limit, which is only 30 days/year. In Vietnam, the power purchase will be limited only when the amount of electricity produced in the system exceeds the demand, which could be damaging to the system. In this circumstance, the Electricity Authority will impose a limit on the quantity of power supplied for a set length of time and then lift the limit once the situation is safe. This is a risk associated with the power purchase agreement that the Electricity Authority applies to all investors in Vietnam. As a result, before investing, the Company has employed experts to investigate the ability to receive electricity into the system.

5) Social risks and environment

Human Rights Risk

Human rights are important to the Company, and it recognizes that they must be respected in accordance with international principles. The

Company implements the complainant protection measures outlined in “Anti-Corruption Policy and Whistle-Blowing or Complaints” to ensure that the Company’s business operations are free of violations of human rights and the right to work, as well as to provide fairness and protection to individuals regarding human rights violations related to the Company. In the event of violation, the offender will face disciplinary action in accordance with the Company’s rules and regulations, as well as legal penalties if the behavior is illegal. This is to establish criteria for treating employees, business partners, suppliers, partners, and all other stakeholders fairly and equitably, while respecting human rights values.

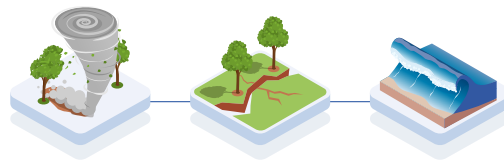
Climate Change Risk

Thailand recognizes the need of collaborating to combat global climate change by attending the 26th session of the United Nations Framework Convention on Climate Change (COP26) and announced its intention to achieve Thailand’s carbon neutrality goal by 2050 and to achieve net zero greenhouse gas emissions in 2065 by setting a target to reduce greenhouse gas emissions in 2005 by 20-25 percent within 2030, as well as implementing the Renewable and Alternative Energy Development Plan (AEDP) and the Energy Efficiency Plan (EEP). However, due to the impact of the COVID-19 outbreak, the amount of backup power demand has increased significantly, forcing the expansion and investment in the aforementioned business to slow and the Company will have to wait for the government to declare the acquisition of renewable energy

electricity. Furthermore, as the National Energy Policy Council stated that the purchase price of renewable energy electricity must not affect the average wholesale electricity price in the future, making it predictable that the price of electricity purchased in the future will be lower, resulting in a slow payback. The Company, on the other hand, has consistently monitored on the government’s policies and has made adjustments in accordance with the economy’s trajectory, as well as seeking out new business models that continually generate positive returns.

Natural Disaster Risk

As Japan is located on the Earth’s crust’s boundary (Ring of Fire), natural disasters occur frequently, which can be categorized as seasonal natural disasters such as typhoons or snow storms, and other unpredictable natural disasters like earthquakes, which can also result in tsunamis. Therefore, insurance is required for the project in Japan to mitigate the risks of such natural catastrophes. The value is based on the findings of a research conducted by a Japanese insurance consulting firm that is an insurance specialist to ensure that the coverage value is reasonable for the probable damage. However, as the project site is in a low-risk area, it has a very minimal chance of having an impact.



On the other hand, Malaysia may face a risk of lightning, which could interrupt the power generation system according to the statistics of frequent lightning events in the area. This is an uncontrollable danger associated with natural disasters. The Company has studied regarding the location of the power plant and various factors that may affect the lightning event, and has consulted experts to design the lightning protection system, as well as other protective equipment, to ensure that the project’s operations are not disrupted by the lightning incident. Furthermore, the Company manages natural catastrophe risk by obtaining All Risk insurance with lightning coverage which provides adequate compensation for any damages that may occur.

6) Emerging Risks

Risk from the spread of the COVID-19

Since the beginning of 2021, the COVID-19 has been causing an outbreak over the world. The number of infections and deaths is steadily increasing and the outbreak appears to be continuing. As a result, the government took steps to regulate and restrict travel. This has an impact on every sector of the economy. Many industries are being forced to shut down and the rate of unemployment is rising, which has a chain effect on all business sectors around the world. The economy has slowed down in several countries, which the Company was also affected from investing in foreign business due to the travel restrictions. In addition, the Company has used technology to communicate in order to continually operate the business as planned.

Furthermore, to guarantee the safety of its employees, the Company has implemented measures to control and prevent the spread of the COVID-19, by establishing a policy for working from home (Work from Home) and constructing an information technology infrastructure to facilitate work from home. The Company also provides Corona virus insurance 2019 (COVID-19) to employees, procures COVID-19 vaccines for employees, procures Antigen Test Kits, procures medicines and medical supplies for COVID-19 patients who need to be isolated at home (Home Isolation Kit), procures oxygen concentrators for employees in the yellow group, and coordinates the patient’s bed as well as plans for surveillance, prevention, and emergency action plans in the event of a COVID-19 outbreak. This is to ensure that the Company’s operations are uninterrupted.

Cyber Threat Risk and Personal Data Protection

Information technology systems play an important role in business operations. However, such technological advancements bring with them security risks to the Company and the group, which are either caused by the complexity of the information technology system or by employees’ knowledge that must be developed to keep up with the changes that occur. Furthermore, the information technology system’s flaws may allow an unauthorized user to have access to the system’s information, as well as various technological threats. Inadequate or incomplete defense and security monitoring systems can result in a variety of cyber threats, such as DDoS attacks, or Malware/Virus that cause serious damage, particularly to data or important systems, resulting in business interruptions, lost income, and reputation, among other things.

In addition, the Company has developed an information security system and put in place a safeguard system to avoid leaking sensitive information, according to the Government Gazette, The Personal Data Protection Act B.E. 2019, which has been postponed to come into force on May 31, 2022. This includes the collection, compilation, control of the use and disclosure of personal information and business partners' information to plan for the prevention of a personal data violation in compliance with the Personal Data Protection Act by establishing risk management principles that include:

1. Follow the information technology policy and create IT Awareness for employees at all levels.
2. Provide and develop information security tools to protect all important data and systems.
3. Monitor and supervise to maintain the security and safety of the Company's and associated's information technology systems to be in accordance with applicable laws and regulations, as well as offer regular backups and testing of stored data and have a plan in place to deal with emergency circumstances.
4. Increase information security measures such as granting access permissions to vital system information based on user hierarchy.
5. Determine measures to prevent the leakage of important information as well as to create an understanding of employees to protect and be cautious of various transmissions that are at risk of data leaks.
6. The Company has an audit and assessment of the adequacy of the information technology policy and internal control systems in information technology systems by the Internal Audit Department and the auditor annually. In addition, the Company plans to test the risk assessment of information systems by detecting vulnerabilities in the host computer and network equipment (Vulnerability Assessment) and Penetration Test by independent agencies to ensure the security of computer networks.



Risks from rapid changes in energy technology and digital technology

The evolution of technology in today's world is extremely rapid, particularly in the clean energy industry, which is a key global altering trend, coupled with the COVID-19 viral epidemic, which has expedited the development of technology in the energy industry by leaps and bounds. However, because the group companies anticipate development in tandem with future technology, there is a plan in place for business expansion, both in terms of staff and financial resources, and the company is equipped to operate new businesses that are tied to the old ones. This is a natural extension of the Company's previously successful operations. As a result, the Company began its innovation technology and platform business by establishing the GUNKUL Spectrum energy innovation business unit and focusing on partnering with experts in each discipline, such as AIS SCB10X. The Company believes that its business will develop in the future with those who have experiences in various fields of business helping each other to reach their full potential, so that the Company can expand without any limit in its 5 business groups as planned.

2.2.2 Investment risk of securities holders

1) The risk that investors will not receive the expected return on investment.

A variety of factors contribute to the volatility of the Company's share price, especially the external factors that are beyond the Company's control, in particular, economic and political conditions in the country, capital market volatility, changes in rules and regulations in doing business both domestically and internationally, and unavoidable crisis situations, such as the spread of the COVID-19. This may have an impact on the Company's share price so that investors may not get the returns as they expect.

2) The risk that investors will not receive expected dividend

The Company intends to maintain the dividend payment level consistently according to the dividend policy, which is not less than 40% of the net profit after corporate income tax deduction, legal reserve, and all other reserves, as shown in the Company's non-consolidated financial statements. However, investors may not receive expected dividend, because the Company may sometimes need to use working capital for operations or investment which the Company expects to earn stronger returns in the long run. As a result of these investments, the Company shall be able to pay more dividend to shareholders in the future.

2.2.3 Risk of investing in foreign securities

- None -

3. Driving Business for Sustainability

3.1 Sustainability Management Policies and Goals



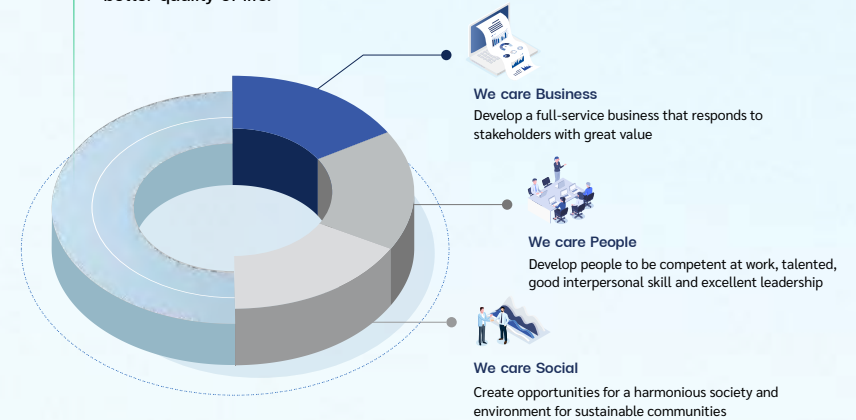
Sustainable
Development Policy

The Company believes that sustainable development, participation and growth together with all stakeholders is the way to create long-term value for the organization. In 2021, the Company has established a sustainable development policy and communicated it to all employees throughout the organization and disclosed to the public on the Company's website and uses as a framework for Company's business operation in accordance with the principles of good corporate governance management, response to all groups of stakeholders, as well as to raise awareness of the impact on society and the environment. The Company aims to be a leader in renewable energy business, equipment and integrated power systems with modern technology and innovation to develop infrastructure to be strong and sustainable, as well as a leader in the hemp and cannabis business internationally to enhance the quality of life and good health under the concept "not only the energy, we care". The Company reviews sustainability management strategies annually as follows:

1. **We care Business** : The Company develop a full-service business that responds to stakeholders with great value while also conducting business responsibly in accordance with the principles of good corporate governance. The Company never stops developing technology and creating innovations to improve operations, and deliver the best products and services to consumers with quality, standards, safety and environmental friendliness. This is to build confidence for stakeholders and to ensure the country's future power generation from renewable energy.
2. **We care People** : The Company develop people to be competent at work, talented, good interpersonal skill and excellent leadership. We believe that people are important resources of the organization. People are crucial mechanism in driving businesses to achieve sustainable success. As a result, we concentrate on human resource development through a work system

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We care not only green innovation energy, but also the continued existence of the world and the better quality of life.



that emphasizes participation, fostering a culture of teamwork and unity, and promoting skills and learning throughout the working period. We encourage employees to have the skills and competencies to work in all areas, as well as to foster a working culture within the organization by adhering to the principles of good governance and equitability according to human rights, safety, and health in order to lead the organization to excellence.

3. **We care Social** : The Company create opportunities for a harmonious society and environment for sustainable communities by strengthening community coexistence and providing mutual assistance as "Good Neighbors" with an emphasis on natural resource management for utmost benefits, including developing technology and innovations to preserve society and environment to mitigate the Company's potential impact. The Company also prioritizes the sharing of experiences among individuals, organizations, communities, and stakeholders as well as the access to electricity and renewable energy because it believes that electricity and energy are essential resources to which everyone should have equal access.

The Company has communicated and disseminated its sustainable development policy to all employees throughout the organization. This is to establish a culture of long-term accountability among executives and staff at all levels, so that they are aware of their roles, obligations, and responsibilities in implementing the policy. The COVID-19 pandemic is a crucial test in strategic planning, development, and keeping up with technology, as well as providing a basis for sustainable development for the community and society in all of the Company's activities. This is done in order to provide stakeholders with long-term, sustainable value.

Sustainability Management Goals and Strategies

The Company has established goals and strategies for sustainable development based on international guidelines, including Sustainable Development Goals (SDGs), organizational quality measurement standards (International Organization for Standardization: ISO). The Company monitors and reports results in accordance with the Global Reporting Initiative (GRI), which encompass economic, social and environmental issues as well as good corporate governance. This is to ensure consistent operations in all business groups of the Company as follows:

We care Business

Develop a full-service business that responds to stakeholders with great value



- Develop, improve, procure a complete range of electrical system products.
- Build on capital strength by expanding the energy business both domestically and internationally.
- Procure cutting-edge energy technology and innovation in respond to the use of renewable energy thoroughly and efficiently.
- Focus on expanding the construction business, both the electrical system and related equipment, including the above ground and subterranean transmission lines, and getting more underwater-cable work to generate income for sustainable growth.
- Commitment to using technology and innovation to provide products and services that meet requirements and develop a sustainable quality of life.
- Procure modern technology systems to enhance organizational management efficiency to meet the new normal style of working to ensure that the business can operate stably without any effect.
- Expand business and strive to seek opportunities to add business value for stable and sustainable returns.

We care People

Develop people to be competent at work, talented, good interpersonal skill and excellent leadership



- Create an appropriate “GROWTH” culture model that supports the strategy of the department and organization.
- Enhance supervisors’ skill to play a key role in driving and fostering appropriate behavior for subordinates so that they are “competent at work, themselves, people, and team management”.
- Develop personnel’s collective behavior to adapt to a new organizational culture of teamwork and lead the organization to excellence.
- Improve the human resource management system to facilitate the creation of good behavior for personnel.
- Support the personnel to achieve career advancement.
- Adjust the way of work in unusual setting or circumstance to ensure the Company’s personnel to work from anywhere safely and efficiently.

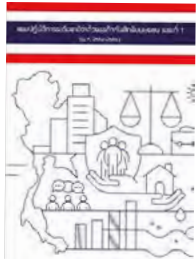
We care Social

Create opportunities for a harmonious society and environment for sustainable communities



- Develop renewable energy power plants to become a source of community and societal learning.
- Create employee involvement in community networks in order to promote and maintain local culture, as well as supporting various community activities in order to establish a strong society and balanced coexistence.
- Create a network with educational institutions as a learning resource and career development for students so that they can apply their skills, knowledge and abilities to effectively pursue their career in the future.
- Promote the creation of a career in the communities surrounding the Company’s renewable energy power plant area to improve the quality of life in the community by hiring personnel from the area and promote the creation of other careers.
- Balancing business growth with environmentally friendly alternative energy innovations and implementing environmental management in a sustainable and effective manner.
- Commit to government involvement and strictly adherence the regulations, and guidelines, particularly in unusual situations such as the spread of COVID-19.
- Support the reduction of the country’s greenhouse gas emissions.
- Support access to electricity and renewable energy, which is one of the fundamental rights to which everyone should have equal access.

Guidelines and cooperation at the national and international level



National Action Plan on Business and Human Rights

This action plan was developed within the framework of the United Nations Guiding Principles on Business and Human Rights (UNGPs), which emphasizes the three pillars of protection, respect and remedies. It essentially consists of 4 main issues that need to be urgently addressed, namely 1) labor 2) community, land, natural resources, and the environment; 3) human rights defense; and 4) international investment, and multinational corporations.



The Global Reporting Initiative (GRI)

An independent organization founded by the United Nations Office for Environment Programs (UNEP) and the Ceres network which jointly developed a sustainability reporting framework that discloses information in the materiality analysis of the business and the ability to respond to the interests of stakeholders with the same reporting standards and precise indicators.

ISO 9001

Quality Management System Standard (ISO 9001:2015)

A management system for quality assurance that controls the work process. The mistake can be checked and corrected, as well as guidance for preventing errors. It also includes understanding the organization and its context, as well as the needs and expectations of stakeholders in order to conduct a risk assessment, able to prioritize risks and develop an action plan to mitigate them, which is one of the foundations that will enable the organization to pursue sustainable development.

TIS18001 BS OHSAS 18001

Occupational Health and Safety Management System Standards (TIS18001 and BS OHSAS18001)

It was designed to reduce and control the hazards of employees and their stakeholders, while also increasing the efficiency of business operations to ensure safety and cultivating a culture of corporate responsibility towards employees and society.

ISO 14001

Environmental Management System Standards (ISO14001:2015)

An international standard for corporate environmental management systems which is internationally recognized operational standard that the Company recommends the adoption as a guideline for operations and environmental management in the operation of both solar and wind power plants. This is to reduce the Company's environmental effect including to promote activities to conserve the environment within the organization.



Industrial Product Standard (ISO/IEC 17025:2007)

A laboratory evaluation standard covering from sample preparation to test analysis proficiency, record keeping, and reporting, as well as document management, corrective and preventive actions, location and environment, tools, uncertainty estimation, traceable evidence, sampling and etc. This is to provide the laboratory with a competitive advantage, increase customers/consumers trust, increase efficiency in terms of quality and academic competency of the laboratory and personnel.



The Enterprise Emissions and Mitigation Verification Standard (ISO 14064-1)

A comprehensive standard that covers the requirements for the design, development, management, reporting and verification of emissions and emissions reductions of greenhouse gas of organization.



Thailand Sustainability Investment (THSI),

The companies in THSI list must have at least 50% scores on sustainability assessments in each dimension, namely economic, social and environmental, or be listed company that has been selected as a member of the Dow Jones Sustainability Indices (DJSI) and meets certain criteria, including the quality assessment of the Corporate Governance Report of Thai Listed Companies (CGR), operational result on net profit and shareholders' equity, and governance on issues related to the qualification of listed companies and non-ESG impact, with the Sustainable Investment Working Group which is made up of experts in corporate governance and sustainability, and transparently selected by capital market agency.

United Nations' Sustainable Development Goals Sustainable Development Goals (SDGs)

The Company recognizes its obligation to drive the business in accordance with the United Nations' Sustainable Development Goals (SDGs), which is a key organization that initiate sustainable business development. The Company is committed to operating business in accordance with 10 international principles covering human rights, labor standards, environment protection and anti-corruption. The Company has defined sustainable development goals that are aligned with business strategies, as well as creating balance in terms of economy, society and environment and reacting to the organization's and stakeholders' goals in a balanced manner. The Company has currently achieved a total of 7 sustainable development targets, the details of which can be summarized as follows:



Create an equal and inclusive education. Promote lifelong learning for everyone.

The Company recognizes the importance of education. As a result, through the annual scholarship sponsorship, employees and their families will be able to obtain equal access to education. Furthermore, educational networks covering multiple educational institutions have been established in order to collaboratively enhance students' vocational skills by giving internship opportunities to support real-world experience that can be used to develop, refine, and utilize in sustainable future job. This increases the number of young people and adults with essential skills, including technical and professional skills, for employment and having a good job. (4.4)



Providing modern, sustainable, stable, and affordable energy for everyone.

The Company operates business related to clean energy. In order to achieve the Company's visions of making sustainable energy more efficient and accessible to all, the Company is dedicated to investing in Company development according to Company's visions. (7.1) To increase the share of renewable energy consumption (7.3), new technologies are continually being invented (7.2)



Promote consistent, inclusive and sustainable economic growth, and decent employment.

The Company focuses on economic growth to meet stakeholder expectations. Therefore, it is committed to being an employer that respects human rights and is responsible for all stakeholders, whether to support the employment of employees or people with disabilities in the areas surrounding the business to create a career for the community, selection of law-abiding contractors, the prohibition of child labor, and the promotion of a safe and equitable working environment. (8.5, 8.7, 8.8)



Develop an infrastructure that is ready for change. Promote a sustainable and thorough industrialization and support innovation

The Company engages in clean energy and technology-related activities, as well as numerous energy advancements. Its goal is to invest in and assist the development of environmentally friendly technology to improve sustainability in a variety of industries, including the creation of clean energy infrastructure. It also aids educational institutions in the creation of long-term innovation. (9.4, 9.5)



Certify the consumption plan and sustainable production

The Company engages in clean energy business, including solar and wind energy, in order to maintain it operation under sustainable consumption and optimize resource utilization. (12.2)



Implement urgent measures to combat climate change and its consequences.

The Company realizes the significance of global warming, which causing rapid climate change. As a result, it aspires to provide a Greenhouse Gas Inventory Report, which complies the organization's greenhouse gas emissions, both directly and indirectly. The results would be used and planned to manage the organization's reduction of greenhouse gas emissions as announced by Thailand at the COP26 meeting (13.2, 13.3).



Promote a peaceful and fair society with no prejudice in order to achieve sustainable development

The Company realizes the importance of promoting a peaceful society and sustainable development. The Company's operations will be based on transparency, accountability, and participation in the Private Sector Collective Action against Corruption (CAC) network, and the Company will also encourage suppliers to join the network so that they can do business with the Company in a transparent manner (16.5, 16.6, 16.7).

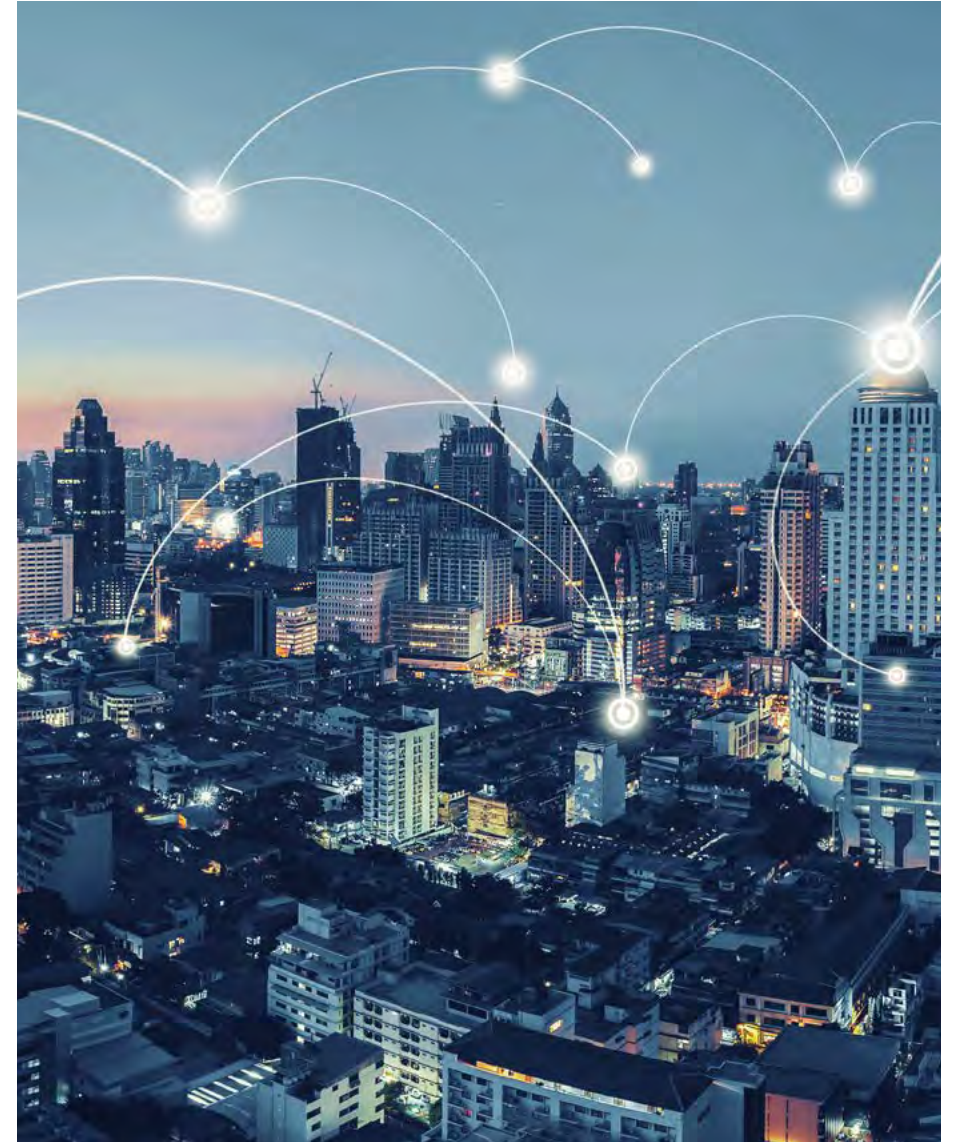
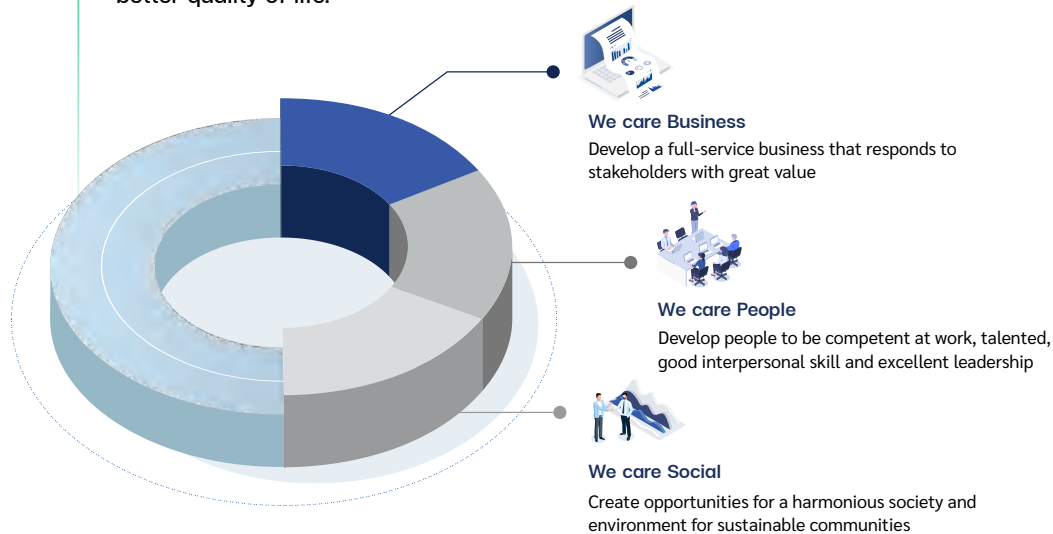
3.2 Management of Impacts on Stakeholders in the Business Value Chain

The Company is committed to be integrated renewable energy, equipment, electrical, and hemp and cannabis business operator, using modern technology and innovation to develop infrastructure that is strong and sustainable, enhancing the quality of life and good health by involving all stakeholders from upstream to downstream. The Company recognizes that stakeholders in the business value chain contribute to the long-term value of the company by ensuring efficient business operations and reducing potential risks. Building good relationships with stakeholders is one of the most important aspects of running a sustainable business. Stakeholders include employees, business partners, customers, competitors, creditors, shareholders, and investors, as well as the community, society, and environment, the public sector, the media, and other organizations.

3.2.1 The Business Value Chain

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We care not only green innovation energy, but also the continued existence of the world and the better quality of life.



3.2.2 Analysis of Stakeholders within the Business Value Chain



Employees

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Fair remuneration and additional welfare beyond those required by law. Receive equal and fair treatment in accordance with human rights principles without discrimination. Opportunities to develop skills and abilities as well as to promote career advancement and working stability. Have a pleasant working environment and a workplace that is healthy and safe. Employees and the organization have a positive relationship and mutual support. 	<p>Target:</p> <ul style="list-style-type: none"> The number of participants in the corporate engagement survey was higher than the previous year. Employee turnover is lower or the same as the previous year. Employees make progress and enjoy stability in their job. Zero accident rate at work. <p>Indicators:</p> <ul style="list-style-type: none"> Number of participants taking the corporate engagement survey. Employee turnover rate compared to the previous year. Number of executives and employees who have been promoted. The rate of accidents and injuries to the extent of missing work (LTIFR) <p>Communication channel:</p> <ul style="list-style-type: none"> Channels for receiving complaints suggestions include employee opinion surveys Corporate Engagement Survey Publicize news and activities through the computer network used within the organization, online and offline communication channels Form 56-1 One Report 	<ul style="list-style-type: none"> Establish HR Committee. Establish a welfare committee. Training Needs Survey, as well as procuring/ providing training courses to develop skills and ability to work in a career. Increase multiple and easily accessible channels for comments and suggestions. Treat employees fairly and equally without discrimination based on human rights principles. Establish concrete and measurable performance evaluation criteria. Develop/improve the appropriate welfare management model. Promote and build corporate engagement with employees through various activities and projects. Employee opinion survey on corporate engagement. Prepare personal data protection policy (Personal Data Protection Act: PDPA). Improve and develop safety and occupational health practices to raise operational standards. 	



Business Partners

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Fair and transparent procurement and bidding. Fulfillment of contractual terms and conditions (products, services, quality, delivery and full payment on time). Long-term business relationship management. Sustainable growth and progress together with the Company. Transfer and exchange knowledge, experience and technology. Respecting each other's rights and non-infringement of Intellectual Property. Social and environmentally responsible procurement. 	<p>Target:</p> <ul style="list-style-type: none"> The procurement process is faster than the previous year. There are 100 percent of key suppliers who agree to the Supplier Code of Conduct. <p>Indicators:</p> <ul style="list-style-type: none"> The duration of the procurement process compared to the previous year. Number of key suppliers who agree with the Supplier Code of Conduct. <p>Communication channel:</p> <ul style="list-style-type: none"> Supplier Assessment Form. Business meetings or seminars. Channels for receiving feedback, including complaints, suggestions, and opinions. Form 56-1 One Report 	<ul style="list-style-type: none"> Meeting/consulting to achieve according to mutual agreements and goals. Provide academic knowledge by specialists for partners. Visit business partners, ready to listen to opinions and suggestions. Treat business partners with equality and fairness. Adhering to the terms of the contract and business ethics. Create a clear, concrete understanding of the work process and with the same standard Having control measures and maintain business secrets. Effective Supply Chain Management to prevent and reduce risks that impact both social and environmental. Conducting Supplier Code of Conduct and officially promulgated within the organization, and communicate to business partners. Conducting an assessment of key trading partners and assessing supplier risk annually to prepare a relationship development plan with partners. Prepare personal data protection policy (Personal Data Protection Act; PDPA). 	



Customers

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Products and services with quality and safety standards Delivery of products and services under specified conditions and times. Providing pre-sales services such as methods or procedures for using the product including after-sales services such as proper consultation and assistance Compliance with the terms and conditions of the contract 	<p>Target:</p> <ul style="list-style-type: none"> The results of the survey of customer satisfaction with products and services are higher than previous year. Complaints about goods and services are resolved promptly. <p>Indicators:</p> <ul style="list-style-type: none"> The results of the survey of customer satisfaction with products and services compared to the previous year The number of complaints and the period of time taken to correct the goods and services according to the complaint <p>Communication channel:</p> <ul style="list-style-type: none"> Channels for receiving feedback including complaints, suggestions, and opinions on the use of goods and services Visits, meetings, trainings/seminars Form 56-1 One Report 	<ul style="list-style-type: none"> Provide high-quality, safety, and observable products and services. Set the price of goods and services at a price that is appropriate with the quality. Set up a quality assurance system throughout the supply chain from the raw material to the customer's hand. Inspect and control the production of goods and services to meet international standards. Continuously research and develop products with suitable and modern technology and innovation. Strictly abide by the agreements given to the customers. Provide services to clients both before and after sales, as well as a public relations channel and contacting enquiries for varied information that is easily accessible. Increasing channels for receiving feedback, including complaints, suggestions and opinions on using products and services. Use technology and innovation in the production of goods and services to be a product for social and environmental development. Evaluate the survey of customer satisfaction with products and services in order to present the result, and suggestions for how to improve and develop on a regular basis. Prepare personal data protection policy (Personal Data Protection Act; PDPA). 	<div> <div> 3 GOOD HEALTH AND WELL BEING </div> <div> 7 AFFORDABLE AND CLEAN ENERGY </div> </div>



Competitors

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Conduct business with transparency, honesty, and ethical competition with fairness and comply by law Not infringing on copyright or intellectual property rights 	<p>Target:</p> <ul style="list-style-type: none"> No complaints about copyright infringement issues. <p>Indicators:</p> <ul style="list-style-type: none"> Number of complaints about copyright infringement issues <p>Communication channel:</p> <ul style="list-style-type: none"> Business seminars Website Form 56-1 One Report 	<ul style="list-style-type: none"> Treat competitors fairly, ethical consideration and comply by law. 	



Creditors

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Pay the debt as specified. Compliance with conditions and contractual agreements. Manage risk in a secure manner to ensure business continuity. 	<p>Target:</p> <ul style="list-style-type: none"> Comply with conditions and contractual agreements. <p>Indicators:</p> <ul style="list-style-type: none"> Compliance with conditions and contractual agreements <p>Communication channel:</p> <ul style="list-style-type: none"> Meeting to mutually clarify terms and conditions. Website Form 56-1 One Report 	<ul style="list-style-type: none"> Talk, discuss or meeting to achieve mutual conclusion on the terms and conditions. Exchange knowledge on risk management for business continuity and knowledge integration. 	



Shareholders and Investors

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Return on investment (dividend and share price differential) from good and sustainable operations. Good corporate governance and risk management. The operation of the business is successful according to the objectives. Receiving equal and fair treatment. Disclosure of the Company's information based on facts, correctness, completeness, transparency and timely decision making. 	<p>Target:</p> <ul style="list-style-type: none"> The satisfaction survey result for investor activities ranges from good to very good. <p>Indicators:</p> <ul style="list-style-type: none"> The results of the satisfaction survey for investor activities. <p>Communication channel:</p> <ul style="list-style-type: none"> Annual meeting or announcement of business plans and business intentions. Website Form 56-1 One Report 	<ul style="list-style-type: none"> Operate the business under the principles of good corporate governance and follow the annual business plan. Disclosure of business results and operations through Form 56-1 One Report. Disclosure of business and operating information to the public such as websites 	



Community, Society and Environment

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Business operation that are responsible and friendly to society, environment and biodiversity. Impacts on communities, the environment, and community safety are all managed. Participation in community's development in economic and social aspects. Employ persons with impairment and persons from nearby community. Non-violation of human rights. Production process that is social and environment friendly. The most efficient use of resources in company operations. Having role in community development and environmental conservation. 	<p>Target:</p> <ul style="list-style-type: none"> The community's assessment result for Company's business and operating place is ranged from good to very good. The number of complaints from communities and society each year is 0%. Greenhouse gas emissions are reduced compared to the previous year. 100% wastewater treatment from the production process is treated before being reused or released. The amount of electric power consumption has decreased compared to the previous year. There is more waste management from production in comparison to the previous year. <p>Indicators:</p> <ul style="list-style-type: none"> The results of commitment assessment for businesses and place of operation. Number of complaints from communities and society. Carbon Dioxide Equivalent Tons. Amount of treated water. Electricity cost per number of employees. Amount of waste disposal from production. <p>Communication channel:</p> <ul style="list-style-type: none"> Channels for receiving feedback including complaints, suggestions, and opinions. Assessing level of engagement with business and place of operation. Website Form 56-1 One Report 	<ul style="list-style-type: none"> Establish Company's sustainability development working group and sub-working groups. Publicize the information and understanding of business processes, technology, and innovation, as well as other knowledge that is valuable to society through the website, activity organizing, and other channels. Arrange a channel for receiving feedback, including complaints, suggestions and comments. Arrange an assessment of the surrounding community's engagement to business and place of operation. Arrange for community impact assessments before and after conducting business operations with environmental responsibility and biodiversity. Develop technology and innovation to improve environmentally friendly production processes. Promote an environmentally responsible operating culture throughout the organization. Electricity usage campaign to turn off the air conditioner and electrical appliances when they are not in use. 	



Public Sector

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Compliance with relevant laws and regulations. Anti-Benefit and Corruption Claims. Payment of taxes and fees in full in timely manner. Cooperation and support in various fields. 	<p>Target:</p> <ul style="list-style-type: none"> Being approved by government agencies to carry out the requested action on an ongoing basis. <p>Indicators:</p> <ul style="list-style-type: none"> The number of projects that have been approved by government agencies as requested. <p>Communication channel:</p> <ul style="list-style-type: none"> Visits, meetings, trainings/seminars. Verification and verification of standards. Website. Form 56-1 One Report. 	<ul style="list-style-type: none"> Operate business under good corporate governance and in accordance with relevant laws and regulations. Join the anti-corruption network. Carry out tax matters according to relevant laws and regulations. Cooperate and support activities and operations at the national level. 	



Media and Other Organizations

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Receive accurate, fast and up-to-date information, neutral and beneficial to society. Operate business with responsibility to economy, society and environment. Having concrete policies and measures to manage impacts arising from business operations. The business is in harmony with society and the environment in a sustainable way. 	<p>Target:</p> <ul style="list-style-type: none"> The news presented internally in an accurate, timely, and timely manner. The number of cases or claims each year is 0%. <p>Indicators:</p> <ul style="list-style-type: none"> Amount of news presented within the Company with accuracy, speed, and timeliness. Number of cases or complaints each year. <p>Communication channel:</p> <ul style="list-style-type: none"> Annual General Meeting of Shareholders or announcement of business plan and intentions and activities on listed companies meeting with investors (Opportunity Day). Channels for receiving feedback including complaints, suggestions and comments. Website. Form 56-1 One Report. 	<ul style="list-style-type: none"> Submit actual and neutral operational information regularly after completion of operation. Establish a working group for organizational development toward sustainability, as well as sub-working groups, to deliver information that is helpful to society or the general public. Commitment to conducting business with social and environmental responsibility. Publicize the information and understanding of business processes, technology, and innovation, as well as other knowledge that is valuable to society through the website, activity organizing, and other channels. 	

3.2.3 Analysis of Key Materiality Business Issues



Identification

Implementing a process for identifying key internal and external issues affecting different levels of business in planning the organization's development toward sustainability by considering stakeholders expectations to enable the organization to identify important issues of all group of stakeholders and can be used to analyze the impact, risks, and likelihood of such risks, which can be divided into 3 main points:

- **We care Business:** Economic issues
- **We care Social:** Social and environmental issues
- **We care People:** Employee issues



Prioritization

Prioritizing major issues that can be identified by comparing with the important concerns that affect the Company's business operations using indicators from the Global Reporting Initiative (GRI) framework and prepare table of key point analysis (Materiality Matrix):

Vertical Axis: Consider prioritization from issues that may affect stakeholders

Horizontal Axis: Consider prioritization from issues that may affect the Company



Validation

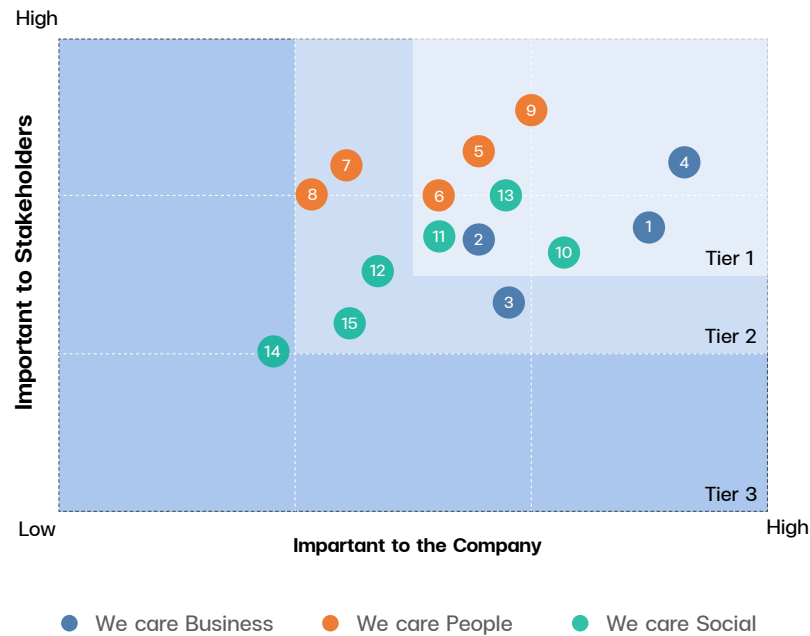
The Company has checked the completeness of the important issues and presented to the Corporate Governance Committee and the Board of Directors for approval, as well as preparing a sustainability action plan and an organizational risk management plan, both of which have been approved by Executive Management, with the Chief Executive Officer serving as the Chairman of the meeting.



Review and Disclosure

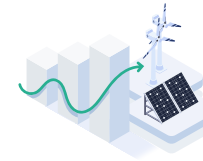
The Company has followed up on operational results that are consistent with all 15 key issues. The results of which have been reported to, and reviewed by the Board of Directors, and disclosed such the information to the public in various channels such as the 56-1 One Report, website, shareholders' meeting, and other channels which comply by all regulations.

Table of Key Materiality Analysis (Materiality Matrix)



Key Issues of Sustainability Summary

We care Business



1. Good corporate governance and business ethics.
2. Risk management in times of crisis or unusual conditions.
3. Sustainable supply chain management.
4. Technology development and innovation.

We care People



5. Occupational safety and health.
6. Labor Administration and Human Rights.
7. Knowledge and skill development of personnel.
8. Remuneration and employee retention.
9. Building stakeholder engagement with the organization.

We care Social



10. Waste management from production processes.
11. Communities and society relationship development.
12. Biodiversity Management.
13. Climate Change Management.
14. Water Management.
15. Energy Management.

3.3 Sustainability Management in Environmental Dimension

The Company is committed to managing and mitigating environmental impacts in associated to its business activities to expand the capacity of sustainable business operations from upstream to downstream. The Company has set operating rules to manage environmental quality and biodiversity, as well as investments to develop, improve, and discover new ways to use resources and energy, including waste and greenhouse gas emissions management in order to adapt to climate change in a sustainable manner. The Company has developed a sustainable development policy, which is available on the Company's website.

Performance in Environmental Dimensions in 2021

Greenhouse Gas Emission Management

Total greenhouse gas emissions of the organization ¹⁾

2,386.78

tons of carbon dioxide equivalent

2022 Target : Decrease 5%



Waste Management

The amount of waste from the production process that has been properly disposed of

164.49 tons



Energy Management

Total electricity consumption from outside ¹⁾

13,873 kilowatt-hour/person

2022 Target : Decrease 5%



Water Management

Total water consumption from outside ¹⁾

0.36 m³/person

2022 Target : Decrease 5%



Note ¹⁾ The Company has started collecting data and has been officially certified by external agencies for the first year. Therefore, the 2021 data will be used as the base year to compare with the following year data.



3.4 Sustainability Management in Social Dimension

The Company realizes the importance of participating in social development for strong, sustainable growth by improving the working process with communities both within and outside the organization, as well as community networks in all sectors to be in line with the business direction and create a strong society. The Company has strictly followed all regulations and laws, as well as prioritizing all stakeholders equally and equitably without discrimination, while also adhering to human rights ideals and being accountable to consumers. The entire Sustainable Development Policy were published on the Company website.

Performance in Social Dimensions in 2021



All Employees

959 persons

Female Employees to Total Employees

percentage **36.39**

Number of employees who have been promoted

18 persons

Employee turnover rate

percentage **1.63**



Providing opportunities for disabled employees to have a career and income

8 persons

Reduce operating costs from employee quality improvement activities.

1,001,200.07 Baht

Average employee satisfaction and engagement scores

percentage **86**



Average customer satisfaction score

percentage **91.56**

Average number of training hours (111 courses)

5.01 hour/person/year

Average number of training hours for senior management

21.94 hour/person/year



Lost time injury frequency rate (per 1,000,000 hours)

1.53 persons

Number of human rights violations

0 persons

labor dispute

0 case



New selected suppliers from evaluation

17 persons

Key suppliers that directly affect the Company

42 persons



Number of corruption and corruption complaints

0 case

Number of complaints on goods and services

0 case

Average satisfaction and community engagement scores

percentage **76.39**

Suppliers who participated in performance evaluations in compliance with the Supplier Code of Conduct

percentage **100**

Number of communities participated in the community relationship development project

percentage **80**

Number of complaints on community issues

0 case



4. Management Discussion and Analysis (MD&A)



Overview of business operations and significant changes

Economic conditions in 2021 remain extremely uncertain due to the COVID-19 pandemic's impact. Despite the economic recovery in many countries, an economic growth has not returned to the same level as it was before the COVID-19 pandemic. Additionally, the government's execution of measures to halt the spread of the epidemic has affected international business expansion due to travel constraints. However, the Company has prepared to expand its business opportunity in the future in order to move forward to penetrate the renewable energy market both domestically and globally.

In 2021, the Company will continue to expand its renewable energy portfolio, the High Voltage Equipment, Engineering, and One-stop Turnkey Platform Ecosystem and Innovation businesses, as well as expanding into hemp and cannabis businesses, through relationships with strong partners for empowering enterprises for sustainable growth. The Company formed a joint venture with Origin Property Public Company Limited last year to jointly operate clean energy in residential projects, including clean energy management systems and electric vehicle charging stations, through Britannia Public Company Limited, an Origin Property Public Company Limited subsidiary. Additionally, it has partnered with Jaymart Public Company Limited and Singer Thailand Public Company Limited to invest in residential rooftop photovoltaics, hemp and cannabis businesses, as well as launching "godungfaiaa.com", an e-commerce platform that aggregates a comprehensive selection of electrical and photovoltaic equipment online which is a collaborative effort between GUNKUL SPECTRUM, the Company's energy business innovation unit, and SCB 10X.

The Company announced a net profit attributable to the owners of parent of 2,229.27 million baht as part of its 2021 results. This is mostly due to the acknowledgment of solar power plant projects' full year income in Vietnam, the four projects totaling 160 megawatts include the Tri Viet 1 solar power

plant and the Bach Khoa A Chau 1 solar power plant, each of which is 60 megawatts, also the 50-megawatt Tan Chau Solar Plant and the 50-megawatt Phong Dien II Solar Plant, including the result of better production capacity from solar plant projects in Japan which are the 31.75-megawatt Sendai Solar Plant and the 33.5-megawatt Kimitsu Solar Plant. Additionally, there was a better performance of wind energy projects as a result of the return of normal wind flows. It also includes foreign exchange earnings, gains from changes in the fair value of derivatives, and enhanced recognition of the profit share from investments in associates and joint ventures.

In comparison to 2020, the Company recorded a decrease in profit attributable to the owners of parent of 1,183.07 million baht, or 34.67% , but when only net profit excluding exceptional profits from sale of investments in subsidiaries and profit from bargain purchase is being considered, the Company reported a growth of 1,063.10 million baht, or 89.45%.

The Company intends to expand its renewable energy business, High Voltage Equipment Business, Engineering & One-stop Turnkey businesss, Platform Ecosystem Business, and Hemp and Cannabis Business by focusing on sustainable development and growth. The Company also prepares for economic, society and environmental disruption to manage each business group effectively through a system of corporate governance and risk management. The Company sets not less than 20% growth target for 2022, which is considered as a continuous growth of the Company for more than 10 years (since listing on the Stock Exchange of Thailand). Additionally, the Company continues to seek possibilities investment as well as the collaboration with business partners, in order to achieve exceptional growth and development.

Analysis of the Company's performance

Comparative performance analysis for the year ended December 31, 2021 and 2020 can be summarized as follows:

Important Financial Information	2021	2020	Change	
	Million Baht	Million Baht	Million Baht	%
Revenue from sale	1,474.97	1,495.88	(20.91)	(1.40)
Revenue from sale of electricity and adder	4,760.50	4,093.36	667.14	16.30
Revenue from construction and rendering services	2,112.60	2,146.63	(34.03)	(1.59)
Revenue from sale of assets under finance lease	970.09	913.48	56.61	6.20
Net foreign exchange gain (loss)	99.71	(13.87)	113.58	818.89
Gain (loss) on change in fair value of derivatives	377.40	(13.22)	390.62	2,954.77
Gain on bargain purchase	-	259.27	(259.27)	(100.00)
Gain on sale of investment in subsidiary	-	1,977.60	(1,977.60)	(100.00)
Other revenues	72.86	88.33	(15.47)	(17.51)
Total Revenue	9,868.13	10,947.46	(1,079.32)	(9.86)
Cost of sale and rendering services	5,573.50	5,608.30	(34.80)	(0.62)
Cost of sale and administrative expenses	972.08	955.28	16.80	1.76
Loss on capital reduction of subsidiary	130.50	-	130.50	100.00
Total Expense	6,676.08	6,563.58	112.51	1.71
Share of profit of associates and joint ventures	217.84	72.60	145.24	200.06
Finance costs	970.53	911.77	58.76	6.44

Important Financial Information	2021	2020	Change	
	Million Baht	Million Baht	Million Baht	%
Profit for the year	2,251.52	3,425.29	(1,173.77)	(34.27)
*Profit for the year (*Excluding the portion arising from the disposal of investments in subsidiary and profit from a bargain purchase)	2,251.52	1,188.42	1,063.10	89.45
Net profit of the owners of parent	2,229.27	3,412.34	(1,183.07)	(34.67)
Basis earning per share (in Baht)	0.25	0.39	(0.14)	(35.90)

The Company's overall operating results for the fiscal year ended December 31, 2021 has a net profit attributable to the Company, showing a net profit of 2,229.27 million baht compared to the same period last year at 3,412.34 million baht, decreased of 1,183.07 million baht or 34.67%, as total revenue decreased.

The Company's had total revenue shown in the consolidated financial statements amount of 9,868.13 million baht, decreased of 1,106.41 million baht or 10.08% compared to the same period last year which the total revenues was 10,974.54 million baht. Due to in 2020, the Company has profited from the bargain purchase prices from the acquisition of four solar power facilities in Vietnam for 259.27 million baht. Additionally, the Company also gain profits from selling investments in subsidiaries by selling two solar energy project in Japan for 1,977.60 million baht which is a non-recurring item. If the aforementioned items are omitted, the Company's total income will be raised of 1,157.55 million baht, compared to the same period last year.

Revenue from the Company's core business operations is totaled of 9,318.16 million baht in the fiscal year ended December 31, 2021, compared to the same period last year was 8,649.34 million baht which increased by 668.82 million baht or 7.73%, which can be broken down per the Company's business category in the following manner.

Revenue from sales of goods for the year ended December 31, 2021 in the consolidated financial statements presented at the amount of 1,474.97 million baht, compared to the same period last year at 1,495.88 million baht, a decrease of 20.91 million baht, or 1.40% decreasing from the waiting for delivery in the first quarter of 2022. However, the Company intends to enter the merchandising sector

in 2022, which will expand sales channels via “godungfaifaa”, an e-commerce platform, as well as raise the proportion of product sales with high gross margins in conjunction with the construction and service segments.

Revenues from sale of electricity and adder in the purchase price of electricity for the year ended December 31, 2021 in the consolidated financial statements presented at the amount of 4,760.50 million baht, compared to the same period last year at 4,093.36 million baht, increased of 667.14 million baht or 16.30% which can be break down as shown in the below table:

Table showing income by type of electricity from energy

Items	2021	2020	Change	
	Million Baht	Million Baht	Million Baht	%
Revenue from sale of solar energy electricity	2,387.37	1,995.41	391.96	19.64
- Domestic	847.20	888.87	(41.67)	(4.69)
- International	1,540.17	1,106.53	433.63	39.19
Revenue from sale of wind energy electricity from 3 projects, totally 170 Megawatt	2,373.13	2,097.95	275.18	13.12

Revenue from sales of solar power for the year ended December 31, 2021 presented at the amount of 2,387.37 million baht, compared to the same period last year at 1,995.41 million baht, increased 391.96 million baht, or 19.64%. The increase was due to an increase in commercial electricity sales in overseas totaling of 224.50 MW as mentioned above, with revenue from the 31.75-megawatt Sendai Solar Power Plant in Japan, the 33.5-megawatt Kimitsu Solar Power Plant in Japan and from another 4 power plant projects in Vietnam, namely Tri Viet 1 and Bach Khoa A Chau 1 Solar Power Plants with a total size of 60 MW, the 50-megawatt Tan Chau Solar Power Plant and the 50-megawatt Phong Dien II Solar Power Plant.

Revenue from sales of wind power for the year ended December 31, 2021 presented at the amount of 2,373.13 million baht, compared to the same period last year at 2,097.95 million baht, increased of 275.18 million baht or 13.12%. An increased capacity was due to the return of normal wind flows in the past year.

In the consolidated financial accounts for the year ended December 31, 2021, revenue from construction and services was 2,112.60 million baht, compared to the same period last year at 2,146.63 million baht, decreased 34.03 million baht, or 1.59%, which was in accordance with the projection of the Company by recognizing the revenue from construction contracts for government and private sectors,

by participating in the bidding for various construction works, such as the construction of power stations, electrical system and the over-ground and underground transmission lines are carried out through a subsidiary in the group (Future Electrical Control Company Limited). Moreover, the Company also intends to bid on more construction project with the Provincial Electricity Authority, the Metropolitan Electrical Authority and the Electricity Generating Authority from seeing opportunity to grow from policies that promote the development of stable electricity systems to encourage economic growth. In addition, the electric power transmission network is being developed to assist the country’s smart power grid system.

For the year ending December 31, 2021, revenue from the sales of assets under finance lease agreements from the revisions of the accounting standard (TFRS 16) effective from 1 January 2020 presented the amounted of 970.09 million baht, compared to the same period last year at 913.48 million baht, increased of 56.61 million baht or 6.20%. This is derived from the revenue from land and building leases agreement for the project contracted with the Lotus Projects and a portion of the revenue from the sale of electricity on the roof to the private sector, which is a long-term contract of 10-15 years. The Company continuously seek for potential prospective private sector customers while also considering to drive the Company towards sustainability in order to bring solar energy to replace the electricity usage which encouraging on the energy conservation and environmental conservation.

In terms of the costs of sales and service for the sales and distribution of electricity and construction and rendering services for the year ended December 31, 2021 amounted of 5,573.50 million baht, compared with the same period last year at 5,608.30 million baht, decreased of 34.80 million baht or 0.62%. The following is a summary of the details by segment:

Items	2021	2020	Change	
	Million Baht	Million Baht	Million Baht	%
Cost of sale	1,174.98	1,110.67	64.31	5.79
Cost of sale of electricity	1,895.98	1,738.35	157.63	9.07
Cost of construction and rendering services	1,631.72	1,867.43	(235.71)	(12.62)
Cost of sale of assets under finance lease	870.83	891.85	(21.02)	(2.36)
Cost of sale and rendering services	5,573.50	5,608.30	(34.80)	(0.62)

The cost of sales for the fiscal year ending December 31, 2021 was 1,174.98 million baht, compared to the same period last year of 1,110.67 million baht, increased of 64.31 million baht or 5.79%. This is due to the increased price of raw materials such as steel and copper which is in accordance with worldwide market pricing. However, the Company manages risk by negotiating raw material prices in each period in order to estimate production costs and reduce the volatility of raw material prices in production.

For the fiscal year ending December 31, 2021, the cost of electricity sales was 1,895.98 million baht, compared to the same period last year amount of 1,738.35 million baht, increased of 157.63 million baht or 9.07% from 4 solar power plants project developments in Vietnam as mentioned above. However, the Company has concentrated on improving and managing costs in order to boost power generation efficiency from both domestic and international power plants to be able to produce and distribute power on a consistent and continuous basis.

For the fiscal year ending December 31, 2021, the cost of construction and service was 1,631.72 million baht, compared to the same period last year at 1,867.43 million baht, decreased of 235.71 million baht or 12.62% which in line with the decreased revenue.

For the year ended December 31, 2021, the cost of selling capital lease property was 870.83 million baht, compared to the same period last year at 891.85 million baht, decreased of 21.02 million baht or 2.36% as a result of the ability to manage construction costs below the projected estimates.

For the gross margin, the Company recorded a gross margin of 40.19% for the year ended December 31, 2021, increased of 5.03% compared to the same period last year from the higher gross profit margin of the electricity sales business, construction and service businesses, as well as sale of assets under finance lease business.

Other sources of income are discussed in this section. The Company reported a decline in other revenues since the profit from the bargain purchase was recognized in 2020 from the purchase of four solar power projects in Vietnam for 259.27 million baht and recognized gains from selling investments in subsidiaries amounting to 1,977.60 million baht from the selling of 2 solar power plant projects in Japan. This was a non-recurring item with a total value of 2,236.87 million baht. However, the Company reported the profit from the exchange rate and the profit from the changes in fair value of derivatives, details as follows:

For the fiscal year ending December 31, 2021, the profit from the exchange rate was 99.71 million baht, compared to the same period last year shown a loss of 13.87 million baht, increased of 113.58 million baht or 818.89%, which is an unrealized gain. As a result of the foreign currency exchange at every end of the period, the main reasons are from the conversion of foreign currency exchange to setup payment of debt for maintenance payments for wind power plant projects in U.S. dollars and the result of capital reductions in subsidiaries in Q1.

Profit from changes in fair value of derivatives for the year ending December 31, 2021 presented the amount of 377.40 million baht, compared to the same period last year shown loss of 13.22 million baht, increased of 390.62 million baht or 2,954.77% due to U.S. dollars exchange contract from wind power projects in the past, as well as interest rate swap contracts from solar and wind energy projects, which began to be recorded in accordance with the Accounting Standard No.9 Financial Instruments, effective from January 1, 2020 onwards.

For the fiscal year ending December 31, 2021, sales and administrative expenses totaled of 972.08 million baht, compared to the same period last year at 955.28 million baht, increased of 16.80 million baht or 1.76%. This is primarily due to rising labor costs.

For the fiscal year ending December 31, 2021 the share of profits from investment in associates and joint venture amount of 217.84 million baht, compared to the same period last year at 72.60 million baht, increased of 145.24 million baht or 200.06% mainly came from 29.99 MW Malaysian solar power plant project, which the company holds 70% of shares, received a penalty for the delayed of the power plant deliveries by the contractors than specified in the contract. In addition, the Company also holds 40% shares in G-Power Source project of 26 MW and 51% shares in Chubu PowerGen Co., Ltd. of 30.9 MW. Both power plants have increased commercial electricity sales due to solar panel replacement, and the decline of asset impairment in 2021.

The financial costs for the year ending December 31, 2021 was 970.53 million baht, compared to the same period last year at 911.77 million baht, increased of 58.76 million baht or 6.44%, as a result from the increased rooftop photovoltaic installations and solar power plant projects in Vietnam.

The fiscal year ending December 31, 2021, the corporate income tax was 187.84 million, compared to the same period of last year at 119.41 million baht, increased of 68.43 million baht or 57.30% increased, owing primarily from the subsidiary dividend tax.

Consolidated Financial Statement

Comparison of consolidated financial statements for the years ending December 31, 2021 and 2020 can be summarized as follows:

Digit: Million Baht	2021	2020	Change	
	Million Baht	Million Baht	Million Baht	%
Current Assets	7,566.82	11,782.49	(4,215.67)	(35.78)
Non-current assets	34,918.54	34,249.67	668.87	1.95
Total Assets	42,485.35	46,032.16	(3,546.81)	(7.71)
Total current liabilities	9,053.60	12,982.57	(3,928.97)	(30.26)
Total liabilities	29,202.13	33,556.84	(4,354.71)	(12.98)
Shareholders' Equity	13,283.22	12,475.31	807.91	6.48
Total liabilities and equity	42,485.35	46,032.16	(3,546.81)	(7.71)

As of December 31, 2021, the Company and its subsidiaries presented total assets of 42,485.35 million baht, compared to total assets of 46,032.16 million baht as of December 31, 2020, decreased by 3,546.81 million baht or 7.71% due to the following changes.

Current assets as of December 31, 2021 amount of 7,566.82 million baht, decreased from the same period last year at 11,782.49 million baht, decrease of 4,215.67 million baht or 35.78%. The significant decreases including cash and cash equivalent from short-term loan payments from financial institutions, including the reduction of trade accounts receivable , other current receivables and accrued revenue.

Non-current assets as of December 31, 2021 was 34,918.54 million baht, compared with total non-current assets as of December 31, 2020 at 34,249.67 million baht, increased of 668.87 million baht or 1.95%.

The Company and its subsidiaries' total liabilities as of December 31, 2021 presented at the amount of 29,202.13 million baht, decreased from the same period last year, presented at the amount of 33,556.84 million baht, decreased of 4,354.71 million baht or 12.98%, as a result of the following changes.

As of December 31, 2021, the current liabilities totaled of 9,053.60 million baht, decreased from the same period last year, presented at the amount of 12,982.57 million baht, decreased by 3,928.97 million baht or 30.26%. This is due to the decrease in short-term loans from financial institutions for cash flow for using as working capital within the Company and for investment in new projects, including creditors of assets, partly as a result of the payment from construction of projects that are not yet due.

Total non-current liabilities as of December 31, 2021 presented amount of 20,148.54 million baht, compared with the same period last year, as of December 31, 2020 presented at amount of 20,574.27 million baht, decreased of 425.73 million baht or 2.07%.

As of December 31, 2021, the Company and its subsidiaries' shareholders' equity was 13,283.22 million baht, compared with shareholders' equity as of December 31, 2020 at 12,475.31 million baht, increased by 807.91 million baht or 6.48% due to the had a surplus on treasury shares from the sale of repurchased shares of 121.79 million baht and an increase in unallocated retained earnings of 391.32 million baht.

Significant Financial Ratios

Important Financial Ratio	Units	2021	2020*
		Million Baht	Million Baht
Profitability Ratio			
Earnings before tax and financial cost margin	%	34.55	25.48
Earnings before interest, tax and depreciation margin	%	47.99	41.02
Net profit margin	%	22.82	13.60
Liquidity ratio			
Current ratio**	times	1.65	1.22
Account receivable turnover ratio	times	3.86	3.78
Inventory turnover ratio	times	1.62	1.72
Financial Ratio			
Interest-Bearing Debt to Equity Ratio	times	2.20	2.69

* Deduct gain from bargain purchase and gain from sale of investment in subsidiary

** Deduct portion of long-term loan to be due within 1 year and portion of debenture redeemable within 1 year

In comparison of the profitability ratio, profitability increased from a year ago, with a pre-tax profit margin and financing costs of 34.55% in 2021, an increase of 9.07% from the previous year. The profit margin in 2021 before interest, tax, and depreciation was 47.99%, which increased of 6.97% from the previous year. The net profit margin of 22.82% in 2021, an increases of 9.22% from the previous year.

In terms of liquidity, the year 2021 had a ratio of 1.65 times which shows an increase of 0.43 times from the previous year. However, the Company maintains sufficient liquidity to operate the business, allowing it to repay the debt on time and in full compliance with the loan's terms. Additionally, when considering the ratio of trade receivables to total revenue, it is discovered that the Company's trade receivable turnover ratio of 3.86 was increased by 0.08 times in 2021. The Company is prudent in

managing trade receivables by regularly evaluating and reviewing the creditworthiness of debtors, to mitigate the risk of trade receivables default and maintain a healthy debt collection balance. In 2021, the Company had an inventory turnover ratio of 1.62, decreased of 0.01 times, as a result of the Company managing inventories to the appropriate level through analysis of order and customer data to anticipate demand and minimize the risk of inventory deterioration or obsolescence.

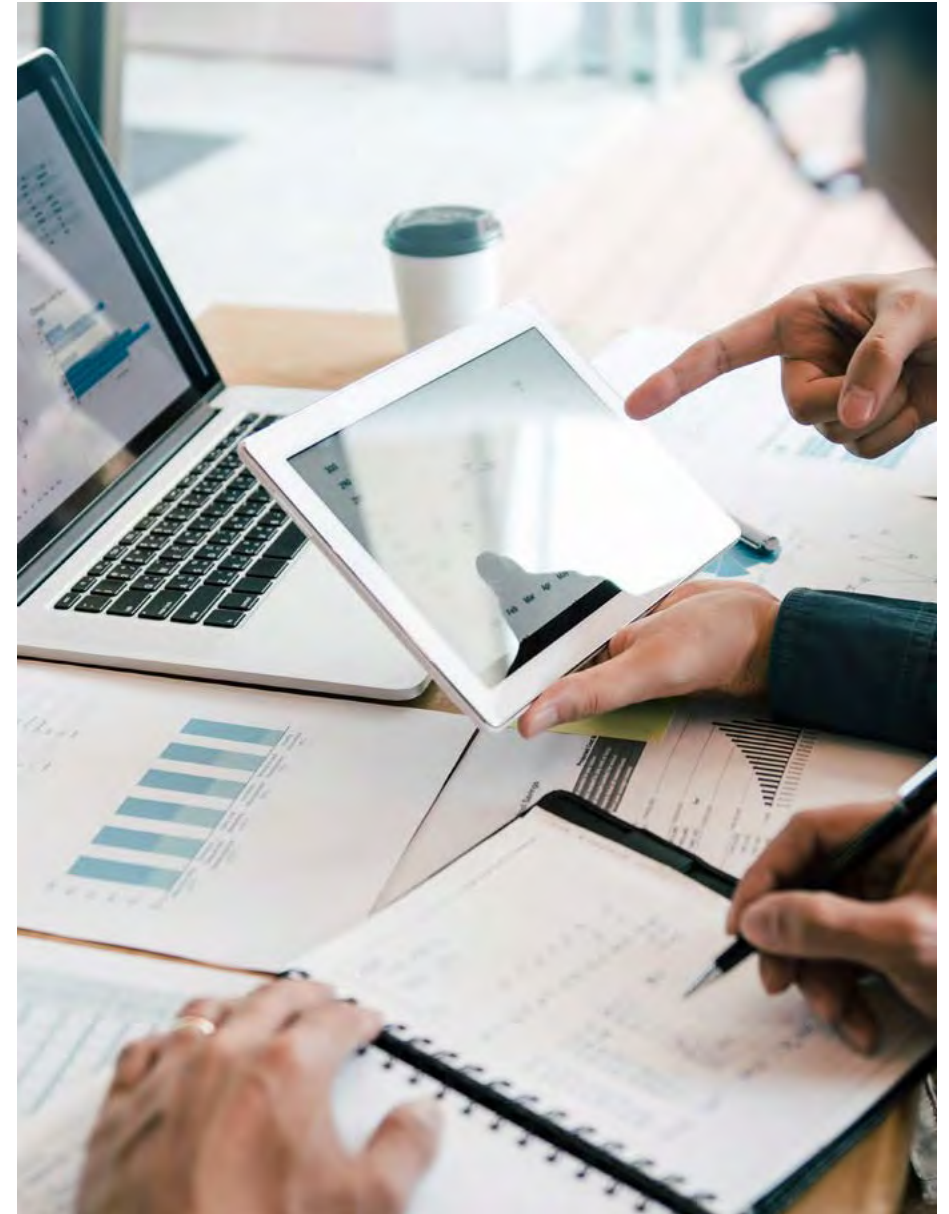
In terms of net interest-bearing debt to total shareholders' equity, the ratio in 2021 was 2.20 times, decreased of 0.49 times from last year, indicating an improved ability to manage interest-bearing liabilities in order to manage financial costs for maximum efficiency. The ratio is a requirement for borrowing money and must fall within the parameters of the Company's substantial supervision.

Important factors affecting future operations

Renewable energy business prospects in Thailand and abroad are improving from the support of governments in many countries that place importance on increasing the proportion of clean energy to replace traditional biofuels, which is considered as an investment opportunity for the Company to increase its revenue contribution from the electricity distribution business. Additionally, technology improves the efficiency of clean energy electricity generation, resulting in lower costs. Moreover, the Company also benefits from the interests of consumers who turned to support clean energy. The roles of power producers and consumers will become inextricably linked in the future, turning consumers into Prosumers, and number of installation of rooftop solar power generation systems will increase. These are critical opportunities for the Company to anticipate and prepare for rapidly changing circumstances.

For part of the hemp and cannabis industry's trend, as there is a transitory provision restricting to import hemp for five years, it benefits the Company to be prepared and develop competitiveness in advance for future import and export legalization. The Company is confident in the ability to establish production standards that will enable the Company to compete on a global scale, which will help expand the customer base internationally and generate additional revenue in the future.

The Company's growth strategy focused on maximizing the business's long-term growth potential in order to maintain its competitiveness. This is accomplished by listening to stakeholders across all sectors and taking mutual interests into account in accordance with the principles of good corporate governance and efficient risk management, concurrently with socially responsible operations. In order to serve as the cornerstone of the organization's growth in the future, even in times of crisis and uncertainty, with the goal is to develop the organization to grow strongly in the face of constant and sustainable challenges.



Financial Highlight

Financial Position

Unit: Million Baht	December 31, 2019	December 31, 2020	December 31, 2021
Total assets	39,041.54	46,032.16	42,485.35
Total liabilities	27,708.63	33,556.84	29,202.13
Total equity	11,332.92	12,475.31	13,283.22

Statement of comprehensive income

Unit: Million Baht	2019	2020	2021
Total revenue	7,195.26 ¹⁾	10,974.54 ¹⁾	9,868.13
EBITDA	4,310.77	5,809.93	4,951.87
Profit (Loss) for the year	2,222.29	3,425.29	2,251.52
Profit (Loss) from normal operation	2,222.29	1,188.42	2,251.52
Profit (Loss) of the parent company	2,147.33	3,412.34	2,229.27

Note ¹⁾ Total revenue from normal operation accounted for Baht 7,175.37 million in 2019 and Baht 8,737.68 million in 2020.

Revenue Proportion

Unit: Million Baht	2019	2020	2021
Revenue from sale	1,526.50	1,495.88	1,474.97
Revenue from sale of electricity	4,504.39	4,093.36	4,760.50
Revenue from rendering of services and construction services	1,067.68	2,146.63	2,112.60
Revenue from sale of assets under finance lease	-	913.48	970.09
Net foreign exchange gain ¹⁾	19.89	(13.87)	99.71
Gain on change in fair value of derivatives ¹⁾	-	(13.22)	377.40
Gain on bargain purchase ¹⁾	-	259.27	-
Gain on sale of investment in subsidiary ¹⁾	-	1,977.60	-
Other income	76.80	88.33	72.86
Total revenue	7,195.26	10,947.46	9,868.13

Note ¹⁾ Revenue identified in the table as special revenue from net foreign exchange gain, gain on change in fair value of derivatives, gain on bargain purchase and gain on sale of investment in subsidiary.

Dividend Payment

Year	2019	2020	2021		
Performance period	1 Jan – 31 Dec	1 Jan – 31 Dec	1 Jan – 30 Jun (Interim)	1 Jan – 31 Dec and Retained Earnings	Total Dividend Payment
Basic earnings per share (in Baht)					
– Separate financial statements	0.10	0.25	0.03	0.25	
Dividend Payment (Baht per share)	0.136	0.182	0.06	0.12 ¹⁾	0.18
Dividend Payout Ratio (%)					
– Separate financial statements	134.14	72.82		48.82	73.28

Note ¹⁾ The dividend payment of the year 2021 is uncertain, subjecting to the shareholders' approval in the 2022 Annual General Meeting of Shareholders on April 27, 2022.



Table of Key Financial Ratios

Item	Consolidated Financial Statements			Saparate Financial Statements		
	2021	2020	2019	2021	2020	2019
Liquidity Ratio						
Liquidity Ratio (time)	0.84	0.91	0.89	0.36	0.66	0.85
Quick Liquidity Ratio (time)	0.75	0.86	0.81	0.28	0.61	0.71
Cashflow Liquidity Ratio (time)	0.55	0.05	0.44	0.14	(0.05)	(0.03)
Trade Account Receivable Turnover (time)	3.86	3.78	6.66	2.83	2.49	4.35
Average Collection Period (days)	94.64	96.51	54.82	128.89	146.88	83.99
Inventory Turnover (time)	1.62	1.72	1.74	3.74	3.61	3.27
Average Selling Period (days)	224.65	212.00	209.27	97.54	101.03	111.74
Payable Turnover (time)	1.34	1.68	3.57	3.13	3.13	4.01
Credit Term (days)	271.43	216.70	102.28	116.60	116.55	91.10
Cash Cycle (days)	47.86	91.81	161.81	109.83	131.35	104.63
Profitability Ratio						
Gross Profit Margin (%)	40.19%	35.16%	51.39%	13.92%	18.98%	25.20%
Operating Profit Margin (%) ⁽¹⁾	34.55%	25.40%	44.10%	56.46%	58.46%	43.54%
Net Profit Margin (%) ⁽¹⁾	22.82%	13.60%	30.89%	48.61%	50.01%	32.89%
Normalized Net Profit Margin (%) ⁽¹⁾	29.75%	24.11%	39.56%	(12.10%)	(7.78%)	(4.42%)
Return on Equity (%) ⁽¹⁾	16.95%	9.53%	19.61%	20.25%	21.28%	9.39%
Efficiency Ratio						
Return on Assets (%) ⁽¹⁾	5.30%	2.58%	5.69%	11.53%	9.86%	5.18%
Return on Fixed Assets (%) ⁽¹⁾	6.45%	3.47%	7.00%	12.63%	12.56%	5.98%
Asset Turnover (time) ⁽¹⁾	0.23	0.19	0.18	0.24	0.20	0.16
Financial Ratio						
Debt to Equity Ratio (time)	2.20	2.69	2.44	0.76	1.16	0.81
Interest Covergae Ratio (time) ⁽¹⁾	5.10	3.92	4.74	7.54	8.04	4.12
Dividend Payout (%) ⁽¹⁾	71.01%	134.51%	53.75%	73.09%	72.76%	133.53%
Other Ratios						
Earnings Per Share (Baht) ⁽¹⁾⁽²⁾	0.25	0.13	0.24	0.25	0.25	0.10
Basic Earnings Per Share (Baht) ⁽¹⁾⁽³⁾	0.25	0.13	0.24	0.25	0.25	0.10
Book Value Per Share (Baht) ⁽¹⁾⁽²⁾	1.50	1.42	1.29	1.22	1.18	1.09

⁽¹⁾ Deduct gain on bargain purchase and gain on sale of investment in a subsidiary

⁽²⁾ Calculate with the total number of all paid up common stocks at the end of the period

⁽³⁾ Calculate with the number of all average weighted common shares which have been paid up

5. General Information and Other Important Information



5.1 General Information

Regulator	The Securities and Exchange Commission (SEC) 333/3 Vibhavadi Rangsit Road, Chomphon Subdistrict, Chatuchak District, Bangkok 10900 Phone (66) 2033 9999 Fax (66) 2033 9660	Auditor	KPMG Phoomchai Audit Company Limited Floor 50 th -51 st , Empire Tower, No. 1, South Sathorn Road, Yannawa Subdistrict, Sathorn District, Bangkok 10120 Phone (66) 2677 2000 Fax (66) 2677 2222
Regulator	The Stock Exchange of Thailand (SET) 93, Ratchadaphisek Road, Din Daeng District, Bangkok 10400 Phone (66) 2009 9000 Fax (66) 2009 9991	Legal Advisor	Kudun and Partners Company Limited 973 President Tower, 14 th Floor, Ploenchit Road Lumpini Subdistrict, Pathumwan District, Bangkok Phone (66) 2 656 0813 Fax (66) 2 656 0814
Share Registrar	Thailand Securities Depository Company Limited 93, Ratchadaphisek Road, Din Daeng District, Bangkok 10400 Phone (66) 2009 9000 Fax (66) 2009 9991	Financial institution	Siam Commercial Bank Public Company Limited 9 Ratchadaphisek Road, Chatuchak Subdistrict, Chatuchak District, Bangkok 10900 Phone (66) 2 544 1000 Fax (66) 2 544 4948
Debenture Holder's Representative and Registrar	Bank of Ayudhya Public Company Limited AA Floor, 1222 Rama III Road, Bang Phongphang, Yan Nawa, Bangkok 10120 Phone (66) 2296 3582 Fax (66) 2683 1298		

5.2 Other Important Information

5.2.1 Other information that may have a significant impact on investors' decision

- None -

5.2.2 Restrictions on Foreign Shareholders

- None -

5.3 Legal Dispute

As of December 31, 2021, the Company has no direct legal disputes that may affect the Company's assets in an amount greater than 5% of the shareholders' equity. The Company is involved in the following legal disputes:

1. Black Case No. 445/2561 (Undecided Case No. 445/2018) of Nakhon Ratchasima Administrative Court, in which Wind Energy Development Company Limited is the first interpleader and Greenovation Power Company Limited is the second interpleader. There is a group of individuals who prosecuted the case against the Director-General of the Department of Land, the Director-General of the Royal Forest Department, the Governor of Thailand's Electricity Generating Authority, the Director-General of the Department of Highways, and the Energy Regulatory Commission. Currently, the case is in the middle of the Nakhon Ratchasima Administrative Court's trial and is in the stage of gathering fact and collecting evidence in Nakhon Ratchasima Administrative Court. Throughout the year 2021, there has not been any progress in the case.
2. Black Case No. Sor. 81/2561 (Undecided Case No. Sor. 81/2018) of the Central Administrative Court, there is a group of individuals who have prosecuted the case against the Energy Regulatory Commission as the first defendant and Greenovation Power Company Limited as the second defendant. Currently, the case is in the middle of the trial stage by Central Administrative Court. On January 14, 2022, the Central Administrative Court has issued a notice specifying the ending date of the fact-gathering stage to be on January 31, 2022.

3. Patent Dispute

- 3.1 Black Case No. ThorPor. 124/2560 (Undecided Case No. ThorPor. 124/2017) and Red Case No. ThorPor. 102/2562 (Decided Case No. ThorPor. 102/2019) of the Central Intellectual Property and International Trade Court, in which Gunkul Engineering Public Company Limited has filed a lawsuit against the Department of Intellectual Property to request for the revocation of the patent with the name of Mr. Prasert Thammanoonkul as the right holder of the patents in the amount of 9 patents. After, Mr. Prasert Thammanoonkul has requested to become a co-defendant. The Central Intellectual Property and International Trade Court and the Court of Appeal Specialized Cases has made a judgment dismissing the plaintiff's lawsuit by ruling in the judgment that the patent on products that the plaintiff brought to file a lawsuit to request the revocation of the co-defendant's patents is not like or similar to the patent of the co-defendant. Currently, the plaintiff has filed a petition with the Supreme Court. The Supreme Court has ordered an appointment to hear the Supreme Court's judgment on March 15, 2022.
- 3.2 Subsequently, Mr. Prasert Thammanoonkul and Khemlek Company Limited has jointly acted as the plaintiff in suing against Gunkul Engineering Public Company Limited as the first defendant, Future Electrical Control Company Limited as the second defendant, the directors of the first defendant and the second defendant with a total of 13 people in the Black Case No. ThorPor.35/2562 (Undecided Case No. ThorPor. 35/2019) and Red Case No.Thor. Por.149/2562 (Decided Case No. ThorPor. 149/2019) of the Central Intellectual Property and International Trade Court. The statement of claim stated that the defendant infringed on the first plaintiff's patents in the amount of 12 patents, 9 out of the 12 patents of which were patents that the first plaintiff was sued by the first defendant for revocation under Article 3.1. Currently, the Central Intellectual Property and International Trade Court had an order striking the disputed case out of the Case-List since 26 August 2019 to wait for the decision of the case under Article 3.1. However, when The Central Intellectual Property and International Trade Court and the Court of Appeal Specialized Cases has ruled the judgment in the case under Article 3.1 that the patent of the first defendant (in this case) that has been brought for lawsuit to request for the revocation of the patent of the first plaintiff (in this case) is not the same or similar to the patent of the first plaintiff. The use of patented products that both courts have decided as mentioned by the first defendant is therefore not be considered as an infringement of the patent of the first plaintiff.

5.4 Secondary Market

- None -

5.5 Financial Institutions with Regular Contacts (Only in the case of debentures)

In issuing debt securities, the Company has been in cooperation with and has a good relationship with many financial institutions such as Bangkok Bank Public Company Limited, Krungthai Zmico Securities Company Limited, KTBST Securities Public Company Limited, Capital Nomura Securities Public Company Limited, Maybank Kim Eng Securities (Thailand) Public Company Limited, Yuanta Securities (Thailand) Company Limited, and RHB Securities (Thailand) Public Company Limited. However, the Company continues to focus on developing relationships with both domestic and international financial institutions to support the Company's operations in the future.



Part 2

Corporate Governance

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6. Corporate Governance Policy



Good Corporate Governance (GCG) is a topic that attracts the public’s attention. The Company’s Board of Directors, sub-committees, compliance unit, executives, and employees have all followed systematic management principles and good corporate governance practices. As a result, the aforementioned principles have been used as a guideline for the Company’s operations in developing the effective management system, with a focus on transparent and verifiable information disclosure. This will lead to standardized operation, increased productivity, enhanced competitiveness, and extended value for business owners which shall satisfy all stakeholders. Consequently, the “Good Corporate Governance Policy” was created for the Board of Directors, sub-committees, executives, and employees to use as a guideline for their operations:

- | | |
|-------------------------------|--|
| 1. Accountability | Responsibility for performance of duties and be able to explain the practice |
| 2. Responsibility | A sense of duty at full capacity and efficiency |
| 3. Equitable Treatment | Respecting the rights and treating stakeholders with honesty and equality including providing opportunities for stakeholders to participate fairly |
| 4. Transparency | Disclosure and operating with transparency and verifiable |
| 5. Value Creation | Adding value to businesses in the short and long term by improving and increasing competitiveness |
| 6. Ethics | Ethics and Code of Conduct in business operation |

6.1 Overview of Corporate Governance Policies and Practices

The Company’s good corporate governance principles have been followed, and prepared in accordance with the corporate governance code (CG Code) for listed companies in the Stock Exchange of Thailand and was reviewed and improved on regular basis to ensure compliance. The structure and guidelines for good corporate governance covering 5 categories: 1) Rights of Shareholders 2) Equitable Treatment of Shareholders 3) Roles of Stakeholders 4) Disclosure of Information and Transparency 5) Responsibilities of the Board of Directors.

6.1.1 Policies and Practices Relating to Board of Directors

Principle: The Board of Directors plays an important role in corporate governance for the best interest of the Company and responsible for the performance of duties to the shareholders and being independent from the management and major shareholders of the Company.

1) Board of Directors

Composition of the Board of Directors

The Board of Directors is set to consist of not less than 5 and not more than 12 members. A minimum of one-third of the Company's directors must be independent directors and not less than half of the Company's directors must reside in the Kingdom of Thailand. The composition of the Board of Directors should have a proportion of directors with diverse knowledge and expertise suitable for the business and shall be a balance of power within the Board of Directors.

Qualifications of the Board of Directors

The Board of Directors shall possess visions, reliability, knowledge, competence, experience, proficiency, including being qualified in accordance with the Company and the group business strategy both in terms of professional skills, specialization and understand the nature of the Company and the group business operations as well as adhering with business ethics which will be beneficial to the business. Those directors shall not engage as a partner or a director in a juristic person of which the nature and the business undertaken is in competition with the business of the Company.

Furthermore, the Company's directors shall possess qualifications and no prohibited characteristics as specified by the Public Company Limited Act and shall not possess the character not suitable to reliability entrusted to manage the business of which the shares are publicly held in accordance with the notifications of the Securities and Exchange Commission. The independent director shall possess independence as required by the Company and shall be able to look after the interest of every shareholder fairly and is able to express opinion independently.

In this regard, the Company has appointed a Company Secretary to advise the Board of Directors on compliance issues and to undertake tasks in overseeing the Board of Directors' activities, including coordinating to ensure compliance with the Board of Directors' resolutions.

Term of office of the Board of Directors

In the Annual General Meeting of Shareholders, one-third of the current number of directors are required to leave the office. If the number of directors of the Company could not be divided by three equally, the closest number to one-third of the directors of the Company is required to leave their office. The leaving directors of the Company in the first and the second year after registration shall be drawn to determine who is required to leave the office while in the later years, the directors of the Company who have been in the office longest are required to leave their office. The leaving directors may be re-elected to take the office again. The director of the Company is allowed to stay in the office for 3 years in each term.

When a new Company's director is appointed to replace the director who resigned or retired, the Company is required to inform the Stock Exchange of Thailand within 3 business days from the date that the Company has received the resolution of the Board of Directors of the Company or inform immediately after the Company has received the resolution of the meeting of shareholders (as applicable).

Scope of Duties and Responsibilities of the Board of Directors

The Board of Directors shall have duties to perform in accordance with the law, objectives, Articles of Association of the Company, and resolutions of the Board of Directors as well as the resolutions of the shareholders' meeting, with responsibility, due care and integrity as a prudent person who will undertake the business under the same conditions for the maximum benefits of the Company. The Board of Directors shall determine vision, mission, strategy, business direction, policy, target, direction of the operating plan and the Company's budget; supervise, oversee, monitor, and examine compliance with the policies, plans, and budgets provided, and regularly assess the performance of the management. Moreover, the Board of Directors shall determine the charters and major policies of the Company as well as establishing measures and guidelines to achieve concrete results. In addition, the Board of directors have roles and duties to supervise, oversee and monitor the Company's operations, and determine the corrective measure if there is any problem or difficulty to accomplish or exceed the target provided.

The Board of Directors is also responsible for providing general information reports, and the Company's financial information to report and disclose to shareholders and stakeholders or general investors correctly, completely, timely, equitably and in accordance with the law provided, and to review the adequacy and suitability of the financial reporting system, internal control system and the Company's risk management to ensure confidence in the accuracy, completeness, and reliability of the information as well as to reduce the risks of fraud and prevent any illegal actions. The Board of Directors shall also acknowledge the key audit reports of the Audit Committee, sub-committees and the Internal Audit Department, auditors, and consultants of the Company and determine the improvement and corrective measure if the defect found is significant and to manage and handle the related transaction in accordance with the criteria provided under the laws.

Furthermore, the Board of Directors are responsible for nominating and appointing a person with qualifications and without possession of character forbidden by related laws to become the director of the Company in case of vacancy of directorship by other reason except expiry of the term as well as appointing sub-committees and Chairman of sub-committees, the Secretary to the Board of Directors and the Secretary to the Company to support the duties performed by the Board of Directors. Additionally, the Board of Directors shall determine the remuneration of all committees before proposing to the shareholders' meeting for approval together with appointing the senior executive of the Company and to arrange the process to develop the executive of the Company through the succession plan and talent management scheme. The performance assessment of all committees, including the Company's top executives are required to arrange annually.

Board of Directors Meeting

The Board of Directors is required to meet at least 6 times a year while every quarter meeting is arranged to examine the financial statements in accordance with the law and the additional meetings may be arranged as deems appropriate to the Chairman of the Board of Directors. Every director of

the Company is required to attend the Board of Directors' meeting not less than 75% of the total meetings throughout the year. In this regard, the meeting must be opened by a quorum of at least half of the total directors while the Board of Directors may make a resolution of the meeting if there are at least two-thirds of the total directors attending the meeting. Every directors is allowed to freely discuss and express the opinions. In the event that a director who has significant conflict of interest related to the matter being considered, is required to leave the meeting during the discussion of such matter. The sub-committees or executives of the Company or the person related to the agenda proposed may be invited to attend the meeting to provide relevant information.

The Board of Directors' meetings schedule is required to be made in advance every year, so that all of the directors can be scheduled in advance. Minutes of meetings shall be recorded after being approved by the Board of Directors and signed by the Chairman of the Board of Directors to certify the accuracy. It shall be kept in both the original file format and the electronic version for ease of reference by the directors and other parties.



2) Sub-committees

The Board of Directors has appointed sub-committees to assist in the management and supervision to ensure compliance with good corporate governance, which consists of:

2.1) Audit Committee

Composition of the Audit Committee

The Audit Committee shall comprise of at least 3 persons selected from the independent directors.

Qualification of the Audit Committee

The Audit Committee shall be competent and have sufficient experience to perform the duties as the Audit Committee member and at least one person with sufficient knowledge and experience to be able to perform the duty of reviewing the reliability of the financial statements. The Audit Committee members shall be the persons not having the quality forbidden under the Public Limited Company Act and Securities and Exchange Act, and any other relevant laws

The Audit Committee shall not be a director assigned by the Board of Directors to make the decision on the business of the Company, parent company, subsidiaries, associated companies, or subsidiary of the same level, major shareholder or the person with control power of the Company. The independent director who is appointed as the Audit Committee member is required to possess qualifications of independence director as required by the Company and be able to protect the interests of all shareholders equally as well as also freely express their opinions.

Term of office of the Audit Committee

The Audit Committee has term in the office for 3 years while the Audit Committee member who retired by rotation may be re-appointed by the Board of Directors for another term. In the event that the position of the Audit Committee is vacant due to any reasons except the expiry of term in office, the Board of Directors shall appoint eligible persons to serve as the Audit Committee member in order to complete the composition of the Audit Committee indicated in the charter as specified by the Board of Directors. The replaced person is allowed to hold the position only for the remaining term of office. In appointing a new member of the Audit Committee to complete the position as specified, it is required to be undertaken rapidly to ensure continuity in the operation of the Audit Committee and not exceed 3 months since the date that the Audit Committee vacates the office.

Scope of Duties and Responsibilities of the Audit Committee

The Audit Committee has the authority and obligation to examine financial reports properly and reliably, including adequate disclosure of information, in collaboration with external auditors and the Company's management, in charge of structuring quarterly and annually financial reports, verify that the Company has internal control system and internal audit that are appropriate, efficient and effective by reviewing with external auditors and internal auditors, consider the independence of the internal audit unit or

any other agency responsible for internal audits as well as approving the appointment, transfer, and dismissal of the Head of the Internal Audit unit or any other unit responsible for internal audits, verify the Company's compliance with the Securities and Exchange Act, the Stock Exchange of Thailand requirements or laws related to the Company's business.

The Audit Committee is responsible for considering, selecting and proposing the appointment of independent persons to act as the Company's auditors including considering the auditor's remuneration taking into account reliability, the adequacy of the auditor's resources and the amount of audit work and experience of personnel assigned to audit the Company's accounts, including termination of such contract. The Audit Committee shall hold a meeting with an external independent auditor without the management attending the meeting at least once a year, as well as considering related party transactions or transactions that may have conflicts of interest in accordance with the laws and regulations of the Stock Exchange of Thailand to ensure that such transactions are reasonable and in the best interests of the Company.

The Audit Committee shall ensure that the Company comply with the anti-corruption policy effectively, including considering the results of the fraud review, and being one of the Company's channels in receiving complaints about fraudulent actions including promoting and raising awareness, risk assessment, preventive system and inspection. They are also responsible for evaluating the performance of the Audit Committee including giving suggestions for improvement and present to the Board of Directors for acknowledgment and use as information in formulating policies for continuous improvement of the organization.

The Audit Committee is also responsible for investigating matters notified by the Company's auditors especially in the event that any suspicious circumstances are found that the director, manager or person responsible for the operation of the Company has committed an offense as prescribed in the Securities and Exchange Act (No. 4) B.E. 2551 and reported the results of the initial investigation to the Office of the Securities and Exchange Commission, and the auditor within 30 days from the date of receiving the notification from the auditor.

Audit Committee Meeting

The Audit Committee shall arrange a meeting at least once every quarter, with additional meetings as the Chairman of the Audit Committee deems appropriate. To constitute a quorum, the Audit Committee shall attend the meeting for not less than half of the total number of Audit Committee members. The meeting may invite directors or executives of the Company or those related to the proposed agenda to attend the meeting to provide relevant information. If the meeting's agenda includes financial statements or any other related item, the Company's auditor, internal auditor, and senior management in the accounting department must attend to clarify the correctness, completeness, and credibility of the financial.

The Audit Committee meetings shall be scheduled in advance each year to allow for appointments with all Audit Committee members in advance.

The minutes of the meeting will be recorded at each meeting and once they have been approved by the Audit Committee and signed by Chairman of the Audit Committee, it will be retained in both its original file format and an electronic version for ease of reference by the Audit Committee and individuals involved.

2.2) Risk Management Committee

Composition of the Risk Management Committee

The Risk Management Committee shall comprise of at least 3 persons, with at least half of the Risk Management Committee member must be non-executives of the Company, chosen from member of directors, executives of the Company, and/or qualified individuals.

Qualifications of the Risk Management Committee

The Risk Management Committee shall possess knowledge and awareness of the Company's business operations, as well as experience in risk management and investment management, or possess particular expertise that is critical in providing advice on the Company's business operations in order to accomplish the Company's objectives. The Risk Management Committee's members must not be directors, executives, or shareholders of a company that competes with the Company and must not possess any prohibited characteristics under the Public Limited Companies Act, the Securities and Exchange Act, or other applicable laws. The Chairman of the Risk Management Committee is not eligible to serve as Chairman of the Board of Directors.

Term of office of the Risk Management Committee Member

Risk Management Committee serves a three-year term. The Risk Management Committee member who retired by rotation, can be re-appointed by the Board of Directors for another term. If the Risk Management Committee member becomes vacant for any reason other than retirement, the Board of Directors shall appoint a qualified individual to fill the vacancy to the extent stipulated in the charter. The replaced person can hold the position only for the remainder term of office.

Scope of Duties and Responsibilities of the Risk Management Committee

The Risk Management Committee has the scope of duties and responsibilities to determine policies, practices and frameworks for risk management operations of the Company to be used as a guideline for conducting business in accordance with the Securities and Exchange Act, the Stock Exchange of Thailand requirements or laws related to the Company's business operations including anti-corruption measures and guidelines, and supervise, monitor and support the success of risk management at the organizational level as well as at the project level taking into account the risks in each aspect for assessment, analysis and decision making to ensure that there is a risk management process covering

all stages of business operations including reviewing risk management practices and frameworks by comparing with international practice guidelines and make suggestions for improvements as appropriate to the Board of Directors as well as assess the performance of the Risk Management Committee including providing suggestions for improvement and present to the Board of Directors for acknowledgment and use as information in formulating policy for continuous improvement of the organization.

Risk Management Committee Meeting

The Risk Management Committee shall hold a meeting at least four times each year, with additional meetings as the Risk Management Committee's Chairman deems appropriate. To constitute a quorum, at least half of the total number of the Risk Management Committee members must be present at the meeting. The meeting may invite directors or executives of the Company or others associated with the proposed agenda to present pertinent information, with the exception of directors who serve on the Audit Committee.

The Risk Management Committee meetings shall be scheduled in advance each year to allow for appointments with all the Risk Management Committee members in advance.

The minutes of the meeting will be recorded at each meeting and once they have been approved by the Risk Management Committee and signed by the Chairman of the Risk Management Committee, it will be retained in both its original file format and an electronic version for ease of reference by the Risk Management Committee and persons involved.

2.3) Nomination and Remuneration Committee

Composition of the Nomination and Remuneration Committee

The Nomination and Remuneration Committee shall be at least three members, with more than half of the members being non-executives of the Company, and will be chosen from among directors and/or executives of the Company and/or qualified persons.

Qualifications of the Nomination and Remuneration Committee

The Nomination and Remuneration Committee must be knowledgeable and competent in personnel management professionals with expertise and experience in related fields, who do not possess any prohibited characteristics under the Public Limited Companies Act, the Securities and Exchange Act, or any other applicable law. The Chairman of the Nomination and Remuneration Committee must be an independent director and not the Chairman of the Board of Directors.

Term of office of the Nomination and Remuneration Committee

The member of the Nomination and Remuneration Committee serves term of office of 3 years. The members of the Nomination and Remuneration Committee who retire by rotation may be reappointed by the Board of Directors for another term. If the Nomination and Remuneration Committee member becomes vacant for any reason other than retirement, the Board of Directors shall appoint suitable

individuals to be the Nomination and Remuneration Committee member to complete the vacancy specified in the charter. The person appointed to be in the office is allowed to stay in the office for the remaining term only.

Scope of Duties and Responsibilities of the Nomination and Remuneration Committee

The Nomination and Remuneration Committee has the authority and responsibility to determine policies, criteria, and processes for recruiting, selecting, and nominating qualified individuals in accordance with applicable regulations and laws to serve as a director and subcommittee of the Company, with the requirement that the selection be clear, transparent, and congruent with the Company business strategies, to present at the shareholders' meeting or to the Board of Directors for approval and appointment as the case may be in accordance with the requirement of the Company. They are responsible for developing policies, criteria, and guidelines for determining remuneration, the method of payment of remuneration, and any other benefits payable to the Board of Directors and sub-committees that are appropriate to their duties and responsibilities to the Company to present to the shareholders' meeting or the Board of Directors for approval, as applicable, in accordance with the Company's Articles of Association.

It is also responsible for reviewing the structure, recruiting criteria, and compensation to ensure the appropriateness for the Company's duties and responsibilities and performance, including considering and presenting a succession plan for the organization's top management (Chief Executive Officer) to the Board of Directors for approval, as well as evaluating the Nomination and Remuneration Committee's performance, including making proposals for improvement and present to the Board of Directors for acknowledgement and use as information in developing policies for the organization's continual improvement.

Nomination and Remuneration Committee Meeting

The Nomination and Remuneration Committee shall arrange the meeting at least twice a year, with additional meetings as the Chairman of the Nomination and Remuneration Committee deems appropriate. To constitute a quorum, the members must be presented at the meeting at least half of the total number of the Nomination and Remuneration Committee members. The meeting may invite directors or executives of the Company, as well as individuals associated with the proposed agenda, to submit pertinent information.

The Nomination and Remuneration Committee meetings shall be scheduled in advance each year to allow for appointments with all members in advance.

The minutes of the meeting will be recorded at each meeting and once they have been approved by the Nomination and Remuneration Committee and signed by the Chairman of the Nomination and Remuneration Committee, it will be retained in both its original file format and an electronic version for ease of reference by the Nomination and Remuneration Committee and persons involved.

2.4) Good Corporate Governance Committee

Composition of the Good Corporate Governance Committee

The Good Corporate Governance Committee shall be comprised of at least three persons, with at least half of them being non-executives of the Company, who will be chosen from directors and/or executives of the Company and/or qualified persons.

Qualifications of the Good Corporate Governance Committee

A Good Corporate Governance Committee shall be knowledgeable about corporate governance and possess the necessary knowledge and skills, including experience in working as a Good Corporate Governance Committee, to achieve success in accordance with the Company's objectives. It shall also be composed of individuals who do not possess any prohibited characteristics under the Public Company Act, the Securities and Exchange Act, and other applicable laws. The Chairman of the Corporate Governance Committee shall not be Chairman of the Board of Directors.

Term of office of the Good Corporate Governance Committee

The Good Corporate Governance Committee has term in the office for 3 years. The members of the Good Corporate Governance Committee who retire by rotation may be reappointed by the Board of Directors for another term. If the Good Corporate Governance Committee member becomes vacant for any reason other than the retire by rotation, the Board of Directors shall select suitable individuals to the Good Corporate Governance Committee to fill the vacancy. The person appointed to be in the office is allowed to stay in the office for the remaining term only.

Scope of Duties and Responsibilities of the Good Corporate Governance Committee

The Good Corporate Governance Committee has the authorities, duties and responsibilities to determine policies and guidelines on good corporate governance, including any other operations related to corporate governance such as sustainability management, social responsibility, anti-corruption measures and practice guidelines to propose to the Board of Directors. The responsibilities also include supervising and monitoring to ensure that the Company and the Group, sub-committees, executives, employees and stakeholders comply with the policies and guidelines set forth and in accordance with the law or requirements related to the principles of good corporate governance, anti-corruption measures and practice guidelines, Code of Conduct, and Business Ethics by allowing practice to develop continuously and appropriately, including reviewing the guidelines for the Company's good corporate governance principles by comparing with international practice guidelines, and provide suggestions for improvements as appropriate to the Board of Directors.

The Good Corporate Governance Committee is also responsible for making recommendations to the Board of Directors, sub-committees, and management in regards to comply with Good Corporate Governance Code of Conduct, and Business Ethics including good practice in business operations as well as to support and encourage the Company to publicize the principles of corporate governance

including information on related matters continuously to be known and understood to various committees, executives and employees at all levels, including supporting and encouraging the Company to take a Corporate Governance Assessment or Rating to develop and enhance the standard of corporate governance of the Company continuously. The Corporate Governance Committee is also responsible for giving suggestions for improvement and submit to the Board of Directors for acknowledgment and use as information in formulating policies for continuous improvement of the organization.

Good Corporate Governance Committee Meeting

The Good Corporate Governance Committee shall arrange the meeting at least 4 times a year, with additional meetings as the Chairman of the Good Corporate Governance Committee deems appropriate. To constitute a quorum, the member must be attended the meeting at least half of the Good Corporate Governance Committee's total member. The meeting may invite directors or executives of the Company, as well as individuals associated with the proposed agenda, to submit pertinent information.

The Good Corporate Governance Committee meetings are scheduled in advance each year to allow for appointments with all members in advance.

The minutes of the meeting will be recorded at each meeting and once they have been approved by the Good Corporate Governance Committee and signed by the Chairman of the Good Corporate Governance Committee and shall be retained in both original file format and an electronic version for ease of reference by the Good Corporate Governance Committee and persons involved.

2.5) Executive Committee

Composition of the Executive Committee

The Executive Committee shall consist of at least five members, who will be chosen from among the Company's directors and/or executives and/or qualified individuals and not being the Audit Committee member.

Qualifications of the Executive Committee

The Executive Committee shall be knowledgeable, competent and possess that will benefit the Company's business, as well as honesty, integrity and ethics in business operations. The Executive Committee must not be directors, executives, or shareholders of a company that competes with the Company and must not possess any prohibited characteristics under the Public Limited Companies Act, unless the business is a subsidiary, a joint venture, and must not possess any prohibited characteristics under the Public Company Act, Securities and Exchange Act and any other relevant laws.

Term of office of Executive Committee

The term of office for a member of the Executive Committee is 3 years. The members of the Executive Committee who retire by rotation may be re-appointed by the Board of Directors for another term.

If the Executive Committee position becomes vacant for any reason other than retirement, the Board of Directors shall select suitable individuals to the Executive Committee to complete the vacancy. The person appointed to be in the office is allowed to stay in the office for the remaining term only.

Scope of Duties and Responsibilities of the Executive Committee

The Executive Committee is responsible for formulating policies, guidelines, operational frameworks, goals, business plans, management structures, rules, regulations, authority, approval authority, and budget, as well as supervising, auditing, monitoring, and reviewing the Company's operations to ensure that the operations are in accordance with the vision, mission, strategy, and policies of the Board of Directors and in compliance with the Securities and Exchange Act, the Stock Exchange of Thailand requirements or law related to the Company business and Article of Association of the Company including anti-corruption measure and guidelines. Additionally, the Executive Committee are accountable to ensure that the Company maintains an appropriate and concise internal control system and for developing rules, policies, and standards for social, community, and environmental responsibility (Corporate Social Responsibility: CSR).

Moreover, the Executive Committee is responsible for assessing the performance of the Executive Committee, including providing recommendations for improvement, and submitting to the Board of Directors for acknowledgement and formulating policies for the continuous improvement of the organization.

Executive Committee Meeting

The Executive Committee shall arrange the meeting at least once a month, with additional meetings as the Chairman of the Executive Committee deems appropriate. To constitute a quorum, the members shall attend the meeting at least half of the Executive Committee's total members. The meeting may invite directors or executives of the Company, as well as individuals associated with the proposed agenda, to provide pertinent information.

The Executive Committee meetings shall be scheduled in advance each year to allow for appointments with all members in advance.

The minutes of the meeting shall be recorded at each meeting and once approved by the Executive Committee and signed by the Chairman of the Executive Committee, it shall be retained in both original file format and an electronic version for ease of reference by the Executive Committee and persons involved.

In 2021, the Company held a shareholders' meeting and a meetings of the Board of Directors and each sub-committees with a clearly defined agenda, meeting materials that are complete and sufficient, and delivered to the board at least 7 days in advance of the meeting to allow the board sufficient time to study the information prior to attending. The following table summarizes the number of meetings scheduled in 2021:

	Meeting Type	Number of Meetings (times)
1)	The 2021 Annual General Meeting of Shareholders	1
2)	Extraordinary General Meeting of Shareholders	-
3)	Board of Directors meetings	10
4)	Meeting between independent directors and auditors to discuss various issues related to management in the Company	1
5)	Meeting among non-executive directors to discuss and exchange opinions on issues related to duties and responsibilities and good corporate governance	1
6)	Audit Committee meetings	5
7)	Risk Management Committee meetings	4
8)	Nomination and Remuneration Committee meetings	2
9)	Good Corporate Governance Committee meetings	4
10)	Executive Committee meetings	32

3) Limiting the number of listed companies in which the directors of the Company hold offices

In order to ensure the effectiveness of the Board of Directors, a policy has been stipulated to limit the number of listed companies to which each director may hold no more than 5 directorship positions in total.

4) Determination of remuneration for directors and executives

Directors' remuneration consists of 2 parts: a meeting allowance and a quarterly remuneration. The Board of Directors has assigned the Nomination and Remuneration Committee to review the compensation system's structure and determining what constitutes reasonable compensation in the short and long term, which must be comparable to the peers in the industry on average and/or based on the results of a compensation survey and capable of competing in the market. This will consider the adequacy of duties and responsibilities for which the directors are responsible. The shareholders' meeting, on the other hand, is authorize to approve all remuneration for directors and sub-committee members.

Executives at all levels, including top management, shall be compensated annually with salary and bonus, as well as any other compensation, whether short or long term, in accordance with the Company's remuneration policy, taking into account the Company's operating results and the performance of each executive.

5) Evaluation the performance of the Board of Directors, sub-committees, Chief Executive Officer, Company Secretary and Secretary to the Audit Committee

Each committee shall assess the performance and utilize it as a guideline for development and improvement, ensuring that the Board of Directors' performance encompasses all areas and is consistent with the nature of the Company's business.

The performance of Chief Executive Officer shall be assessed on a regular basis by the Board of Directors in order to the attainment of Company goals and individual competency. Qualitative aspects such as leadership, strategy designation, strategy implementation, planning, performance, relationship with the Board of Directors, external relations, management and people interactions, succession, and product and service knowledge, including personal traits, shall be assessed.

Additionally, the Board of Directors shall evaluates the Company Secretary's performance, and the Audit Committee evaluates the Secretary to the Audit Committee's performance, in order to consider the results and use them as a guideline for efficiency development and improvement of performance.

The assessment process and criteria shall be reviewed by each committee annually.



5.1) Assessment of the Board of Directors' performance

The Company has a policy requiring the Board of Directors to self-assess their performance as follows:

- Self-Assessment of the Board of Directors
To assess the performance of the Board of Directors as a whole.
- Self-Assessment of each director
To assess the performance of Company's directors on an individual basis.

5.2) Assessment of sub-committees' performance

The Company has a policy requiring sub-committees to self-assess their performance through group assessment. The purpose is to evaluate the sub-committees' work in the context of the faculty as a whole.

5.3) Assessment of Chief Executive Officer's performance

The Company has a policy requiring the Board of Directors to assess the performance of the Chief Executive Officer.

5.4) Assessment of Company Secretary and Secretary to Audit Committee's performance

The Company has a policy requiring the Board of Directors to assess the performance of the Company Secretary. The Audit Committee shall assess the performance of the Secretary to the Audit Committee.

6) Development of directors and executives of the Company

The Company has a policy of encouraging all directors, sub-committee members, and executives to attend continual trainings which may be conducted on-site, or provided by external institutions in order to maintain their knowledge of good corporate governance.

7) Orientation for new directors

The Company recognizes the importance of new directors performing their duties by requiring all new directors to attend the Company's "Orientation for new directors" session.

8) Reporting of the Board of Directors

8.1 The Board of Directors is accountable for the Company's consolidated financial reports and financial information. These financial statements have been produced in compliance with generally accepted accounting principles in Thailand through an appropriate accounting policy and consistent practice. The Audit Committee and the auditor shall jointly assess the propriety of accounting policies used in the preparation of financial reports on a regular basis. The Board of Directors has stressed the need of the working group exercising caution in preparing and disclosing critical information in the notes to the financial statements.

The Board of Directors assigned the Audit Committee to be responsible for the quality of financial reports and internal control systems.

8.2 The Board of Directors is responsible for disclosing material information about the Company that affects the price of securities, critical for investment decisions, or affects shareholders' rights.

8.3 The Board of Directors is accountable for declaring the charters of all committees and significant Company policies.

8.4 The Board of Directors is responsible for disclosing the following items in the Annual Registration Statement / Annual Report (Form 56-1 One Report).

- (1) Processes and criteria for evaluating the performance of the Board of Directors as a whole and individually, including processes and criteria for evaluating the performance of sub-committees as a whole
- (2) Number of meetings held and the number of meeting attendance of each director which shall be disclosed for both the Board of Directors and of every sub-committees
- (3) Remuneration of each director and sub-committee member
- (4) Information on individual directors and sub-committees attending development and training courses in the past year
- (5) Report on the purchase and sale of shares/holding securities in the Company, as well as changes in the holdings of the Company's directors and executives during the fiscal year, as defined by the Securities and Exchange Commission on an individual basis.

8.5 The Board of Directors is responsible for reporting any other matters that the Board of Directors believes shareholders and general investors should be aware of within the extent of their assigned tasks and responsibilities.

9) Supervision of operations of subsidiaries and associated companies

The Company has established rules and regulations governing the nomination and election of directors of subsidiaries and associated companies, which must be authorized by the Board of Directors. A person appointed as a director of a subsidiary or associated companies is accountable for acting in the subsidiary or associated company's best interests. The Company requires the individual to be approved by the Board of Directors prior to voting or exercising the right to vote on significant issues at the same level as those required by the Board of Directors if carried out by the Company. Directors are nominated to serve as representatives in the mentioned subsidiary or associated company in proportion to the Company's investment in such company.

Additionally, in the case of a subsidiary, the Company specifies regulations for the person appointed by the Company to ensure that the subsidiary has regulations on related party transactions, acquisition or disposition of assets, or any other significant transactions of such companies in a complete and accurate manner and that the subsidiary follows the rules relating to information disclosure and the above transactions in the same manner as the Company's guidelines, including supervising the gathering of information and recording of subsidiary's accounts for the Company's inspection and collection in order to create timely consolidated financial statements.



10) Risk Control and Management Policy

The Board of Directors realizes the critical nature of risk management and is directly responsible for the organization's risk management. The objective is to assist the Company's management in operating effectively and achieving goals in the event that the organization faces uncertain business events that could jeopardize the attainment of the Company's objectives or goals.

The Board of Directors has established a risk management policy and framework that encompasses all areas of risk management and addresses the business's risk factors by establishing rules for internal practice. This is determined by the probability of occurrence and the magnitude of the resulting impact. Preventive measures have been developed, including risk mitigation, a reporting system, and a process for routine monitoring and evaluation, with an emphasis on early warning indications.

The Company has defined and disclosed information about significant risk factors in its Annual Registration Statement/Annual Report (Form 56-1 One Report), which includes information about all risks.

Additionally, the Board of Directors has assigned the Risk Management Committee to be responsible for developing the Company's risk management policy and framework, as well as defining the roles and responsibilities of management by supervising and assisting in the success of risk management at the corporate and project levels, increase the importance of risk-based considerations and examine each aspect in order to make appropriate resource and process allocation decisions along with the business's direction and to strengthen risk management capabilities throughout the organization.

Additionally, the Board of Directors has assigned the Audit Committee to be responsible for reviewing the internal control system and conducting internal audit to ensure that the operation is efficient and covers all aspects of accounting and finance, property care, performance, and operations in accordance with applicable laws, regulations, and regulations. Internal Audit is responsible for risk assessment and control activity evaluation at the operational level of the organization. This includes analyzing financial reports and risk management information and reporting quarterly to the Audit Committee.



6.1.2 Policies and Practices Relating to Shareholders and Stakeholders

1. Rights of Shareholders

Principle: Shareholders have ownership rights by controlling the Company through the appointment of the Board of Directors to act on their behalf and have the right to make decisions about material changes of the Company. Therefore, the Company should encourage shareholders to exercise their rights.

The Board of Directors places importance on the rights of shareholders by not taking any action that infringes or deprives shareholders of their rights, either major shareholders or minority shareholders, Thai shareholders or foreign shareholders. The fundamental rights of shareholders as stipulated by law and the Company's Articles of Association are as follows:

- 1) The right to trade or transfer shares
- 2) The right to obtain profit sharing from the business
- 3) The right to be treated equally in the event that the Company repurchases shares
- 4) The right to receive adequate, complete, timely, transparent, and consistent news and information from the Company, as well as to get critical update information via the Company's website, both in Thai and English
- 5) The right to attend the meeting and to exercise the right to vote at the shareholders' meeting or authorize others to attend the meeting and vote on their behalf to appoint or remove directors, determine the directors' remuneration, appoint an independent auditor, determine the auditor's remuneration, including any other matters that affect the Company, such as the allocation of dividends, determination or amendment of the Articles of Association, and the Memorandum of Association, capital reduction or capital increase, including approval of special items, etc.
- 6) The right to propose agenda for the shareholders' meeting in advance
- 7) The right to nominate a person to be elected as a Company's director
- 8) Any other rights as prescribed by law

Additionally, the Board of Directors has established a policy to facilitate and promote attendance at shareholders' meetings in order to assist the Company's shareholders, including institutional investors, to exercise their fundamental rights to attend and vote at shareholders' meetings as follows:



1) Actions prior to the shareholders' meeting date

- Provide shareholders an opportunity to submit opinions, make inquiries, or propose agenda items prior to the meeting date, subject to certain criteria specified, by notifying shareholders via the Stock Exchange of Thailand channel and disclose on the Company's website.
- Provide shareholders an opportunity to nominate a candidate for election as the Company's director in advance of the meeting date, subject to certain criteria, by notifying shareholders via the Stock Exchange of Thailand channel and disclose on the Company's website.
- Deliver the meeting invitation letter and supporting documents to shareholders at least 14-21 days in advance (or any other period required by law) and publish in a newspaper for at least 3 consecutive days to notify shareholders of the date scheduled for the shareholders' meeting in accordance with the law, including disseminating the invitation letter and supporting documents, both in Thai and English, on the Company's website at least 30 days prior to the meeting.

- Fully specify important information in the meeting invitation letter, such as the date, time, and venue of the meeting, the meeting agenda, the supporting documents along with the Board of Directors' opinion, the criteria for counting votes in each agenda to ensure compliance with the law, proxy form as required by law, list of independent directors from which shareholders may choose to appoint a proxy to attend the meeting, clarification on proxy, registration for the meeting, presenting documents for attending the meeting, voting at the shareholders' meeting, and a map of the meeting venue, as well as the Company's Articles of Association relating to the shareholders' meeting and voting.

2) Actions on the date of the shareholders' meeting

- The Company shall determine the date, time, and venue of the meeting in the primary interest of the shareholders and shall provide adequate and appropriate personnel and technology for the number of shareholders.
- The Company shall provide ballots with a barcode system (Bar Code) and arrange for an independent person to count or verify the votes and report the results to the meeting, which shall be included in the minutes of the meeting.
- The Chairman of the meeting will explain the meeting's rules, voting procedures, and allot appropriate meeting time, as well as provide shareholders an opportunity to make inquiries, express their opinions and suggestions. The Board of Directors, the Audit Committee, Chairman of all sub-committees, relevant management, auditor and/or legal advisor, and/or independent financial advisor, and/or financial institutions (as applicable) shall attend the shareholders' meeting to response to inquiries, including senior management, Company Secretary, and Secretary to all committees.
- If shareholders are unable to attend the meeting in person, the Company allows shareholders to appoint independent directors or any other person to attend the meeting on their behalf.

3) Actions after the shareholders' meeting

- The Company shall disclose the resolutions of the shareholders' meeting, together with the voting results, within the date of the shareholders' meeting or, at the latest, by 9.00 a.m. of the next business day, via notification to the Stock Exchange of Thailand's information system and disclose on the Company's website.
- The shareholders' meeting, minutes shall be prepared within 14 days with accurate and complete information, specifying the issues raised by shareholders and the Board of Directors' response to such inquiries; submit the minutes to the related departments within the specified time; and disclose the minutes of the meeting on the Company's website for shareholders and related persons to examine.

In 2021, the Company held the 2021 Annual General Meeting of Shareholders on April 28, 2021 at the Company's meeting room (Branch Office No. 1), No. 1038-1046, Nakhon Chaisi Road, Thanon Nakhon Chaisi Sub-District, Dusit District, Bangkok 10300. All members of the Board of Directors, senior executives, secretary to all committees, and Company Secretary together with a certified public accountant and representatives from legal advisors, totaling 24 persons attended the meeting to clarify details related to the meeting agenda and answer shareholders' inquiries. The Company has assigned the Thai Securities Depository, which is the Company's registrar, to distribute the invitation letter and supporting documents of the shareholders' meeting together with the Annual Report, Articles of Association and criteria for shareholders' meeting and voting, Proxy form and information of independent directors who will act as a proxy for shareholders who are unable to attend the meeting in person, including the requesting form for a hard copy of the Annual Report and a map to the meeting venue, to the shareholders in advance of the meeting. The Company arranged for the dissemination of the invitation letter and supporting documents of the shareholders' meeting, including the Annual Report and the above-mentioned documents on the Company's website at www.gunkul.com in advance of the meeting to enable shareholders to access information about the meeting more conveniently and quickly. Concerning meeting registration and vote counting, the Company informed shareholders of the rules and voting procedures prior to the commencement of the meeting and provided an opportunity for shareholders to express their opinions and ask questions about the Company and the agenda.

2. Equitable treatment of shareholders

Principle: All shareholders, both executive shareholders and non-executive shareholders, including foreign shareholders should be treated equally and fairly.

The Board of Directors has established policies and procedures to ensure that all shareholders are treated equally and that their fundamental rights are equally protected, including providing information prior to shareholder meetings, protecting minority shareholder rights, preventing the use of inside information, avoiding conflicts of interest, and engaging in related party transactions, as well as internal controls and internal audits as follows:

1) Providing information prior to the shareholders' meeting and protecting the rights of minority shareholders

- The Company prepares meeting invitation letters and supporting documents, both in Thai and English, by notifying the meeting schedule, agenda, and opinions of the Board of Directors in the invitation letter, through the Stock Exchange of Thailand's information reporting system and disclose on the Company's website at least 30 days in advance of the date of the shareholders' meeting.

- The Company informs shareholders the meeting's procedures and rules, including registration, proxy voting, and voting methods.
- The Company provides an opportunity for shareholders to submit inquiries, propose agenda and nominate a person for election as the Company's director in advance of the date of the shareholders' meeting, with clearly defined criteria, by notifying through the Stock Exchange of Thailand channel and disclose on the Company's website.
- The Company provides shareholders an opportunity to submit inquiries, propose agenda items, and nominate a candidate for election as the company's director in advance of the date of the shareholders' meeting, with clearly defined criteria, by notifying shareholders via the Stock Exchange of Thailand's information reporting system and disclose on the Company's website.
- The Company conducts the shareholders' meeting according to the order specified in the meeting invitation letter, without adding any unnotified meeting agendas.
- The Company requires shareholders who are directors or executives to disclose their financial interests and relationships with related parties and give them no right to vote on matters involving a potential conflict of interest.

2) Supervision of the Insider Trading Treatment

- The Company shall notify directors and executives to report their securities holdings in the Company and any changes in their holdings, including of their spouse and minor children, to the Securities and Exchange Commission ("SEC") in accordance with Section 59 and the penalties imposed by Section 275 of the Securities and Exchange Act B.E. 2535 (as amended), and to submit a copy to the Company Secretary on the same day. The securities holdings report shall be reported to the meeting of the Good Corporate Governance Committee and the Board of Directors for acknowledgement every quarter as well.
- The Company requires that directors, executives, staffs, employees, and person involved in the Company's operation and the group of companies who are aware of material inside information that could affect the trading price of securities refrain from trading in the Company's securities prior to the date on which the financial statements or inside information will be made public.

1. Independent Directors

Not less than 7 days or upon receipt of supporting documents for the Board of Directors' meeting whichever is earlier.

2. Executive Committees, Executives, Employees, Persons involved in the Company and the Group financial information that are capable of recognizing or possessing internal information.

Not allow to trade the Company's securities from the date of acknowledging the Company's financial statements to the date of disclosing financial statements to the public via the Stock Exchange of Thailand channel, as knowledge of financial information may pose a risk or result in the use of the Company's insider information.

However, after the Company discloses information to the public, they are permitted to trade the Company's securities following the 24-hour period.

Additionally, those with access to such insider information are prohibited from disclosing it to others until it has been notified via the Stock Exchange of Thailand channel.

- The Company's directors, executives, employees, person working for the Company and the Group are prohibited from using insider information about the Company that has or may affect the Company's securities price that has not yet been disclosed to the public for trading, offering for trading, or soliciting other people to trade shares or other securities (if any) of the Company, whether directly or indirectly, whether receiving benefit or not.
- The Company has taken significant disciplinary action against those seeking benefits from the use of insider information or disclosing it to the extent that it causes damage to the Company by considering the appropriate punishment, which include a verbal warning, a written warning, probation, as well as termination of employment due to termination, or dismissal, as the case may be. The Board of Directors has approved the aforementioned guidelines.

3) Prevention of conflicts of interest

- The Company requires those who are involved or have an interest in the transaction must notify the Company regarding the relationship or interest in the said transaction. If that person is a director, such person shall not participate in the decision making including abstain from approval such transactions.
- If a conflict of interest arises in any transaction that is not a general trade condition, the transaction must be approved by the Board of Directors and must adhere to the rules of the Capital Market Supervisory Board, the Securities and Exchange Commission, the Stock Exchange of Thailand, or any other relevant regulation.

4) Related Party Transactions

- If a related party transaction occurs, the Company shall comply with the Securities and Exchange Act and all applicable regulations, notifications, orders, and requirements of the Capital Market Supervisory Board, Securities and Exchange Commission, Stock Exchange of Thailand, and any other applicable regulatory authority, including the Company's related party transaction disclosure requirements under the Accounting Standard established by the Federation of Accounting Professions.
- In the case of related party transaction is a normal business transaction and a normal business support transaction with general trading conditions, including transactions of giving or receiving financial support in which a listed company or its subsidiary provides financial assistance to a juristic person of which the listed company or subsidiary is a shareholder in proportion to their participation of interests in that juristic person under general trading conditions or better, the Company shall comply with the framework of the authority approved by the Board of Directors' meeting.
- In the case of related party transaction is another type of transaction, the Company shall submit to the Board of Directors for consideration by complying with the regulations of the relevant regulatory Authority.

5) Internal Control and Internal Audit

- The Board of Directors, the Audit Committee, and management are all directly responsible for establishing and maintaining an internal control system, including taking action to ensure the system's efficiency on a regular basis in order to foster confidence in an accurate and trustworthy of information system and financial report.
- The Company has established an Internal Audit Department to be responsible for auditing the effectiveness of Company's operations and report audit finding directly to the Audit Committee.
- At least once a year, the Audit Committee evaluated the suitability and sufficiency of internal control system by proposing to the Board of Directors for consideration, comment, and specification in the Annual Registration Statement / Annual Report (Form 56-1 One Report).

3. Role of Stakeholders

Principle: Stakeholders should be protected by the Company in accordance with legal rights under applicable laws. The Board of Directors should consider establishing a process to foster collaboration between the Company and stakeholders in order to generate financial value and ensure the Company's business's sustainability.

The Board of Directors places importance on the rights of all stakeholders, including shareholders, customers, business partners, creditors, competitors, employees, society, communities, and the government sector, as defined by applicable laws and existing agreements with the Company. The Company therefore establishes practices for treating all stakeholders fairly, as well as guidelines for conducting business in accordance with environmental quality standards, anti-corruption, non-infringement of intellectual property, and avoidance of human rights violations while adhering to basic principles of fairness and equality. There is a compliance monitoring mechanism in place, as well as channels for receiving suggestions or complaints, by defining it as the following policy or guideline:

1) Rights of all stakeholders according to laws or agreements with the Company.

- | | |
|---|---|
| Shareholders | : The Company is committed to conducting business with integrity, transparency, morality, and ethics, and to disclosing adequate information by growing and expanding the business and generating appropriate returns for shareholders and investors on a continuous and sustainable basis. |
| Customers | : The Company is accountable to customers by upholding the quality and standards of products and services, which includes responding completely and comprehensively to customers' needs in order to foster long-term customer satisfaction. |
| Partners | : The Company treats the partners fairly and in accordance with commercial terms and mutually agreed-upon contracts, and has a policy of continually establishing and developing relationships with them. |
| Creditors | : The Company abides by commercial terms and contracts mutually agreed upon, including providing creditors with various information upon request. |
| Competitors | : The Company conducts business within the framework of fair competition and develops the market's growth for mutual benefit in the industry. |
| Employees | : The Company is committed to treat all employees fairly and providing reasonable returns, which includes providing a quality work environment. |
| Society/
Community
and Environment | : The Company is accountable for ensuring that the operations do not have an adverse effect on the community or social environment, including compliance with applicable laws and regulations. Additionally, the Company has engaged in Corporate Social Responsibility (CSR) activities aimed at fostering community and social development. |
| Public sectors | : The Company conducts business in order to enhance and develop the country while adhering to applicable laws, rules, regulations, and policies. |

2) Communication channels with the Board of Directors for submitting suggestions, whistleblowers, or complaints

To safeguard the rights of stakeholders, the Board of Directors has established channels for all stakeholders to provide suggestions, report information, and file complaints regarding suspected violations or non-compliance with applicable laws, rules, regulations, or corporate governance policies, such as inaccurate financial reporting or a deficient internal control system. The Company will conduct an investigation and take steps to ensure that all parties are treated fairly. Whistleblowers' information will be kept confidential to safeguard and protect the whistleblowers.

Recommender or whistleblower is able to communicate to the Board of Directors as follows:

Complaint channel and/or report a clue



Contact the Audit Committee:
audit_committee@gunkul.com



Website: www.gunkul.com
Topic "Whistle Blowing Form"



Send sealed postage to the Chairman of the Audit Committee
Gunkul Engineering Public Co. Ltd.
1177 Pearl Bangkok Building, 8th Floor,
Phaholyothin Rd. Phayathai Subdistrict,
Phaya Thai District, Bangkok 10400



Whistleblowing and complaint boxes at the Company
(Open the box by the Audit Committee and/or the Secretary to the Audit Committee)

Complaint channel and or report of corruption clues



Contact the Audit Committee:
audit_committee@gunkul.com



Website: www.gunkul.com
Topic "Whistle Blowing Form"



Send sealed postage to the Chairman of the Audit Committee
Gunkul Engineering Public Co. Ltd.
1177 Pearl Bangkok Building, 8th Floor,
Phaholyothin Rd. Phayathai Subdistrict,
Phaya Thai District, Bangkok 10400



Whistleblowing and corruption complaints boxes at the Company
(Open the box by the Audit Committee and/or the Secretary to the Audit Committee)

3) Anti-corruption policy and whistleblowing or complaints

As the Board of Directors places importance on Anti-Corruption, the Company therefore has established an "Anti-Corruption Policy and whistle-blowing or complaints" as guidelines for the Company's operations focusing on transparency, sustainability, and compliance as an integral part of business operations.

4. Disclosure and Transparency

Principle: The Board of Directors should ensure that the Company discloses all material information both financial and non-financial, accurately, completely, timely, and transparently, via easily accessible, equal, and reliable channels.

The Board of Directors places importance on the timely disclosure of accurate, complete, transparent, and lawful information, including financial reports and general information, as well as other significant information that affects the stock price and the decisions of investors and stakeholders of the Company. Thus, all those associated with the Company received information in an equal manner. The Company will disseminate information via the Stock Exchange of Thailand channel as well as through the Company's website.

1) Disclosure

- The Board of Directors recognizes the responsibility to ensure that financial reports are accurate, complete, and reasonable, and prepared in accordance with generally accepted accounting principles. As a result, the Board of Directors has assigned the Audit Committee to be responsible for reviewing financial reports to ensure accuracy, completeness, and reliability. The Company is required to disclose information in a timely manner in accordance with applicable regulatory requirements.
- The Company is required to disclose the roles and responsibilities of the Board of Directors and sub-committees, credential of each director, the number of meetings of all committees held and the attendance of each director, the remuneration of directors and senior executives, the process and criteria for evaluating the performance of all committees, information on individual directors' development and training, and a report on stock trading/ holdings of the Company's securities, as well as any change in holdings shall be disclosed in Annual Registration Statement / Annual Report (Form 56-1 One Report).
- The Company has required all employees not to misuse inside information or to seek benefits for themselves or families, or their peers in an improper manner, including the requirement to maintain confidential of the Company information and internal documents. However, the use of inside information must be limited to the employee's assigned duties and responsibilities.

2) Channel to contact the Company Secretary/ Investor Relations Department

Company Secretary / Investor Relations Department

Telephone (66) 2 242-5867/ (66) 2 242-5876

Email ir@gunkul.com

Website www.gunkul.com

The Company discloses information relating to the Company through various channels in order to keep shareholders and general investors informed accurately and completely, including information disclosure about the Company's operating results quarterly and annually, information on investments in various projects, revised policies, as well as the preparation of reports on financial and general information about the Company, together with Board of Directors' responsibilities to the financial report together with auditor's report in the Annual Registration Statement/ Annual Report (Form 56-1 One Report) and shall disclose other matters according to Good Corporate Governance through the Annual Registration Statement/ Annual Report (Form 56-1 One Report) and the Company's website.

Apart from disclosing information in accordance with the Securities and Exchange Commission and the Stock Exchange of Thailand's regulations, the Company has established channels of communication with shareholders, investors, and analysts both domestically and internationally. Investor Relations is responsible for directly communicating and disseminating information.

In 2021, the Company organized the following activities:

- 4 meetings to announce quarterly and annual performance to shareholders, investors and analysts (Opportunity Day)
- 2 Analysts meetings
- 20 meetings with analysts and investors who request to acquire an overview of the Company's business operations
- 35 interviews with journalists and media
- Regularly publish press releases whenever there is important investment or business activities.

In addition, various information has been disclosed through the Company's website at www.gunkul.com in both Thai and English so that other stakeholders shall be able to get information equally and thoroughly. Interested parties can inquire or request any information from the Company's Investor Relations Department at telephone number 0-2242-5876, 0-2242-5867 and 0-2242-5868 or e-mail: ir@gunkul.com

6.2 Business Ethics

The Board of Directors is responsible for establishing a system that ensures the Company's activities are conducted in a lawful and ethical manner, as well as for developing a business ethics policy or code of conduct and communicating it to all committees, executives, and employees for acknowledgement and compliance. In addition, the Company reviews its business policies and ethics every year and disclose on the Company's website. (<https://www.gunkul.com/storage/download/cg/2021/2021-gunkul-business-ethics-policy-th.pdf>)

6.3 Significant Changes and Developments in Policies, Practices, and Corporate Governance Systems in the Past Year

6.3.1 Significant changes and developments related to the policies, practices and the corporate governance system or the charter of the Board of Directors in the past year

The Board of Directors approved the Good Corporate Governance Policy in writing and approved the most recent review at the Board of Directors Meeting No. 9/2021 on November 10, 2021. The objective to establish and to review the Good Governance Policy is to use the policy as a guideline for monitoring, controlling, and supervising those authorized to perform administrative duties. The procedural management or management is organized in such a way that the organization's resources can be used effectively and efficiently to accomplish the organization's goals as well as to maximize benefits and fairly distribute them to all stakeholders. The Board of Directors determined that this policy and practice should be reviewed annually, and the Company has adhered to the principles of good governance consistently and strictly. Since 2020, the Company has reviewed and improved policies and procedures to ensure the consistency with ASEAN's CG Scorecard guidelines for implementation and adoption.

In 2021, the Company prepared a summary of the activities that have not yet been fully complied according to the principles of Good Corporate Governance and proposed to the Good Corporate Governance Committee, and the Board of Directors to acknowledge the rationale and approaches as follows:

Items that have not yet been fully complied	Rationale/ Guidelines
The Board of Directors should consist of non-executive directors more than 66%.	At present, the Board of Directors consists of 54.55% non-executive directors and is in the process of selecting additional directors.
The Board of Directors should consist of more than 50% of independent directors.	At present, the Board of Directors consists of 45.45% independent directors and is in the process of selecting additional directors.

6.3.2 Other practices in accordance with good corporate governance principles

The Company is committed to concretely implementing the principles of Good Corporate Governance throughout its operations. As a result, the Company has maintained a five-star rating for Good Corporate Governance (CGR) for the last five years. In 2021, the Company received an excellent score of 97 points, compared to an excellent scores of 95 points, 94 points, 91 points, and 91 points in 2020, 2019, 2018, and 2017 respectively. The Company also received the ASEAN award under the 2019 ASEAN Corporate Governance Scorecard ("ACGS"), which is the "ASEAN Asset Class Publicly Listed Award Companies" given to 135 ASEAN listed companies with a score of 97.50 or higher, of which 42 companies are Thai listed companies which is the highest number of all listed companies in ASEAN.

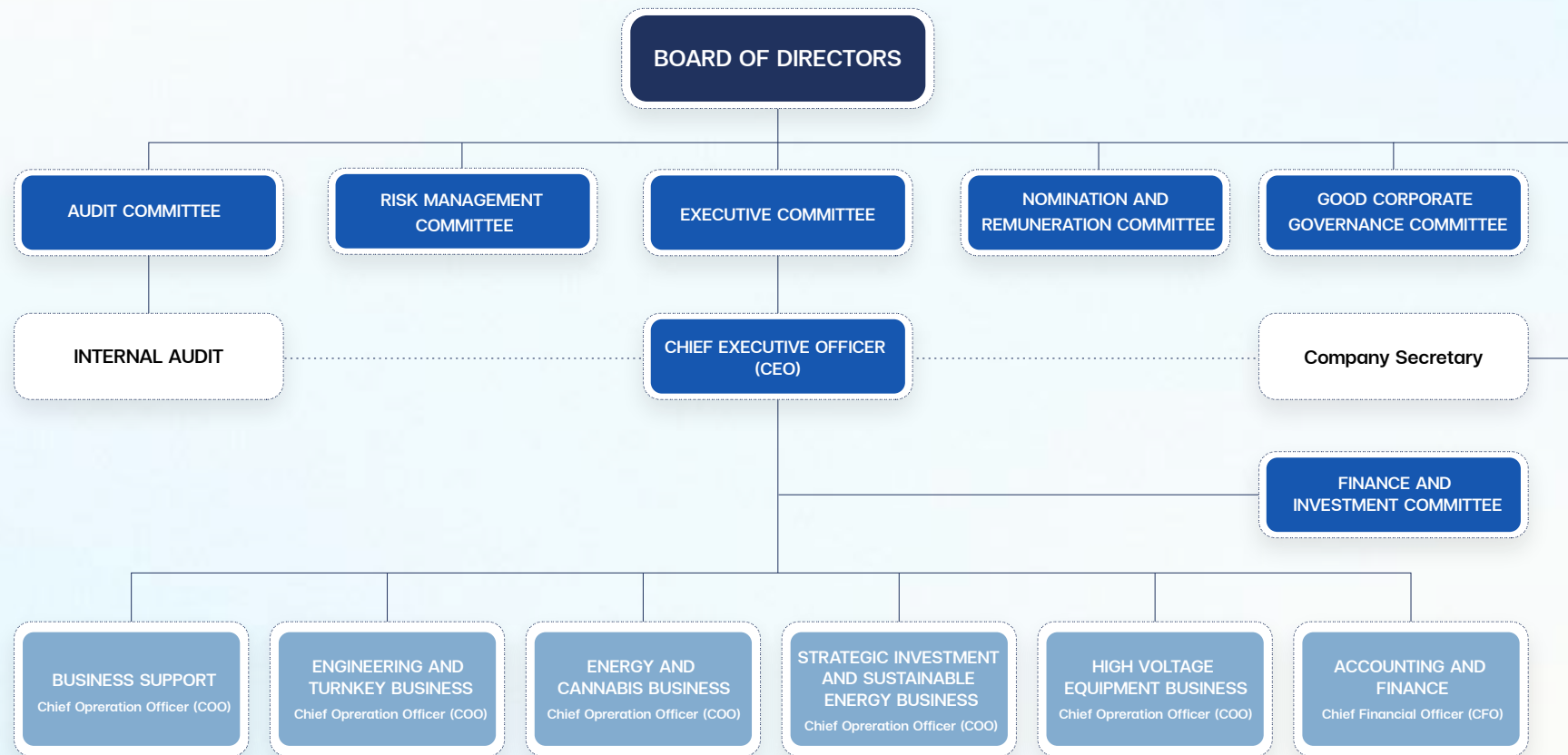
In 2021, the Company received an excellent score of 100 for the Annual General Meeting of Shareholders for the year 2021, compared to the scores received in 2020, 2019, 2018, and 2017 at a score of 100 points, 100 points, 96 points, and 97.5 points, respectively.

To encourage the private sector's voluntary cooperation in preventing and combating corruption by establishing accurate and transparent business standards, as well as higher business ethical standards, in order to instill confidence in the Company's stakeholders and Thai society in general, the Company submitted a statement of intent to the Private Sector Collective Action Coalition Against Corruption in 2017 (CAC). The Thai Private Sector Collective Action Coalition Against Corruption Committee evaluated the Company and determined that it should be certified as a CAC member. The Company has implemented practice guidelines based on these principles throughout the organization, which reflects the continuous evolution of the Company's Good Corporate Governance, and the Company is committed to sustainable growth.

Additionally, in 2021, the Company developed a work plan to comply with Good Corporate Governance principles for Thai listed companies (Corporate Governance Code for Listed Companies, "CG Code"), based on recommendations from the Office of the Securities and Exchange Commission, and presented it to the Good Corporate Governance Committee and the Board of Directors in order to define a concrete practice and continue development. Throughout the year 2021, the Good Corporate Governance Committee and the Board of Directors have acknowledged, reviewed, and considered the aforementioned principles and plans.

7. Corporate Governance Structure and Material Facts Related to the Board of Directors, Sub-committees, Executives, Employees and Others

7.1 Corporate Governance Structure



Remark: 1) The organization chart was effective from January 24, 2022
2) Internal audit is comprise of Internal Audit Department and Compliance Department

Report of Securities Holding of Directors and Senior Executives of the Company for the year 2021

No.	Directors / Senior Executives	Relation	Type of Securities	Number of shares held at January 1, 2021 (Share)	Number of shares held at December 31, 2021 (XO: January 5, 2022) (Share)	Number of shares changed Increase / (Decrease) in 2021 (Share)	Proportion of shareholding in the Company (%)
1	Dr. Gunkul Dhumrongpiyawut	Director	Common share	311,511,270	231,458,670	(80,052,600)	2.606
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				311,511,270	231,458,670	(80,052,600)	2.606
2	Dr. Chongrak Rarueysong	Director (Independent Director)	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
3	Assoc. Prof. Dr. Panarat Panmanee	Director (Independent Director)	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
4	Gen. Tarnchaiyan Srisuwan	Director (Independent Director)	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
5	Mr. Tarakorn Angpubate	Director (Independent Director)	Common share	900,039	900,039	-	0.010
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				900,039	900,039	-	0.010
6	Mr. Kris Chantanotoke	Director (Independent Director)	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
7	Ms. Sopacha Dhumrongpiyawut	Director / Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-

No.	Directors / Senior Executives	Relation	Type of Securities	Number of shares held at January 1, 2021 (Share)	Number of shares held at December 31, 2021 (XO: January 5, 2022) (Share)	Number of shares changed Increase / (Decrease) in 2021 (Share)	Proportion of shareholding in the Company (%)
8	Dr. Somboon Aueatchasai	Director / Senior Executive	Common share	33,600,000	33,600,000	-	0.378
		Spouse	Common share	4,076,799	3,000,000	(1,076,799)	0.034
		Underage children	Common share	-	-	-	-
				37,676,799	36,600,000	(1,076,799)	0.412
9	Ms. Naruechon Dhumrongpiyawut	Director / Senior Executive	Common share	431,193	431,193	-	0.005
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				431,193	431,193	-	0.005
10	Mrs. Areewan Chaloemdan	Director / Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
11	Mr. Chaloepon Sricharoen	Director / Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
12	Dr. Phongsakorn Damnoen	Senior Executive	Common share	38,174,073	38,174,073	-	0.430
		Spouse	Common share	336,000	336,000	-	0.004
		Underage children	Common share	-	-	-	-
				38,510,073	38,510,073	-	0.434
13	Mr. Chaisiri Wattanacharnnarong	Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
14	Mr. Thitipong Techaratanayuenyong	Senior Executive / Secretary to the Risk Management Committee	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-

No.	Directors / Senior Executives	Relation	Type of Securities	Number of shares held at January 1, 2021 (Share)	Number of shares held at December 31, 2021 (XO: January 5, 2022) (Share)	Number of shares changed Increase / (Decrease) in 2021 (Share)	Proportion of shareholding in the Company (%)
15	Mr. Theerapab Punyasakhon	Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
16	Mrs. Somluk Kanuenghet	Senior Executive / Secretary to the Nomination and Remuneration Committee	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
17	Mrs. Nattawan Wongchan	Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
18	Ms. Suttirat Tangnorakul	Senior Executive	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
19	Ms. Chantira Jongjamareeseethong	Senior Executive / Company Secretary	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-
20	Mr. Tanetsiri Farkmitr	Senior Executive / Secretary to the Audit Committee	Common share	-	-	-	-
		Spouse	Common share	-	-	-	-
		Underage children	Common share	-	-	-	-
				-	-	-	-

Note: As of December 31, 2021 and January 5, 2022, the Company has registered capital of THB 2,220,632,743,50 and has the total share sold of 8,882,530,974 shares

7.2 Board of Directors Information

7.2.1 Composition of the Board of Directors

The composition of the Board of Directors set forth in the Board of Directors' charter as follows:

- Not less than 5 persons but not more than 12 persons
- A minimum of one-third of the Company's directors must be independent directors
- Not less than half of the Company's directors must reside in the Kingdom of Thailand
- The Board of Directors should have a proportion of directors with diverse range of knowledge and expertise suitable for the business, and shall be a balance of power within the Board of Directors.

Currently, according to the Company's Affidavit dated January 11, 2022, the Board of Directors consisted of 11 members consisting of:

- 5 Independent Directors representing 45.45% of the total directors
- 6 Non-Executive Directors* representing 54.55% of the total directors
- 5 Executive Directors, representing 45.45% of the total directors
- 4 Female Directors representing 36.36% of the total directors

* Total of 5 independent directors



7.2.2 Board of Directors and the Controlling Persons Information

Board of Directors as of December 31, 2021 consists of 11 directors as follows:

Name-Surname	Position
1. Dr. Gunkul Dhumrongpiyawut ²⁾	Chairman of the Board of Directors (Non-Executive Director)
2. Dr. Chongrak Rarueysong ³⁾	Director Independent Director Chairman of the Audit Committee Member of the Good Corporate Governance Committee
3. Assoc. Prof. Dr. Panarat Panmanee ^{1) 3) 4) 5)}	Director Independent Director Member of the Audit Committee
4. Gen. Tarnchaiyan Srisuwan	Director Independent Director
5. Mr. Tarakorn Angpubate ^{1) 3)}	Director Independent Director Member of the Audit Committee Chairman of the Risk Management Committee
6. Mr. Kris Chantanotoke	Director Independent Director
7. Ms. Sopacha Dhumrongpiyawut	Executive Director (Authorized Director) Chairman of the Executive Committee Member of the Risk Management Committee
8. Dr. Somboon Aueatchasai ¹⁾	Executive Director (Authorized Director) Member of the Executive Committee Secretary to the Board of Directors Chief Executive Officer (CEO)

Name-Surname	Position
9. Ms. Naruechon Dhumrongpiyawut	Director (Authorized Director) Member of the Executive Committee Chief Operating Officer, Strategic Investment and Sustainable Energy Business
10. Mrs. Areewan Chaloezman ¹⁾	Director (Authorized Director) Member of the Executive Committee Chief Operating Officer, High Voltage Equipment Business
11. Mr. Chaloezman Sricharoen	Director (Authorized Director) Member of the Executive Committee Vice President, Sales and Marketing

Note: Ms. Chantira Jongjamareeseethong is the Company secretary.

- Note:** ¹⁾ Resolution of the 2021 Annual General Meeting of Shareholders held on April 28, 2021 resolved to approve the re-election of the Company's directors who have completed their terms of service to be the Company's directors for another term.
- ²⁾ A non-executive director with working experience related to the business of the Company and the Group.
- ³⁾ An independent director with knowledge and experience in reviewing financial statements.
- ⁴⁾ An independent director with a degree in accounting and auditing.
- ⁵⁾ A female independent director.

Authorized Directors

The Company's authorized directors are: any of Dr. Gunkul Dhumrongpiyawut or Ms. Sopacha Dhumrongpiyawut or Ms. Naruechon Dhumrongpiyawut, jointly sign with Dr. Somboon Aueatchasai or Mr. Chaloezman Sricharoen or Mrs. Areewan Chaloezman, two persons altogether, or Dr. Somboon Aueatchasai, Mrs. Areewan Chaloezman and Mr. Chaloezman Sricharoen jointly sign, for and on behalf of the Company.

7.2.3 Scope of Authorities, Duties and Responsibilities of the Board of Directors

The Board of Directors shall have authorities, duties and responsibilities as follows:

- Perform duties in accordance with the law, objectives, and Articles of Association of the Company and resolutions of the Board of Directors as well as the resolutions of the shareholders' meeting with responsibility, due care and integrity as a prudent person who will undertake his business under the same conditions for the maximum benefits of the Company.
- Determine vision, mission, strategy, business direction, policy, targets, direction of the operating plan, and the Company's budget; supervise, oversee, monitor, and examine compliance with the policies, plan and budget provided and to assess the performance of the management consistently.
- Determine the charter and important policies of the Company as follows:
 - Major business policy (Business Ethics and Good Corporate Governance)
 - Charter of the Board of Directors and Charter of the Sub-committees
 - Policies, authorities, duties and responsibilities of the Chairman of the Board of Directors and Chief Executive Officer
 - Policy and measures for non-related party transactions and related party transactions with the Company and Table of Authority
 - Financial Policy
 - Financing Policy
 - Fund Management Policy
 - Risk Management Policy
 - Internal Audit and internal control Policies
 - Anti-Corruption Policy and Related Policies
 - Any other policies related to the corporate governance of the Company.
- Decisions on the following investment
 - Consider/Approve the budget
 - Consider/Approve the Company's investment projects
 - Supervise and monitor the project implementation in accordance with the plan arranged.
- Supervise, oversee and monitor the Company's operations
 - To ensure that target is achieved or exceeding in accordance with the Company's strategy
 - To determine the corrective measure if there is any problem or difficulty to accomplish or exceed the targets provided

- 3) To determine measures and practice on good corporate governance to manage sustainability, social responsibility, and anti-corruption, including any other relevant measures and practice guidelines
- 4) To comply with anti-corruption measures and other relevant measures and to take responsibility on implementation of anti-corruption measures, and other relevant measures
6. Prepare the disclosure of Company's general information, and financial information to shareholders, stakeholders or general investors correctly, completely, timely, equitably and in accordance with the law.
7. Review the adequacy and suitability of the financial reporting system, internal control system, and the Company's risk management system in order to ensure confidence in the accuracy, completeness, and reliability of the information as well as to mitigate the corruption risk and prevent any illegal actions.
8. Acknowledge the key audit reports of the Audit Committee and sub-committees, including the Internal Audit, the auditors, and consultants of the Company and to determine the improvement and corrective measures in the event that a material defect is found, and to manage and handle the related party transactions in order to comply with the criteria prescribed by law.
9. Appoint a person with qualifications and without possession of any prohibited characteristics according to the relevant laws to be the Company's director in case of vacancy of directorship by other reason other than retirement by rotation.
10. Appoint sub-committees member and Chairman of the sub-committees such as the Audit Committee, Risk Management Committee, Nomination and Remuneration Committee, Good Corporate Governance Committee, Executive Committee or any other sub-committees as well as Secretary to the Board of Directors and the Company Secretary to support the duty performed by the Board of Directors.
11. Determine remuneration and appoint senior executives of the Company as well as arrange a process for developing high-level executives of the Company to ensure continuity (Succession Plan).
12. Appoint one or more directors or any persons to undertake any act on behalf of the Board of Directors, provided that such person shall not have the authority to approve transactions in which such person or persons with potential conflicts of interest in any nature with the Company or the subsidiary.

In this regard, directors or person with potential conflict of interest in any nature with the Company or its subsidiaries, or director of the Company who has any conflict of interest in that matter, shall abstain from voting on that matter unless such following matters have been approved by the meeting of shareholders.

- 1) The matters requiring a resolution of the shareholders' meeting under the laws and Articles of Association of the Company
- 2) Any transaction in which the director may have a conflict of interest, and is indicated by the law or the regulations of the Stock Exchange of Thailand that it is required approval by the shareholders' meeting.
13. Arrange an annual performance assessment as follows:
 - 1) Performance of the Board of Directors
 - 2) Performance of each Individual Director
 - 3) Performance of every Sub-committee
 - 4) Performance of top executive of the Company (Chief Executive Officers)
 - 5) Performance of Company Secretary
 - 6) Performance of Secretary to the Audit Committee

Additionally, such assessment results shall be used and undertake for development and improvement, as well as for determination of the policy for continuous development of the organization.
14. Review corporate governance policies and the Board of Directors' charter, vision, mission, and strategy annually.
15. Prepare a Report of the Board of Directors to disclose in the Company's Annual Registration Statement / Annual Report (Form 56-1 One Report), and shall be signed by the Chairman of the Board of Directors in the following topics:
 - 1) Overall opinions or comments by the Board of Directors while performing their duties in accordance with the charter; and
 - 2) Any other transactions that the Board of Directors deems appropriate that shareholders and general investors should be aware of within the scope of the authorities, duties, and responsibilities assigned by the shareholders; and
 - 3) Number of meetings of the Board of Directors and attendance of each director including remuneration received by each director.
16. To perform the duties, the Board of Directors may seek independent advice from any other professional consultant at the expense of the Company when necessary.

In this regard, The Company has prescribed the Chairman of the Board of Directors' roles, authorities, duties, and responsibilities as follows:

1. The Chairman of the Board of Directors and the Chief Executive Officer are required to be a separate individual
2. To convene the Board of Directors' and Shareholders' Meetings by conducting the Board of Directors' and shareholder meetings in accordance with the Articles of Association of the Company

3. To cast as decisive vote in the event that the votes are on par in the Board of Directors' meeting
4. To take a role to effectively control the meetings to ensure the adherence to the Company's Articles of Association, and to support and provide opportunities for directors to express their opinions independently
5. Encourage and support the Board of Directors to perform their duties and responsibilities at full capacity within the scope of their authorities, duties, and responsibilities and in accordance with the principles of good corporate governance
6. Accountable as the leader of the Board of Directors in supervising, monitoring and overseeing the management of the Board of Directors and other sub-committees in order to accomplish the stated objectives and plan provided
7. Supervise the execution of the policies, strategic operational guidelines, and provide advice and support for the management's business operations
8. Be a leader and role model on the Company's Code of Conduct and Business Ethics, which includes promoting, supervising, and monitoring the management with respect to sustainability principles, social responsibility, and complies with anti-corruption measures and practice guideline.

7.3 Sub-Committees Information

The Board of Directors has appointed five sub-committees to support the Board of Directors in carrying out its responsibilities, including the Audit Committee, Risk Management Committee, Nomination and Remuneration Committee, Good Corporate Governance Committee, and Executive Committee.

1) Audit Committee

The Audit Committee is a sub-committee, appointed by the Board of Directors to assist the Board of Directors in the operation and ensure that the business has a good governance system. The Audit Committee is appointed with the objective to promote operational efficiency and enhance the organization's value. To conduct the duty effectively, the Audit Committee is required to maintain the relationships with the Board of Directors, the executives, and the external and internal auditors of the Company. Each Audit Committee member is required to develop and maintain proficiency and knowledge, as well as an understanding of the duties and responsibilities, including the business and risk of the Company.

The Board of Directors' meeting No. 3/2021 on April 28, 2021, appointed the Audit Committee, consisted of the following 3 directors as of December 31, 2021:

Name	Positions
1. Dr. Chongrak Rarueysong ¹⁾	Chairman of the Audit Committee (Independent Director)
2. Assoc. Prof. Dr. Panarat Panmanee ^{1) 2) 3)}	Member of the Audit Committee (Independent Director)
3. Mr. Tarakorn Angpubate ¹⁾	Member of the Audit Committee (Independent Director)

In which Mr. Tanetsiri Farkmitr is the Secretary to the Audit Committee

- Note**
- ¹⁾ Independent director who has knowledge and experience in reviewing the Company's financial statements
 - ²⁾ Independent director who graduated in accounting
 - ³⁾ Female Independent Director

Scope of Authorities, Duties and Responsibilities of the Audit Committee

1. Review the financial reports to ensure accuracy and reliability, including adequate disclosure of information through coordination with external auditors and the Company's executives responsible for preparation of the financial reports, both quarterly and annually.
2. Review the internal control system and internal audit system to ensure suitability and efficiency in coordination with external auditors and internal auditors, consider the independence of the Internal Audit unit or any other agency responsible for internal audits as well as to provide consent on appointment, rotation, and dismissal of the Head of the Internal Audit or any other agency responsible for internal audits.
3. Review the Company's compliance with the Securities and Exchange Act, the Stock Exchange of Thailand requirements or laws related to the Company's business.
4. Examine, select, and propose for appointment of independent persons to perform the duty as the Company's auditors, including determining the auditor's remuneration in light of the auditor's reliability, the sufficiency of the auditor's resources, the quantity of audit work and experience of personnel assigned to audit the Company's accounts, as well as dismissing such contract, and require to hold a joint meeting with an external independent auditor without management present at least once a year.
5. Examine the related party transactions or the transactions with possibly conflicts of interest in accordance with the laws and regulations of the Stock Exchange of Thailand to ensure that such transactions are reasonable and in the best interests of the Company.
6. Review compliance with the anti-corruption policy to ensure efficiency, to examine the outcome of the fraud review, and being the Company's channels in receiving complaints about fraudulent actions including promoting and encourage risk awareness, risk assessment, preparation of the preventive system and examination system.

7. Assess the performance of the Audit Committee to provide recommendations on development and improvement to the Board of Directors for acknowledgment and use the information in determining policies for continuous improvement of the organization.
8. Review the Audit Committee Charter and the Internal Audit Charter annually.
9. Prepare a Report of the Audit Committee to disclose in the Company's Annual Registration Statement / Annual Report (Form 56-1 One Report), and shall be signed by the Chairman of the Audit Committee in the following topics:
 - Comments on accuracy, completeness and reliability related to preparation process and disclosure in the financial report of the Company
 - Comments on the adequacy of the Company's internal control system
 - Comments on compliance with the Securities and Exchange Act and the Stock Exchange of Thailand's regulations, or laws related to the Company's business
 - Comments on the suitability of the auditor
 - Comments on possible conflict of interest transactions
 - Comments or remarks that the Audit Committee has learned from performing their duties under the Charter of Audit Committee
 - The number of Audit Committee meetings and the attendance of each Audit Committee member, including remuneration received by each Audit Committee member
 - Any other reports that the Audit Committee has viewed that the shareholders and general investors should know within the scope of authority and responsibility assigned by the Board of Directors
10. Examine the matters raised by the Company's auditors for the case that is doubtful that the director, manager, or other person responsible for the operation of the Company has involved in the wrongdoing as defined in the Securities and Exchange Act (No. 5) B.E. 2559, and prepare the preliminary findings report to the Office of Securities and Exchange Commission and the auditor within 30 days since the date receiving notification from the auditor.
11. Perform the Audit Committee's duties and responsibilities. The Audit Committee may seek independent advice from any other professional advisor at the expense of the Company when necessary.
12. Perform any other duties assigned by the Board of Directors with the agreeable of the Audit Committee, such as reviewing the Financial Management Policy and the Risk Management Policy, reviewing the compliance with the business ethics of the executives, and joint review with the Company's executives on critical matters that must be made public as required by law, such as management's reports and analysis.

2) Risk Management Committee

The Risk Management Committee is responsible for assisting the Board of Directors in determining Risk Management Policies and guidelines, developing a risk management plan and risk assessment, recommending preventive and corrective measures, as well as monitoring and supervising the operation to ensure compliance with measures provided, in order to ensure systematic risk management process throughout the entire organization. Thus, the impact on business operations will be mitigated and will enhance compliance with laws, regulations and rules stipulated by supervisory agencies.

The Board of Directors meeting No. 1/2021 on April 28, 2021, appointed the Risk Management Committee, consisted of the following 4 directors, as of December 31, 2021:

Name	Positions
1. Mr. Tarakorn Angpubate	Chairman of the Risk Management Committee (Independent Director)
2. Ms. Sopacha Dhumrongpiyawut	Member of the Risk Management Committee
3. Mr. Somchai Trairatanapirom	Member of the Risk Management Committee (Independent Director)
4. Mr. Thitipong Techaratanayuenyong	Member of the Risk Management Committee and Secretary

Scope of Authorities, Duties and Responsibilities of the Risk Management Committee

1. Determine the Company's risk management policies, guidelines, and framework as a guideline to undertake the business in accordance with the Securities and Exchange Act, the Stock Exchange of Thailand's regulations, and other applicable laws, including anti-corruption measures and practices guidelines.
2. Supervise, monitor, and provide support the organizational and project to accomplish the success of risk management, taking into account risks in each aspect to support in assessment, analysis, and decision-making to ensure that a risk management process covers all stages of business operations.
3. Review the risk management guidelines and framework in comparison to international best practices and provide appropriate recommendations on correction and improvement as deemed suitable to the Board of Directors.
4. Assess the Risk Management Committee's performance, provide recommendations for development and improvement to the Board of Directors for acknowledgement and use to determine the policy on continue development of the organization.

5. Review the Risk Management Committee Charter annually.
6. Prepare a report of the Risk Management Committees to disclose in the Company's Annual Registration Statement / Annual Report (Form 56-1 One Report), and signed by the Chairman of the Risk Management Committees in the following topics:
 - 1) Overall comments or remarks that the Risk Management Committee has learned while performing their duties in accordance with the Charter.
 - 2) Any other reports that the Risk Management Committee deems appropriate that the shareholders and general investors should know within the scope of the authorities, duties, and responsibilities assigned by the Board of Directors.
 - 3) Number of meetings of the Risk Management Committee and attendance of each of them including remuneration from holding position.
7. To perform the duties, the Risk Management Committee may seek independent advice from any other professional advisor at the expense of the Company when necessary.
8. Perform any other tasks as assigned by the Board of Directors.

3) Nomination and Remuneration Committee

The Nomination and Remuneration Committee is responsible for supporting the Board of Directors by determining policies, criteria, and procedures for selecting the person with qualifications suitable and aligned with the Company's business strategy, as well as provide recommendations on criteria for determining appropriate and consistent remuneration with the current situation.

The Board of Directors meeting No. 1/2021 on April 28, 2021, appointed the Nomination and Remuneration Committee, consisted of the following 4 directors, as of December 31, 2021:

Name	Position
1. Pol.Maj.Gen. Visit Sukarasep	Chairman of the Nomination and Remuneration Committee (Independent Director)
2. Mr. Decha Chooligorn	Member of the Nomination and Remuneration Committee (Independent Director)
3. Mr. Hathai Uthai	Member of the Nomination and Remuneration Committee (Independent Director)
4. Mrs. Somluk Kanuenghet	Member of the Nomination and Remuneration Committee and Secretary

Scope of Authorities, Duties and Responsibilities of the Nomination and Remuneration Committee

1. Determine policies, criteria, and processes for recruiting, selecting, and nominating qualified individuals in accordance with applicable regulations and laws to serve as a director and subcommittee of the Company, with the requirement that the selection be clear, transparent, and consistent with business strategies of the Company, to propose to the shareholders' meeting or to the Board of Directors for approval or appointment as applicable in accordance with the Company's Articles of Association.
2. Determine policies, criteria, and guidelines for determining remuneration, the method of payment of remuneration, and any other benefits payable to the Board of Directors and sub-committees that are suitable to the duties and responsibilities to the Company and submit to the shareholders' meeting or to the Board of Directors for approval or appointment as applicable in accordance with the Company's Articles of Association.
3. Review the structure, recruitment criteria, and remuneration to ensure suitability with the duties and responsibilities and performance of the Company.
4. Consider and propose a succession plan for the Company's top executives (Chief Executive Officer) to the Board of Directors for approval.
5. Assess the Nomination and Remuneration Committee's performance, including providing recommendations on development and improvement to the Board of Directors for acknowledgement and use those information for determining policies on continued development of the organization.
6. Review the Nomination and Remuneration Committee Charter annually.
7. Prepare a report of the Nomination and Remuneration Committees to disclose in the Company's Annual Registration Statement / Annual Report (Form 56-1 One Report), and signed by the Chairman of the Nomination and Remuneration Committees in the following topics:
 - 1) Overall comments or remarks that the Nomination and Remuneration Committee has learned while performing their duties in accordance with the Charter.
 - 2) Any other reports that the Nomination and Remuneration Committee deems appropriate that the shareholders and general investors should know within the scope of the authorities, duties, and responsibilities assigned by the Board of Directors.
 - 3) Number of meetings of the Nomination and Remuneration Committee and attendance of each of the director including remuneration received by each member.
8. To perform the duties, the Nomination and Remuneration Committee may seek independent advice from any other professional advisor at the expense of the Company when necessary.
9. Perform any other tasks as assigned by the Board of Directors.

4) Good Corporate Governance Committee

The Good Corporate Governance Committee is responsible for supporting the Board of Directors in determining good corporate governance policies and guidelines to accommodate the international good corporate governance principles that listed companies should follow to achieve concrete operations outcome throughout the organization that adhere to the principles of good corporate governance, and to enhance the Company to grow in a sustainable manner through business management with integrity, transparency, and accountability. This will enhance confidence among shareholders, investors, stakeholders, and all other related parties.

The Board of Directors meeting No. 1/2021 on April 28, 2021, appointed the Good Corporate Governance Committee, consisted of the following 3 directors, as of December 31, 2021:

Name	Position
1. Mr. Somchai Trairatanapirom	Chairman of the Good Corporate Governance Committee (Independent Director)
2. Dr. Chongrak Rarueysong	Member of the Good Corporate Governance Committee (Independent Director)
3. Mr. Pongtep Thithapand	Member of the Good Corporate Governance Committee (Independent Director)

Note: Ms. Chantira Jongjamareeseethong is the Secretary to the Good Corporate Governance Committee.



Scope of Authorities, Duties and Responsibilities of the Good Corporate Governance Committee

- Determine policies, guidelines and framework on good corporate governance, including any other operations undertaken and related to good corporate governance such as sustainability management, social responsibility, anti-corruption measures and practice guidelines including the establishment of the compliance unit and propose to the Board of Directors.
- Supervise and monitor to ensure that the Company, the Group, committees, executives, employees, and stakeholders comply with the policies and guidelines set forth and in accordance with the law or requirements related to the principles of good corporate governance, anti-corruption measures and practice guidelines, code of conduct, and business ethics by allowing practice to develop continuously and appropriately,
- Review the guidelines for the Company's good corporate governance principles in accordance with international practice guidelines and provide recommendations for improvements as appropriate to the Board of Directors.
- Provide recommendation to the Board of Directors, sub-committees, and management in regard to the compliance with good corporate governance, code of conduct, and business ethics including proper practice in business operations.
- Support and encourage the Company to distribute the principles of corporate governance including information on related matters consistently so the sub-committees, the executives and employees at all levels for acknowledge and understand.
- Promote and support the Company to participate in the corporate governance assessment or rating to develop and upgrade the standard of good corporate governance of the Company continuously.
- Assess performance of the Corporate Governance Committee including providing recommendations on development and improvement to the Board of Directors for acknowledgment and use those information in determining policies on continued development of the organization.
- Review the Corporate Governance Committee Charter annually.
- Prepare a report of the Good Corporate Governance Committee to disclose in the Company's Annual Registration Statement / Annual Report (Form 56-1 One Report), and signed by the Chairman of the Good Corporate Governance Committee in the following topics:
 - Overall comments or remarks that the Good Corporate Governance Committee has learned while performing the duties in accordance with the Charter.
 - Any other reports that the Good Corporate Governance Committee deems appropriate that the shareholders and general investors should know within the scope of the authorities, duties, and responsibilities assigned by the Board of Directors.

- 3) Number of meetings of the Good Corporate Governance Committee and attendance of each director including remuneration received by each director.
10. To perform the duties, the Good Corporate Governance Committee may seek independent advice from any other professional advisor at the expense of the Company when necessary.
11. Perform any other tasks as assigned by the Board of Directors.

5) Executive Committee

The Executive Committee is accountable for assisting the Board of Directors in managing and controlling the Company's business to ensure an overall concrete outcome to enhance the Company to grow sustainably through business management with integrity, transparency, and verifiable manner. This will enhance confidence among shareholders, investors, stakeholders, and all other related parties.

The Board of Directors meeting No. 1/2021 on April 28, 2021, appointed the Executive Committee, consisted of the following 5 directors, as of December 31, 2021:

Name	Position
1. Ms. Sopacha Dhumrongpiyawut	Chairman of the Executive Committee
2. Dr. Somboon Aueatchasai	Member of the Executive Committee
3. Ms. Naruechon Dhumrongpiyawut	Member of the Executive Committee
4. Mrs. Areewan Chaloeindan	Member of the Executive Committee
5. Mr. Chaloepon Sricharoen	Member of the Executive Committee

Note: Ms. Chantira Jongjamareeseethong is the Secretary to the Executive Committee.

Scope of Authorities, Duties and Responsibilities of the Executive Committee

1. Perform duties within the scope of the law, objectives and Articles of Association of the Company as well as resolution of the Board of Directors' meeting and shareholders' meeting with honesty caution including being responsible and ethical taking into account the equal benefits of all shareholders.
2. Determine regulatory policy, and practice guidelines and operational frameworks, as well as objectives, business plans, and management structures, rules, regulations, authority, approval authority, and budget, including supervising, auditing, monitoring, and reviewing the Company's operations to ensure the compliance with the Board of Directors' vision, mission, strategy, and policy, as well as with the Securities and Exchange Act, the Stock Exchange of Thailand's regulations or laws governing the Company's business operations, and the Company's Articles of Association, anti-corruption measures and practice guidelines.

3. Determine regulations, policies, and guidelines for corporate social responsibility (CSR) operations.
4. Screen, endorse or approve the key operations conducted in a normal course of business and general management within the scope of authorities provided.
5. Determine the working regulations for the Company's employees without any conflict with or violate applicable regulations and laws.
6. Approve the structure, salary, and other employees' benefits, as well as the management structure of the division level or lower.
7. Screen and consent the annual budget plan, supervise and monitor operating results in accordance with policies, targets, and budget plans approved by the Board of Directors.
8. Oversee the Company's internal control system to ensure the suitability and appropriateness.
9. Screen, consent or approve the investment in and/or participation in bidding of new projects, as well as to undertake projects as deemed appropriate, including the execution of juristic act relating to such matters until completion within the scope of authority provided.
10. Screen, consent or approve a joint venture with any individual, juristic person, and/or group of persons in any form to undertake the business in accordance with the Company's business objectives, including performing juristic acts related to the matter until completion, within the scope of authority provided.
11. Screen, consent or approve the appointment or employment of consultants, including external experts, to provide opinions and undertake any actions relating to the business of the Company.
12. The Executive Committee may delegate authority and appoint a special working group, a group of individuals, an executive, or any other person to act on its behalf in any matter related to its duties and responsibilities.
13. Grant authority to the management, a special working group, a group of persons, an executive, or any other person within the scope of authority provided as a substitute to undertake any act but not the approval on a related party transactions or a potential conflict of interest transactions as defined in the Company's Articles of Association, policies, regulations, and the Notification of the Capital Market Supervisory Board, the approval of which must be submitted to the Board of Directors and/or the shareholders meeting unless it is an approval on the transaction of which the nature is a normal course of business of the Company and in accordance with the policy and criteria approved by the Board of Directors.
14. Assess the performance of the Executive Committee including providing the recommendations for development and improvement to the Board of Directors for acknowledgment and use such information in determining policies on continued development of the organization.
15. Review the Charter of the Executive Committee annually.

16. Prepare a report of the Executive Committee to disclose in the Company's Annual Registration Statement / Annual Report (Form 56-1 One Report), and signed by the Chairman of the Executive Committee in the following topics:

- 1) Overall comments or remarks that the Executive Committee has learned while performing their duties in accordance with the Charter.
- 2) Any other reports that the Executive Committee deems appropriate that the shareholders and general investors should know within the scope of the authorities, duties, and responsibilities assigned by the Board of Directors.
- 3) Number of meetings of the Executive Committee and attendance of each of director including remuneration received by each director.

17. To perform the duties, the Executive Committee may seek independent advice from any other professional advisor at the expense of the Company when necessary.

18. Perform any other tasks as assigned by the Board of Directors.

7.4 Information about the Management

7.4.1 List and position of management

As of December 31, 2021, the Company has 14 executives (according to the structure shown in section 7.1), consisting of:

Name	Position
1. Ms. Sopacha Dhumrongpiyawut	Chairman of the Executive Committee Director / Member of the Risk Management Committee
2. Dr. Somboon Aueatchasai ¹⁾	Chief Executive Officer (CEO) Director / Secretary to the Board of Directors / Member of the Executive Committee
3. Dr. Phongsakorn Damnoen ¹⁾	Chief Operating Officer, Energy and Cannabis Business
4. Ms. Naruechon Dhumrongpiyawut ¹⁾	Chief Operating Officer, Strategy Investment and Sustainable Energy Business Executive Director / Member of the Executive Committee
5. Mrs. Areewan Chaloezman ¹⁾	Chief Operating Officer, High Voltage Equipment Business Director / Member of the Executive Committee
6. Mr. Chaisiri Wattanacharnnarong ¹⁾	Chief Operating Officer, Engineering and Turnkey Business

Name	Position
7. Mr. Thitipong Techaratanayuenyong ¹⁾	Chief Financial Officer (CFO) Member of the Risk Management Committee / Secretary to the Risk Management Committee Head of Investor Relations
8. Mr. Theerapab Punyasakhon ¹⁾	Chief Operating Officer, Business Support
9. Mrs. Somluk Kanuenghet	Senior Vice President, Human Resources Secretary to the Nomination and Remuneration Committee
10. Mrs. Nattawan Wongchan	Senior Vice President, Finance and Information Technology
11. Ms. Suttirat Tangnorakul	Senior Vice President, Accounting Accounting Supervisor
12. Ms. Chantira Jongjamareeseethong	Senior Vice President, Office of the Chief Executive Officer Company Secretary
13. Mr. Chaloezman Sricharoen	Vice President, Sales and Marketing Director
14. Mr. Tanetsiri Farkmitr	Vice President, Internal Audit Secretary to the Audit Committee / Head of Internal Audit Unit Acting Head of Compliance Department

- Note**
1. ¹⁾ An executive of a Company who is an executive as defined in the SEC Notification.
 2. At the beginning of 2022, the Company has restructured the management position to that stated above, from as previously notified to the Securities and Exchange Commission on March 4, 2021 and the Stock Exchange of Thailand on March 5, 2021.
 3. In 2021, the Company has restructured the organization and made changes to the management structure, as follows:
 - Ms. Sopacha Dhumrongpiyawut, previously the Chairman of the Executive Committee and the Chief Executive Officer, as Chairman of the Executive Committee, effective from March 5, 2021 onwards.
 - Dr. Somboon Aueatchasai, previously Managing Director and Acting Chief Financial Officer, as Chief Executive Officer (top executive), effective from March 5, 2021 onwards.
 - Mr. Thitipong Techaratanayuenyong, previously Senior Vice President of Finance and Strategic Management, as Chief Financial Officer, effective from March 5, 2021 onwards.
 - Changed the title of executive position from "Deputy Managing Director" or "Assistant Managing Director" to "Chief Operating Officer", effective from March 5, 2021 onwards.
 4. In 2022, the Company has changed the name of the business line to be consistent with the Company's business as described in Organization Chart set out in section 7.1.

The Board of Directors has assigned the Chief Executive Officer to be a leader in operation and management of the Company within the scope of authority as follow:

1. Manage the Company's business, including supervise and control the overall operation, in accordance with the Company's objectives, Articles of Associations, policies, regulations, requirements, orders, business strategies, targets, and operating plans, financial targets, budget, and Board of Directors' and/or shareholders' resolutions.
2. Prepare and submit the Company's business policy, including plans and budgets, and propose to the Board of Directors for approval. Report the progress toward the approved plan and budget to the Board of Directors regularly.
3. Undertake or determine the management authority to ensure efficient and effective operation in accordance with the policies, plans, and budgets approved by the Board of Directors based on the principle of systematic internal control and consistent risk management.
4. Determine the organizational structure and management method, including selection, training, employing, and termination of employees, as well as wages, salaries, compensation, bonuses, and other employee benefits.
5. Supervise, contact, command, undertake, and sign any juristic act, agreement, order, notice, or other letter used in communication with an agency or other person in order to ensure effective and efficient of the Company's operation.
6. Have the authority to delegate and/or assign specific tasks to other individuals pursuant to the authority granted by the power of attorney and/or in accordance with the rules, requirements, or orders prescribed by the Board of Directors and/or the Company.
7. Be a leader and role model according the Company's Code of Conduct and business ethics, which includes promoting, supervising, and monitoring the management based on sustainability principles, social responsibility, and complies with anti-corruption measures and practices guidelines.
8. Have the authorities, duties, and responsibilities as assigned by the Board of Directors or consistent with the policies assigned by the Board of Directors.

The delegation of authorities, duties, and responsibilities of the Chief Executive Officer shall not constitute a power of attorney or authorizing the Chief Executive Officer or the person authorized by the Chief Executive Officer to approve any related party transaction or with possible conflict of interest transaction related to such person and the Company or the Group (As defined in the Notification of the Securities and Exchange Commission). Such transactions shall be required to propose to the Board of Directors and/or shareholders meetings (as applicable) for consideration and approval in accordance with the Company's Articles of Association or applicable laws. Unless it is an approval of a transaction that is a normal business transaction for the Company and is consistent with the policies and criteria considered and approved by the Board of Directors.

7.4.2 Management Remuneration Policy

The Nomination and Remuneration Committee determined "Remuneration and Welfare for Executives and Employees Policy" and proposed to the Board of Directors for consideration and approval on criteria and practices for remuneration and welfare for executives and employees at all levels to be align with the Company's short and long-term performance at comparable rates, and in accordance with market guidelines in similar industries in order to create and motivate employees to work more efficiently. Those remuneration and welfare include salary, position fee, annual bonus, allowance, accommodation, fuel, breakage, telephone charges, and commissions, as well as welfare expenses such as provident funds, medical expenses, group accident insurance, scholarship, disaster relief, funeral assistance, sickness and maternity allowance, employee uniform, and new year's event together with compensation and any other benefits that may be increased by considering the Company's short and long-term operating performance.

In this regard, the Company's performance evaluation framework will be used to determine the criteria for paying remuneration in the form of salary, position fee (Promotion), and annual bonus by setting and reviewing vision, mission, and corporate key performance indicators (KPIs) using Balanced Scorecard (BSC) principles to cover all dimensions, including a competency assessment to be used as a guideline for each individual's development, as well as the consideration of working time according to the criteria.



7.4.3 The Remuneration of the Management

In 2021, the Company has a total of 14 executives. The total remuneration paid to the Company's executives consisting of salary, bonuses and other remunerations such as provident funds, in a total amount of THB 124,873,330.84, including retroactive compensation for the preceding one year as follows:

Monetary Remuneration of the Management

Remuneration	Executives who serve as directors of the Company				Executives only			
	Year 2021		Year 2020		Year 2021		Year 2020	
	No. of person	Remuneration (Baht)	No. of person	Remuneration (Baht)	No. of person	Remuneration (Baht)	No. of person	Remuneration (Baht)
Salary	5	38,151,840.00	5	37,080,000.00	9	32,965,764.00	12	39,493,600.00
Bonus	5	30,082,670.00	5	28,036,800.00	9	18,939,145.00	12	19,850,300.00
Provident fund	5	2,670,628.80	5	2,595,600.00	9	2,063,283.04	12	2,714,152.00
Total	5	70,905,138.80	5	67,712,400.00	9	53,968,192.04	12	64,766,806.36

Non-monetary Remuneration of the Management

Non-monetary remuneration is provided to executives in the form of a company car, gasoline, telephone, medical expenses, COVID-19 insurance, accident insurance, travel expenses, and accommodation expenses.

7.5 Personnel

Total employees of the Company and its subsidiaries is 959 persons, classified by type and level of employment as follow:

Number of Employees	Number of Employees		
	2019	2020	2021
Total employees (person)	844	964	959
Monthly	716	854	849
Daily	128	110	110
Number of employees by type of employment (persons)			
Full Time	718	791	835
Contracted	126	173	124
Number of employees by gender (person)			
Male	538	603	610
Female	306	361	349
Number of employees by other hiring (persons)			
Disabled	2	7	8
Elderly	19	21	8
Number of employees by employee level (person)			
Management	34	38	41 ¹⁾
Manager	60	65	71
Supervisor	88	114	117
Staff	421	476	509
Operator	241	271	221
Number of successful recruiting of employees (persons)	246	215	217
Management	5	4	4
Manager	15	19	25
Supervisor	31	29	17
Staff	130	158	165
Operator	65	5	4
Employee turnover rate (%)	2.23	1.39	1.63

¹⁾ Including 14 executives as listed in section 7.4.1



The Company and its subsidiaries classify employees according to the core business as follows:

Employee Level	Renewable Energy Business Group (Persons)	Engineering And Turnkey Business Group (Persons)	High-Voltage Equipment Business Group (Persons)	Ecosystem Business Platform and Innovation Business Group (Persons)	Cannabis Business Group (Persons)	Total (Persons)
Executives	56	15	30	8	3	112
Operation employees	339	114	135	15	23	626
Employees at Head Office	110	13	97	-	1	221
Total	505	142	262	23	27	959

Employees Remuneration and Type of Remuneration

In 2021, the Company and its subsidiaries paid the monetary remuneration to employees (excluding executives as defined in section 7.4.3), including salary, bonus, and other remuneration such as provident fund, in a total amount of THB 398,777,206.77, as follows:

Unit : Baht	2019	2020	2021
Salary	259,855,863.20	317,177,396.39	326,643,953.03
Bonus	44,731,866.32	41,515,350.97	58,905,240.77
Provident fund	9,472,229.61	11,633,785.30	13,228,012.97
Total	314,059,959.13	370,326,532.66	398,777,206.77

Non-Monetary Remuneration of Employees

The Company provides non-monetary remuneration to employees in the form of gasoline, telephone, medical, COVID-19 insurance, accident insurance, travel, and accommodation expenses.

Provident Fund

A provident fund (PVD) is a fund created by employees and employers. The fund's funding comes from money that employees who voluntarily apply to be Members of the PVD fund voluntarily contribute a portion called "Employee's Contributions" and the "Employer" voluntarily contribute a portion called "Employer's contributions" on a monthly basis continuously to promote long-term savings and benefits for employees in their retirement years. This is a type of retirement benefit provided to employees. The Company has established the criteria to apply with provident fund membership that the applicant must be placed as a permanent employee. The Company has set the employer contribution rate at 3%, 5%, or 7%, depending on the member's deposit rate.

These funds will be invested by professionals known as the "Management Company," SCB Asset Management Company Limited, and the profits will be distributed to fund members in proportion to their investment in the fund. The fund will not pay interest or dividends to members, but will accumulate funds that will be returned to members upon "Membership Termination." Members will be unable to withdraw a portion of their funds because the purpose of the provident fund is to accumulate long-term savings for use after retirement.

Investment policies are consistent and appropriate for members' needs, such as age, expected return, and willingness to accept risk. Members may select investment plans that are appropriate for their own investment, which is a life path balance investment policy that adjusts the ratio of low-risk assets (debt instrument) to high-risk growth assets (Equity Dividends) in proportion to each of the 4 investment plans as follows:

Investment plan	Investment Policy
<input type="checkbox"/> Plan 1	Debt Instrument: 90%, Equity Dividend: 10% (PVDMPFFI 90% PVDMEQDV 10%)
<input type="checkbox"/> Plan 2	Debt Instrument: 70%, Equity Dividend: 30% (PVDMPFFI 70% PVDMEQDV 30%)
<input type="checkbox"/> Plan 3	Debt Instrument: 50 %, Equity Dividend: 50 % (PVDMPFFI 50% PVDMEQDV 50%)
<input type="checkbox"/> Plan 4	Debt Instrument: 20%, Equity Dividend: 80% (PVDMPFFI 20% PVDMEQDV 80%)

Note: Members can change their contribution rate and investment plan once a year by giving notice and completing documents within 1-15 January of each year in order to the adjustment to take effect in January of the same year.

Upon termination of membership, the member is entitled to receive the full amount of money they have contributed, as well as any benefits derived from employer and employee contributions in accordance with the terms specified in the "Fund Regulations." Members will receive contributions in addition to the benefit of 100% contributions in the following circumstances:

1. Deceased
2. Retirement
3. Sick and incapacity to work
4. Insane, incompetent or semi-incompetence
5. Dissolution of the Fund
6. Disability
7. Employer's liquidation

In the case of "termination of membership" due to resignation from the Company, members may continue to collect money in the same manner, such as by transferring funds from the former employer's fund to the new employer's fund or by transferring funds to a mutual fund established particularly to receive provident fund transfers (RMF for PVD). This continued savings will provide members with sufficient funds for a comfortable retirement. The members may elect to receive the fund in the form of a cashier check payable to their name. The following conditions apply to the payment of contributions and benefits upon resignation from the Company:

Membership	Percentage of Contributions and Benefits from Contributions
Less than 1 year	0
1 year but less than 2 years	20
2 Years but less than 3 years	40
3 Years but less than 4 years	60
4 Years but less than 5 years	80
5 years or more	100

Ratio of employees enrolled in the Company's provident fund

Company	Number of enrolled employees (person)	Ratio of enrolled employee to all employees (percent)
Gunkul Engineering Public Company Limited	511	61.20

Personnel Development

The Company has a continuous policy for personnel and potential development to support employees in growing within the organization and to ensure happiness of employees at all levels by encouraging them to create works and self-development together with the organization.

The Company has developed a human resource development plan based on the competency and performance assessment (KPIs), in which the data will be used for analyzing the curriculum for personnel development, and training plans for personnel at all levels. The Company has a policy regarding training for personnel at various levels as follows:

Management The Group emphasizes the management to clearly understand and capable of managing the organization, as well as understand the organization's vision, targets, and strategies in order to determine an integrated corporate strategy for the Group and to enhance the Group's competitive advantages by engaging in a variety of high-level management development courses, including work planning courses, strategic planning courses, special knowledge training, overseas field trips, seminars, and management courses in a variety of related fields, etc.

Department Head The Group focuses on creating development in preliminary management skills and knowledge relevant to job duties in order to enable Department Head to fulfil tasks in accordance with the organization's strategic plans and apply to the line-of-command employees. Training sessions on a variety of topics, including leadership, teamwork, basic time management, and skill assessment, etc, are provided.

Employee The Group requires the employees to have knowledge and understanding of their responsibilities, as well as the ability to apply that knowledge and understanding on their work. The training courses will emphasize job skills and those associated with the work environment, such as introductory courses in work presentation, knowledge of operational regulations, 5S training, suggestion activity training, and safety at work training, among others.

The Company has consistently promoted employees' knowledge and potential development in order for employees to possess the necessary skills, knowledge, and expertise in work they are responsible for.

For management structure policy, the Company has a policy to consider appointing or promoting capable employees on annual basis in accordance with the Career Path program, which includes encouraging employees to participate in work quality improvement continuously through activities such as expressing opinions for work development and having a Skills Test.

Concerning the directors and top executives of the Company and the Group, the Board of Directors and the Company encourage participation in training with the Thai Institute of Directors Association (IOD) and other courses to improve directors and executives' knowledge and understanding of their roles, responsibilities, and skills, with the goal of continuously developing knowledge for maximum benefit of the organization.

Budget and Employees' Development Statistics

The Company has summarized the budget, employees' development statistics, and details on training courses as follow:

1. The summary of budget and employees' development statistics can be summarized as follow:

Details	2019	2020	2021
Training budget (million baht)	3.85	3.15	2.00
Number of courses	168	135	111
Number of employees attending the training	2,231	1,022	1,371
Average number of training hours/person	16.57	13.23	5.01

- Note**
- 1) Employee potential development for the year 2021, adjusted according to the epidemic situation of COVID-19
 - 2) Some training courses have been adapted to online formats.
 - 3) 14 executives, as listed in item 7.4.1, have attended at least one training course or seminar. (Details of executive credential are set out in Attachment 1) accounted for 100%
2. The details of employees training course in 2021 are disclosed in Attachment 7, Sustainability Report section 3.3.2, Employee Care and Retention.

Labor dispute

The Company had no labor dispute in the past three year



7.6 Other Important Information

7.6.1 List of persons assigned to be directly responsible for the Company Secretary, the person taking the highest responsibility in Finance and Accounting, the person supervising Accounting, Head of Internal Audit, and Head of Compliance of the Company.

Company Secretary

To ensure compliance with the principles of good corporate governance applicable to listed companies under the Securities and Exchange Act, the Board of Directors has appointed Ms. Chantra Jongjamareeseethong, Senior Vice President, Office of the Chief Executive Officer, to be Company Secretary. The details of appointment, credential, as well as duties and responsibilities according to the Company Secretary charter are disclosed in Attachment 1.

The person taking the highest responsibility in Finance and Accounting

Mr. Thitipong Techaratanayuenyong, Chief Financial Officer, has been appointed by the Company to be a person taking highest responsibility in Finance and Accounting, as charged with qualifications and conditions prescribed by the Securities and Exchange Commission and the Stock Exchange of Thailand. The profile and credential are disclosed in Attachment 1.

The person supervising accounting

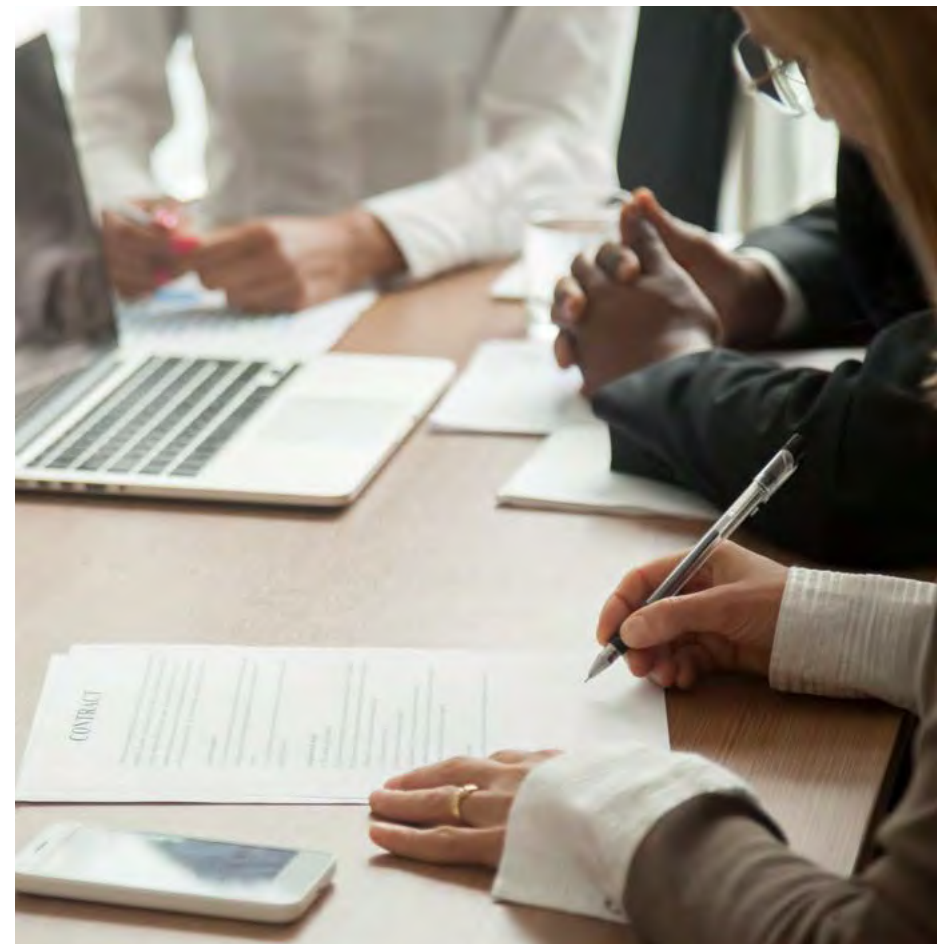
Ms. Suttirat Tangnorakul, Senior Vice President, Accounting and Finance, has been appointed by the Company to be a person supervising accounting, as charged with qualifications and conditions prescribed by the Notification of Department of Business Development. The profile and credential are disclosed in Attachment 1.

Head of Internal Audit Unit

Mr. Tanetsiri Farkmitr, Vice President, Internal Audit, has been appointed by the Company to be Head of Internal Audit Unit. The profile and credential are disclosed in Attachment 3.

Head of Compliance Unit

Mr. Tanetsiri Farkmitr, Vice President, Internal Audit, has been appointed by the Company to be Acting Head of Compliance Unit. The profile and credential are disclosed in Attachment 3. The Company is currently recruiting responsible person for the above-mentioned position.



7.6.2 Head of Investor Relations

Mr. Thitipong Techaratanayuenyong, Chief Financial Officer, has been appointed by the Company to be Head of Investor Relations. Investors and general public may contact the Investor Relations Department at the following address:



Phone (66) 2 242 5800 Ext.5876



Email ir@gunkul.com



Website <https://www.gunkul.com/th/investor-relations/information-inquiry/ir-contact>



7.6.3 Audit Fee

The Company paid audit fee, which consist of the annual audit fee and the quarterly fee for financial statements of the Company in the past fiscal year, in a total amount of THB 1,830,000.00 to KPMG Phoomchai Audit Co., Ltd. by having Mr. Waiyawat Kosamarnchaiyakij as its representative. The audit fee in 2021 and the past 2 years can be summarized as follows:

Year	Audit Fee (Baht)
2021	1,830,000.00
2020	1,830,000.00
2019	1,830,000.00

- Note 1**
- The Company had no other non-audit fee in the previous fiscal year.
 - The Company had no director or senior executive who was employed by or a partner of an external audit firm used by the Company in the preceding two years.

The audit fee for the subsidiaries, associated companies, and joint ventures, both domestically and internationally, can be summarized as follows:

Year	Audit Fee (Baht)
2021	23,762,302.00
2020	22,372,616.00
2019	19,026,000.00

- Note:** Subsidiaries, associated companies, and joint ventures, both domestically and internationally, had no other non-audit fee in the preceding year.

8. Report on Key Operating Performance Related to Corporate Governance

Report of the Board of Directors

Dear Shareholders of Gunkul Engineering Public Company Limited

The Board of Directors consist of 11 directors which has Dr. Gunkul Dhumrongpiyawut as Chairman of the Board of Directors (non-executive director), 5 independent directors, namely Dr.Chongrak Rarueysong, Assoc. Prof. Dr. Panarat Panmanee, Gen. Tarnchaiyan Srisuwan, Mr. Tarakorn Angpubate and Mr. Kris Chantanotoke, and 5 executive directors, namely Ms. Sopacha Dhumrongpiyawut, Dr. Somboon Aueatchasai, Ms. Naruechon Dhumrongpiyawut, Mrs. Areewan Chaloeindan and Mr. Chaloeimon Sricharoen

In 2021, the Board of Directors, held 10 meetings to perform duties and responsibilities in accordance with the Board of Directors' Charter which can be summarized as follow:

- 1) Established and reviewed the vision, mission, policy, charter, goals, and guidelines of the business plan in accordance with the Company's strategy and good corporate governance. This included supervising, monitoring, following up and ensuring continuous compliance.
- 2) Established measures and guidelines for good corporate governance, social responsibility, the environment, and anti-corruption; as well as any other applicable measures and guidelines for management with sustainability principles and transparency, by supervising, monitoring, and following up on the Company's operations to ensure compliance with anti-corruption and other applicable measures, including setting the solution guideline in the event of problems or obstacles.
- 3) Considered and approved the Company's budget and capital expenditure for significant projects as well as oversaw and monitored the budget couple with implementation of the projects to be in accordance with the plan, with the Company's shareholders', and all stakeholders' best interests as a main consideration.
In 2021, the Board of Directors approved an investment in the hemp and cannabis business which was considered a means of expanding the Company's new business base. This was also able to link to other industries and capable of generating consistent and sustainable returns for the Company.
- 4) Acknowledged the report of general information and the Company's financial information, reviewed the sufficiency and suitability of the financial reporting system, internal control system, and the Company's risk management; as well as, considered and endorsed the internal control system, and



Financial Statements for the fiscal year 2021 of the Company and its subsidiaries as reviewed by the Audit Committee and the Company's auditors representing financial position and operating results as correct, accurate, and complete in accordance with generally accepted accounting standards and sufficiently disclosed important information in the notes to the financial statements to report to the shareholders, stakeholders and investors correctly, completely, timely, equitably and as required by law.

- 5) Acknowledged the Audit Committee and sub-committees significant audit reports, including those from the Internal Audit Department, auditors, and advisors from various departments of the Company, and developed guidelines for correction and improvement in the event of a significant defect being discovered; as well as, managing related transactions in accordance with the criteria prescribed by law.
- 6) Conducted performance assessment of the Board of Directors on the individual basis, all sub-committees, and top executive (CEO) of the organization, and to use the result of the assessment as a guideline for improvement and establishing policies for continuous organizational development, together with disclosing the results to shareholders, stakeholders, and investors.

Dr. Gunkul Dhumrongpiyawut
Chairman of the Board of Directors
February 23, 2022

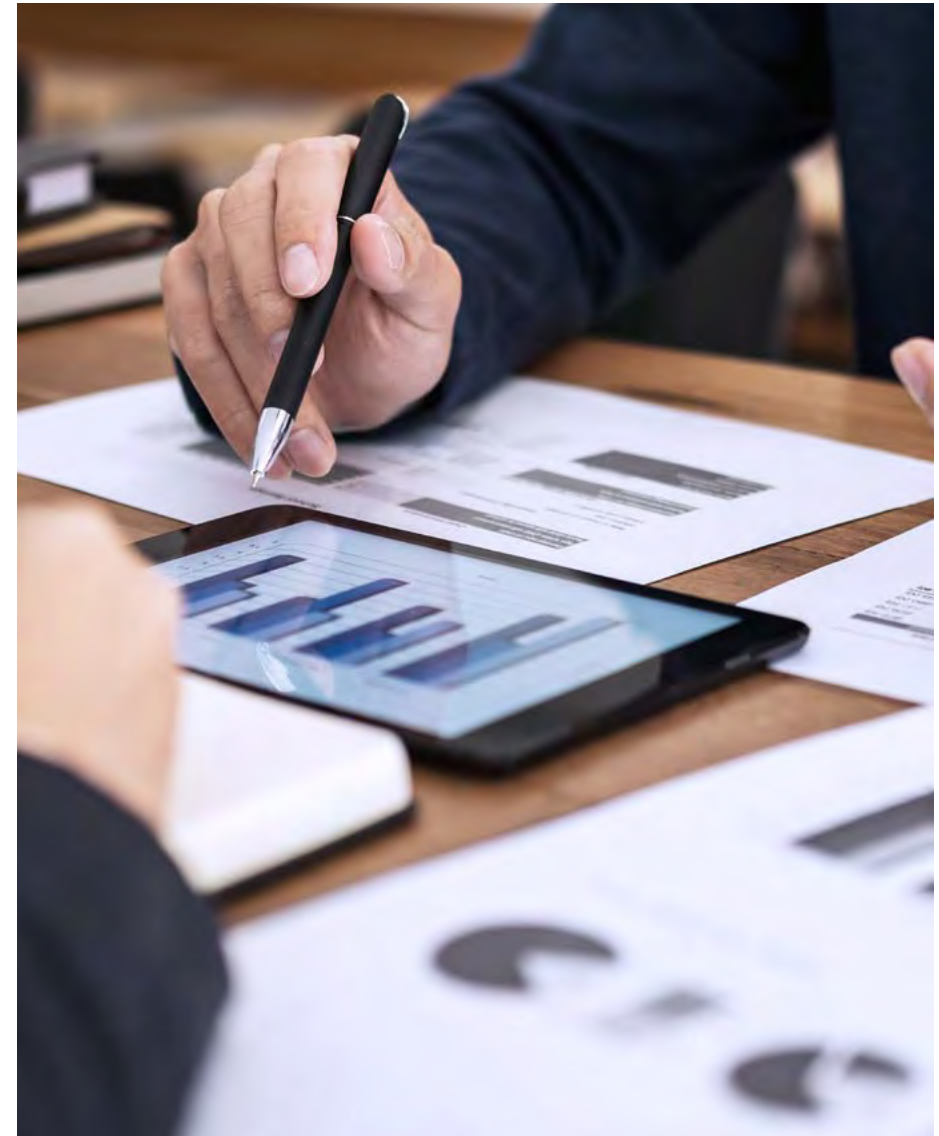
8.1 Summary of the Board of Directors' Performance in the Previous Year

Performance of the Board of Directors in the previous year can be summarized as follows:

1. Established and reviewed the vision, mission, policy, charter, goals, and guidelines of the business plan in accordance with the Company's strategy and good corporate governance. This included supervising, monitoring, following up and ensuring continuous compliance.
2. Established measures and guidelines for good corporate governance, social responsibility, the environment, and anti-corruption; as well as, any other applicable measures and guidelines for management with sustainability principles and transparency, by supervising, monitoring, and following up on the Company's operations to ensure compliance with anti-corruption and other applicable measures, including setting the solution guideline in the event of problems or obstacles.
3. Considered and approved the Company's budget and capital expenditure for significant projects as well as oversaw and monitored the budget couple with implementation of the projects to be in accordance with the plan, with the Company's shareholders', and all stakeholders' best interests as a main consideration.

In 2021, the Board of Directors approved an investment in the hemp and cannabis business which was considered a means of expanding the Company's new business base. This was also able to link to other industries and capable of generating consistent and sustainable returns for the Company.

4. Acknowledged the report of general information and the Company's financial information, reviewed the sufficiency and suitability of the financial reporting system, internal control system, and the Company's risk management; as well as, considered and endorsed the internal control system, and Financial Statements for the fiscal year 2021 of the Company and its subsidiaries as reviewed by the Audit Committee and the Company's auditors representing financial position and operating results as correct, accurate, and complete in accordance with generally accepted accounting standards and sufficiently disclosed important information in the notes to the financial statements to report to the shareholders, stakeholders and investors correctly, completely, timely, equitably and as required by law.
5. Acknowledged the Audit Committee and sub-committees significant audit reports, including those from the Internal Audit Department, auditors, and advisors from various departments of the Company, and developed guidelines for correction and improvement in the event of a significant defect being discovered; as well as, managing related transactions in accordance with the criteria prescribed by law.
6. Conducted performance assessment of the Board of Directors on the individual basis, all subcommittees, and top executive (CEO) of the organization, and use those evaluations information as a guideline for improvement and establishing policies for continuous organizational development, together with disclosing the results to shareholders, stakeholders, and investors.



8.1.1 Nomination, Development, and Performance Evaluation of the Board of Directors and Top Executive

The Nomination and Remuneration Committee has screened and nominated the most qualified individuals to serve as directors and top executive officers, taking into account the board skills matrix and the candidates' performance evaluations, gender, ethnic, religion, or any other characteristic is not restricted or discriminated against during this process. Directors and top executives must possess the qualifications, expertise, and abilities necessary to accomplish the Company's goals and strategies, as well as the ability to propel the Company forward and develop sustainably. They must also possess the competencies required of directors under applicable rules and legislation. The specifics are as follows:

1) Independent Director

The Company establishes criteria for nominating independent directors in accordance with the criteria set by Securities and Exchange Commission ("SEC") for nominating the Company's directors. The minimum qualification of the Independent directors defined by the SEC must meet the following criteria:

1. Holding not more than 0.75% of the total voting shares of the Company, parent company, subsidiaries and affiliates, major shareholders, or controlling person including the shareholding of persons related to the independent director.
2. Not currently be or never been the Company's executive director, employee, worker, salaried consultant, or controlling parties of the Company, parent company, subsidiary, affiliate, same-level subsidiary, major shareholders, unless such person has been discharged from the position at least 2 years prior to appointment as an independent director. However, that this restriction does not apply in the case of an independent director who previously served as a government officer or advisor to a government agency that is one of the major shareholders or controlling party of the Company.
3. Not by blood or legally registered such as being father, mother, spouse, siblings, and children, including spouses of the children of other directors, executives, major shareholders, or a person who will be nominated to serve as a director, executive, or controlling party of the Company or its subsidiary.
4. Not currently having or never had any business relationship with the Company, parent company, subsidiary, associated, major shareholder, or controlling person of the Company in a way that such relation may impede the person from having independent views, including not being or having been a significant shareholder or controlling person of another person who has a business relationship with the Company, parent company, subsidiary, associated, major shareholder, or controlling person of the Company, unless such person has been discharged from the position at least 2 years prior to appointment as an independent director.

Business relationship under the first paragraph includes the normal commercial transactions in the ordinary course of business of the Company, renting or renting out property, transaction relevant to assets or services, granting or obtaining financial assistance in the form of borrowing or lending, guaranteeing, and placing assets as collateral to secure debt including other transaction of similar nature resulting in the Company or the counterparty incur debt and liable to pay to the other party from 3% of the net tangible assets of the Company, or Baht 20 million or more, whichever is lower. The calculation of such debt obligation shall be in accordance with the method of calculating the value of the connected transaction according to the Notification the Capital Market Supervisory Board relating to connected transactions, provided that, only the debt obligation incurred within 1 year prior to the occurrence date of business relationship with that person shall be taken into account.

5. Not currently being or never been the auditor of the Company, parent company, subsidiary, associated, major shareholder, or controlling person of the Company. Also, the person shall not currently be or never been a significant shareholder, controlling person, or partner of the current auditing firm of which the auditor of the parent company, subsidiary, major shareholder, or controlling person of the Company is under association, unless such person has been discharged from the position at least 2 years prior to appointment as an independent director.
6. Not currently be or never been a professional service provider of any kind, including legal or financial advisory services, and receiving service fees in excess of Baht 2 million per year from the Company, parent company, subsidiary, associated, major shareholder, or controlling person of the Company, and not being a significant shareholder, controlling person or partner of that professional service provider, unless such person has been discharged from the position at least 2 years prior to appointment as an independent director.
7. Not currently a director appointed to represent the Company's directors, major shareholders or shareholders related to the Company's major shareholders.
8. Not currently be operating under similar business nature and significantly competes with the Company or its subsidiary; or not a significant partner of partnership, executive director, salaried worker, employee, or consultant; or holding more than 1% of the total voting shares of any other company operating under similar business nature and significantly compete with the Company or its subsidiary.
9. Not under any conditions that may impede the person from having independent views towards the Company's operations. After being appointed as an independent director, the independent directors may be assigned by the Board of Directors to make decisions on the operation of the Company, its parent company, subsidiary, associated, same-level subsidiary, major shareholder or controlling person of the Company with a decision in the form of a collective decision (Collective Decision).

2) Nomination of Directors and Top Executives

The Board of Directors has established the nomination and appointment process in accordance with the principles of good corporate governance based on transparency and accountability. The consideration process shall be as follows:

1. The Nomination and Remuneration Committee consider for the nomination of directors and/or the top executive of the Company according to the specified characteristics.
2. The Nomination and Remuneration Committee present biographies and qualifications to the Board of Directors for approval.
3. The Board of Directors consider and approve the appointment of directors.
4. If the nomination position is the position of a Company director who vacates office by rotation or appoints a Company's director to replace a director whose term is less than 2 months left, it shall be proposed to the shareholders' meeting for consideration.

The Company has a policy of utilizing a consulting firm (Professional Search Firm) or Director Pool to nominate new directors for the nomination and appointment process, and has effective criteria and nomination process based on knowledge, experience, and specific expertise as determined by a competency analysis (Board Skills Matrix), without discrimination, with consideration for equality, without regard for gender, race, religion, or age, for the organization's best interests.

Number of Directors

11 persons



Male directors

7 persons

Female directors

4 persons

Board of Directors

Executive Directors **5** persons

Non-Executive Directors **6** persons*

Independent Directors **5** persons



* including 5 independent directors

Board Skills Matrix

Industry and Operations	<div><div></div></div>	9 persons
International Business and Marketing	<div><div></div></div>	9 persons
Information Technology	<div><div></div></div>	5 persons
Strategic Planning and Risk Management	<div><div></div></div>	11 persons
Financial and Corporate Finance Management	<div><div></div></div>	8 persons
Accounting / Auditing	<div><div></div></div>	5 persons
Legal	<div><div></div></div>	3 persons
Human Resource and Talent Management	<div><div></div></div>	7 persons
Corporate Governance and Business Ethics	<div><div></div></div>	11 persons
Public Company Board Service and Governance	<div><div></div></div>	11 persons
Economic	<div><div></div></div>	10 persons

In addition, the Company has a policy to allow minority shareholders to nominate qualified persons to be considered for election as a director of the Company at the Annual General Meeting of Shareholders. The Company will disclose information via the portal of the Stock Exchange of Thailand so, that the shareholders are notified in advance of the meeting day.

3) Development of directors and top executives

The Company encourages directors and top executives to attend regular training sessions with the Thai Institute of Directors Association (IOD) and/or other curriculum, both internally and externally, to improve their knowledge and understanding of the roles, responsibilities, and skills of directors and executives. This is the process of continual knowledge development for the benefit of the organization's development.

In 2021, the Board of Directors has encouraged and supported the Company's directors and senior executives to attend training courses or seminars to broaden their knowledge of continuous work operations, which can be summarized as follows:

1. 9 out of 11 directors of the Company attended the training course or seminar, representing 81.82% of the total number of directors. (Details of the directors as shown in Attachment 1).
All directors have completed Company Directors Course or other courses offered by the Thai Institute of Directors Association (IOD) or other institutions representing 100% of total directors.
2. 14 executives, as listed in item 7.4.1, have attended at least one training course or seminar (Details of executive credential are set out in Attachment 1) accounted for 100%

4) Assessment of the Board of Directors, Sub-Committees, Top Executive, Company Secretary and Secretary to the Audit Committee .

The Company conducts performance assessment for the Board of Directors and all sub-committees to be used for performance consideration and as a guideline for development and improvement, ensuring that the Board of Directors' performance covers all aspects and consistent with the nature of the Company's business operations. The self-assessment of the Board of Directors shall be on an individual and group basis while all sub-committees' self-assess shall be on a group basis. Performance assessment shall be conducted annually. The assessment's procedure and criteria shall cover the following points:

Assessment Procedure

Self-assessment Procedure of the Board of Directors, Sub-Committees, Chief Executive Officer (CEO), Company Secretary and the Secretary to the Audit Committee

1. The Board of Directors establishes a self-assessment form for each member of the Board of Directors on an individual and group basis, for sub-committees on a group basis, a self-assessment form for the Chief Executive Officer's (CEO), who is the organization's top executive, the Company Secretary, and Secretary to the Audit Committee, which shall be completed once a year. The self-assessment form shall be used to determine whether an individual has adhered to the policy and/or best practices, as well as to review and improve the performance over the previous year.
2. The Board of Directors approves and reviews the Board of Directors', Chief Executive Officer's (CEO's), Company Secretary's, and Audit Committee's performance assessment forms. The sub-committee shall approve and review the self-assessment form used by their group's committees to ensure that it is accurate, complete, and meets the regulatory agency's criteria.
3. The Company Secretary submits a self-assessment form to the Board of Directors on behalf of the Board of Directors, the Chief Executive Officer (CEO), the Company Secretary, and Secretary to the Audit Committee. Secretary to each sub-committee's submits self-assessment form of its group committee within December of each year.
4. The directors, CEO, and Managing Director complete and return the self-assessment form to the Company Secretary and each group's sub-committee completes the self-assessment form and submits it to the secretary of the group committee within January of each year.
5. The Company Secretary/Secretary to the sub-committees summarizes the assessment results and incorporates them into the Board of Directors' meeting agenda so that the Board of Directors can analyze the performance evaluation result of the Board of Directors, sub-committee, Chief Executive Officer (CEO), Company Secretary, and Secretary to the Audit Committee.
6. The Secretary of the Board of Directors/Secretary to the sub-Committees presents analysis findings and additional Board of Directors opinions in order to develop a plan for improvement.

Assessment criteria and topics

1. Board of Directors' self-assessment form

Group	Individual
1. Structure and Qualifications of the Board of Directors	1. Structure and Qualifications of the Board of Directors
2. Roles, duties, and responsibilities of the Board of Directors	2. Roles, duties, and responsibilities of the Board of Directors
3. Board of Directors' Meeting	3. Board of Directors' Meeting
4. Responsibilities of the Company's Directors	
5. Relationship with Management	
6. Self-development of Directors and Executive	

2. Self-assessment form of sub-committees

Audit Committee

Group
1. Structure and Qualifications of the Audit Committee
2. Roles, duties, and responsibilities of the Audit Committee
3. Audit Committee's Meeting
4. Relationship with Management
5. Self-development of the Audit Committee

Other sub-committees, i.e. Risk Management Committee, Nomination and Remuneration Committee, Good Corporate Governance Committee, and Executive Committee

Group
1. Structure and Qualifications of the committee
2. Roles, duties, and responsibilities of the committee
3. Meeting of the committee

3. Self-Assessment Form of Top Management

Individual
Section 1 Progress of the Plan
Section 2 Performance Measurement
<ol style="list-style-type: none"> Leadership Strategy establishment Strategy implementation Financial planning and performance Relationship with the Board of Directors External Relationship Management and relationship with personnel Succession plan Product and service knowledge Personal characteristic
Section 3 Development of Chief Executive Officer
<ol style="list-style-type: none"> Significant strengths that the CEO should maintain Issues that the CEO should further develop in the next year



4. Self-Assessment Form of Company Secretary and the Secretary to the Audit Committee

Individual
1. Qualifications of Company Secretary / Secretary to the Audit Committee
2. Roles, Duties and Responsibilities of Company Secretary / Secretary to the Audit Committee
<p>To enable the Board of Directors, sub-committees, Chief Executive Officer, Company Secretary, and Secretary to the Audit Committee to compare assessment results by topic or by year. The scoring method as follows (full score of 4 points or equivalent to 100 percent):</p>
<p>0 = Strongly disagree or take no action in that matter</p> <p>1 = Disagree or take minor action in that matter</p> <p>2 = Agree or take reasonable action in that matter</p> <p>3 = Relatively agree or take good action in that matter</p> <p>4 = Strongly agree or take excellent action in that matter</p>

Each self-assessment questionnaire includes the following assessment criteria expressed as a percentage of the total score as follows:

Score range (percentage)	Assessment results
Over 90	Excellent
More than 80 – 90	Good
More than 70 - 80	Fair
Less than 70	Needs Improvement

In 2021, the Board of Directors' and each director's performance evaluations, as well as the results of all sub-committees, including the Audit Committee, the Risk Management Committee, the Nomination and Remuneration Committee, the Good Corporate Governance Committee, and the Executive Committee, was resulted as excellent.

5) Director Orientation

The Company realizes the importance of new directors performing their duties by requiring all new directors to attend “**Orientation for new directors**” at the Company's discretion. The Company will prepare information and explanations about the Company's business, as well as other pertinent information, in order for the directors who have been appointed in the position of in the Company are acknowledged. There are significant contents, including the roles, duties, and responsibilities of director and each group of sub-committee, the holding and trading of directors' securities, reporting on directors' benefits, meeting administration, disclosure of information, liaison with management, remuneration, and director and sub-committee's privileges, table of authority, general information about the Company, Audit Committee's Charter, Internal Audit Committee's Charter, and the scope of the Audit Committee's and Internal Audit's duties and responsibilities and related-party transaction measure.

8.1.2 Directors' Meeting Attendance and Remuneration Payment of each Director

Meeting attendance of the Board of Directors and Sub-committees for the year 2020 and 2021

No. Name			Board of Directors		Audit Committee		Risk Management Committee		Nomination and Remuneration Committee		Good Corporate Governance Committee		Executive Committee	
			Year 2020 (9 times)	Year 2021 (10 times)	Year 2020 (5 times)	Year 2021 (5 times)	Year 2020 (6 times)	Year 2021 (4 times)	Year 2020 (2 times)	Year 2021 (2 times)	Year 2020 (6 times)	Year 2021 (4 times)	Year 2020 (29 times)	Year 2021 (32 times)
Board of Directors and Sub-committees														
1	Dr. Gunkul	Dhumrongpiyawut	9/9	10/10										
2	Dr. Chongrak	Rarueysong ¹⁾	9/9	10/10	5/5	5/5					6/6	4/4		
3	Assoc. Prof. Dr. Panarat	Panmanee ¹⁾	9/9	10/10	5/5	5/5								
4	Gen. Tarnchaiyan	Srisuwan ¹⁾	9/9	10/10										
5	Mr. Tarakorn	Angpubate ¹⁾	9/9	10/10	-	5/5	6/6	4/4	2/2	-				
6	Mr. Kris	Chantanotoke ¹⁾	9/9	10/10										
7	Ms. Sopacha	Dhumrongpiyawut	9/9	10/10			6/6	4/4					29/29	32/32
8	Dr. Somboon	Aueatchasai	9/9	10/10									29/29	32/32
9	Ms. Naruechon	Dhumrongpiyawut	8/9	10/10									29/29	32/32
10	Mrs. Areewan	Chaloemdan	9/9	10/10									29/29	32/32
11	Mr. Chaloempon	Sricharoen	9/9	10/10									29/29	32/32
12	Mr. Somchai	Trairatanapirom ¹⁾					6/6	4/4			6/6	4/4		
13	Mr. Thitipong	Techaratanayuenyong					6/6	4/4						
14	Pol.Maj.Gen. Visit	Sukarasep ¹⁾							-	2/2				
15	Mr. Decha	Chooligorn ¹⁾							2/2	2/2				
16	Mr. Hathai	Uthai ¹⁾							2/2	2/2				
17	Mrs. Somluk	Kanuenghet							2/2	2/2				
18	Mr. Pongtep	Thithapand ¹⁾									6/6	4/4		
Directors who resigned/completed their terms during the year 2020 and received remuneration														
1	Dr. Djitt	Laowattana ¹⁾	8/8	-	5/5	-								

Note ¹⁾ Independent director

Board of Directors' and Sub-Committees' Remuneration

The Company has set a clear and transparent policy on directors' remuneration. The Nomination and Remuneration Committee will consider and propose the directors' remuneration to the Board of Directors for a further propose to the Annual General Meeting of Shareholders for approval. The directors' remuneration is at an appropriate level compared to the directors' remuneration of listed companies in the energy industry, which is comparable to that of the Company's business. The Board of Directors has set the criteria, methods of consideration and the components of the remuneration as follows:

1. Criteria and methods of consideration

The Board of Directors has assigned the Nomination and Remuneration Committee to be responsible for proposing the remuneration of all committees for submission to the Board of Directors for consideration and propose to the Annual General Meeting of Shareholders for approval. The criteria for consideration are as follows:

- Roles, scope, authority, duties and responsibilities of the Board of Directors and each sub-committee
- The collective and individual performance of the committees
- The Company's operational performance by considering based on type and size of the Company's business
- The remuneration survey, in comparison with other companies in the same industry

2. Components of remuneration

To ensure compliance with the obligations, responsibilities, and performance of each director, the components of directors' remuneration is established and divided into 2 parts as follows:

- Meeting Allowance

Position	Board of Directors	Audit Committee	Good Corporate Governance Committee	Risk Management Committee	Nomination and Remuneration Committee	Executive Committee
Chairman	25,000	25,000	20,000	20,000	20,000	7,500
Director	20,000	18,000	15,000	15,000	15,000	5,000
Secretary	8,000	8,000	8,000	8,000	8,000	-

Note: In case of independent directors have been appointed as the Chairman of each committee, such person shall be entitled to receive meeting allowance for only one highest position held in each committee.

- Annual Remuneration

Position	Board of Directors	Audit Committee	Good Corporate Governance Committee	Risk Management Committee	Nomination and Remuneration Committee	Executive Committee
Chairman	750,000	300,000	100,000	100,000	100,000	500,000
Director	300,000	200,000	100,000	100,000	100,000	200,000
Secretary	50,000	50,000	25,000	25,000	25,000	-
Company Secretary	100,000	-	-	-	-	-

Note: In case independent directors have been appointed as the Chairman of each committee, he/she shall be entitled to receive annual remuneration of the committee for only one highest position held in each committee.

The maximum limit for all types of remuneration is set as follows:

Position	Maximum amount of not exceeding (Baht/person/year)
Chairman of the Board of Directors	3,500,000
Chairman of the Executive Committee	2,500,000
Chairman of all sub-committees (except Chairman of the Board of Directors and Chairman of the Executive Committee)	1,500,000
Chief Executive Officer	1,000,000
Executive Director	800,000
Other member of sub-committees (except Executive Directors)	400,000

If a director holds more than one position, the remuneration shall be calculated from the aggregate amount of remuneration of all types, including meeting allowance and annual remuneration but not exceeding the cap or maximum rate applicable to the director's highest position. If a director holds more than one position, the remuneration shall be paid at the maximum rate applicable to the highest position held. Total annual remuneration for all types and positions shall not exceed THB 18,000,000/ annum.

3. Remuneration Determination Procedure

The Board of Directors has established the procedure for determining the remuneration that is consistent with good corporate governance principles and adheres to the transparency and auditability by outlining the steps of consideration as follows:

- 1) The Nomination and Remuneration Committee considers and determines the directors' remuneration, which is divided into 2 components: 1) meeting allowance 2) annual remuneration.
- 2) The Nomination and Remuneration Committee proposes the aforementioned remuneration to the Board of Directors for approval.
- 3) The Board of Directors approves and proposes to the Annual General Meeting of Shareholders for approval.
- 4) Annual General Meeting of Shareholders considers and approves the remuneration.

4. Remuneration for the year 2020 and 2021

In 2020 and 2021, the Company had the directors' remuneration, both monetary and non-monetary, as follows:

1. Monetary Remuneration: The total amount of directors' remuneration was THB 10,153,800.00 in 2020 and THB 9,990,000 in 2021.

No. List			Remuneration for the year 2020 ^{2) 3)} (Meeting Allowance and Annual Renumeration)			Remuneration for the year 2021 ^{2) 3)} (Meeting Allowance and Annual Remuneration)		
			Board of Directors	Sub-committees	Total Remuneration	Board of Directors	Subcommittees	Total Remuneration
Board of Directors and Sub-committees members								
1	Dr. Gunkul	Dhumrongpiyawut	950,000.00	-	950,000.00	975,000.00	-	975,000.00
2	Dr. Chongrak	Rarueysong ¹⁾	444,000.00	495,000.00	939,000.00	480,000.00	585,000.00	1,065,000.00
3	Assoc. Prof. Dr. Panarat Panmanee ¹⁾		444,000.00	290,000.00	734,000.00	480,000.00	290,000.00	770,000.00
4	Gen. Tarnchaiyan	Srisuwan ¹⁾	444,000.00	-	444,000.00	480,000.00	-	480,000.00
5	Mr. Tarakorn	Angpubate ¹⁾	444,000.00	229,800.00	673,800.00	480,000.00	470,000.00	950,000.00
6	Mr. Kris	Chantanotoke ¹⁾	444,000.00	-	444,000.00	480,000.00	-	480,000.00
7	Ms. Sopacha	Dhumrongpiyawut	444,000.00	672,000.00	1,116,000.00	480,000.00	660,000.00	1,140,000.00
8	Dr. Somboon	Aueatchasai	542,000.00	200,000.00	742,000.00	602,000.00	200,000.00	802,000.00
9	Ms. Naruechon	Dhumrongpiyawut	426,000.00	200,000.00	626,000.00	480,000.00	200,000.00	680,000.00
10	Mrs. Areewan	Chaloemdan	444,000.00	200,000.00	644,000.00	480,000.00	200,000.00	680,000.00
11	Mr. Chaloempon	Sricharoen	444,000.00	200,000.00	644,000.00	480,000.00	200,000.00	680,000.00
12	Mr. Somchai	Trairatanapirom ¹⁾	-	332,000.00	332,000.00	-	340,000.00	340,000.00
13	Mr. Thitipong	Techaratanayuenyong	-	233,000.00	233,000.00	-	217,000.00	217,000.00

2. Non-monetary Compensation	Year 2020	: None
	Year 2021	: None

Directorship Holding in 2021

No.	Name		Total number of years in current position (December 31, 2021)							Date of resignation / due date	Number of months in position	
			Position Starting Date	Board of Directors	Audit Committee	Risk Management Committee	Nomination and Remuneration Committee	Good Corporate Governance Committee	Executive Committee		Year 2020 (month)	Year 2021 (month)
Board of Directors and Sub-committees												
1	Dr. Gunkul	Dhumrongpiyawut	10 August 2009 ²⁾	12 years 5 months							12	12
2	Dr. Chongrak	Rarueysong ¹⁾	3 July 2015 / 3 July 2015 / 3 July 2558 ³⁾	6 years 6 months	6 years 6 months			6 years 6 months			12	12
3	Assoc. Prof. Dr. Panarat	Panmanee ¹⁾	20 April 2018 / 14 May 2018 ⁶⁾	3 years 8 months	3 years 8 months						12	12
4	Gen. Tarnchaiyan	Srisuwan ¹⁾	18 April 2019	2 years 8 months							12	12
5	Mr. Tarakorn	Angpubate ¹⁾	20 April 2018 / 14 December 2020 / 20 February 2019 ⁵⁾	3 years 8 months	1 year 1 month	2 years 10 months					12	12
6	Mr. Kris	Chantanotoke ¹⁾	6 November 2019	2 years 2 months							12	12
7	Ms. Sopacha	Dhumrongpiyawut	10 August 2009 / 10 August 2009 / 10 August 2009 ²⁾	12 years 5 months		12 years 5 months			12 years 5 months		12	12
8	Dr. Somboon	Aueatchasai	9 June 2010 ³⁾ / 10 August 2009 ⁷⁾	11 years 7 months					12 years 5 months		12	12
9	Ms. Naruechon	Dhumrongpiyawut	10 August 2009 / 10 August 2009 ²⁾	12 years 5 months					12 years 5 months		12	12
10	Mrs. Areewan	Chaloemdan	August 10, 2009 / August 10,2009 ²⁾	12 years 5 months					12 years 5 months		12	12
11	Mr. Chaloepon	Sricharoen	August 10, 2009/ August 10, 2009 ²⁾	12 years 5 months					12 years 5 months		12	12
12	Mr. Somchai	Trairatanapirom ¹⁾	June 22, 2015 / February 25, 2013 ⁴⁾			6 years 6 months		8 years 10 months			12	12
13	Mr. Thitipong	Techaratanayuenyong	November 12, 2014			7 years 2 months					12	12

No.	Name	Total number of years in current position (December 31, 2021)							Date of resignation / due date	Number of months in position	
		Position Starting Date	Board of Directors	Audit Committee	Risk Management Committee	Nomination and Remuneration Committee	Good Corporate Governance Committee	Executive Committee		Year 2020 (month)	Year 2021 (month)
14	Pol.Maj.Gen. Visit Sukarasep ¹⁾	February 20, 2019				2 years 10 months				12	12
15	Mr. Decha Chooligorn ¹⁾	November 9, 2012				9 years 2 months				12	12
16	Mr. Hathai Uthai ¹⁾	November 12, 2015				6 years 2 months				12	12
17	Mrs. Somluk Kanuenghet	August 10, 2009				12 years 5 months				12	12
18	Mr. Pongtep Thithapand ¹⁾	February 25, 2013					8 years 10 months			12	12
Directors who resigned/completed their terms during the year 2020 and received remuneration											
1	Dr. Djitt Laowattana ¹⁾	August 18, 2014 ³⁾	-	-					December 13, 2020	11.5	-

Note

- ¹⁾ Independent director
- ²⁾ August 10, 2009 was the date on which GUNKUL transformed into a public company. On such date, the Company had registered with the Department of Business Development for the first set of Board of Directors to take the position as the directors of the public company.
- ³⁾ The date of registration as a director of the Company as registered with Department of Business Development.
- ⁴⁾ The date of holding the position as member of the Good Corporate Governance Committee (currently holding the position of the Chairman of the Good Corporate Governance Committee) and member of the Risk Management Committee, respectively.
- ⁵⁾ The date of holding the position as member of the Board of Directors, member of the Audit Committee and Chairman of the Risk Management Committee, respectively.
- ⁶⁾ The date of holding the position as member of the Board of Directors and member of the Audit Committee, respectively
- ⁷⁾ The date of holding the position as member of the Board of Directors and member of the Executive Committee, respectively

Changes of Director in 2021

In 2021, the Company's Annual General Meeting of Shareholders held on April 28, 2021, approved the election of directors who have completed their terms to serve another term as the Company's directors, totaling 4 persons as follows:

1. Assoc. Prof. Dr. Panarat Panmanee
2. Mr. Tarakorn Angpubate
3. Dr. Somboon Aueatchasai
4. Mrs. Areewan Chaloeindan

8.1.3 Governance of Subsidiaries and Associated Companies

(1) Mechanisms to govern, manage and be responsible for the operation in subsidiaries and associated companies as approved by the Board of Directors

The Company has established policy regulation in case of nominating and using voting right to elect a person to be the director of subsidiaries and associated companies that it shall be approved by the Board of Directors. The person appointed as a director of subsidiaries or associated companies is obliged to act in the best interests of the subsidiaries and associated companies. The Company requires that the appointed person must be approved by the Board of Directors prior to voting or exercising their voting rights on important matters at the same level as those required by the Board of Directors. Assigning director to act as the representative of such subsidiaries and associated companies is consistent with the Company's shareholding proportion. Additionally, in case of the subsidiary, the Company prescribes regulations for persons appointed by that Company to ensure that the subsidiary has regulations on related party transactions, acquisition or disposition of assets, and must supervise the suitability and sufficiency of the internal control system or any other important transactions of such company to be complete and accurate; adhere to the rules governing information disclosure; and carry out the above transactions in the same manner as stated in the Company's practice; supervise the collection of data and recording of the subsidiary's accounts to facilitate the Company for inspection and gather information for preparing consolidated financial statements in a timely manner.

Summary of the procedure and scope of authority are as follows:

1. Sending representatives of the Company to be directors or executives in subsidiaries or associated companies shall be in accordance with the shareholding or as agreed. The number and person representing the Company shall be approved by the Board of Directors
2. Scope of authority and responsibility of directors and executives representing the Company in subsidiaries or associated companies
 - 1) Establishing important policies of subsidiaries and associated companies shall be in accordance with the framework of the Company's policies.
 - 2) Performing any actions of subsidiaries and associated companies shall be in compliance with the Article of Association of subsidiaries and associated companies, and shareholders' agreement (if any).
 - 3) The implementation of the important agenda of subsidiaries and associated companies shall be proposed to the Board of Directors' meeting and/or the shareholders' meeting of the Company (as the case may be) for approval before proceeding.

- 4) The Company has controlling procedure regarding the operation of important matters for governing the Company, subsidiaries and associated companies, to be based on the same standards and formats, which include disclosure on financial information and performance, related party transactions, acquisition or disposition of assets, other important transactions, appropriate and adequate internal control system, as well as the consideration in the matter of capital increase, capital reduction and dissolution of subsidiaries and associated companies.

The above-mentioned procedure also covers Holding Company.

(2) Disclosure of agreements between the Company and other shareholders in the management of Subsidiaries and associated companies (Shareholders' Agreement)

In the development of some new projects, the Company has developed and implemented projects with business partners in which a new joint venture company will be set up to specifically develop and own the project. In the management of the aforementioned joint venture company, it is often a commercial practice in which venture capitalists enter into a shareholder agreement to determine the rights, duties, and management of the joint venture company.

The Company's shareholder agreement contains brief agreements on issues such as the shareholding portion; the agreement on the duties of managing a joint venture company; agreement on the right to appoint directors; voting at the board of directors meeting and matters requiring approval from the board of director; agreement on voting rights at the shareholders meeting and matters requiring approval from the shareholders meeting; right to dividend and the right to receive capital back; right of first refusal and tag along right in the event that an agreement cannot be reached and the dissolution of the joint venture. All agreements will also appear in the Articles of Association of subsidiaries and associated companies to enable other parties to review.



8.1.4 Monitoring to Ensure Compliance with Policies and Corporate Governance Practices

(1) Prevention of conflicts of interest

The Company requires persons who have a conflict of interest or an interest in the transaction under consideration to notify the Company of their relationship or stake in the transaction. If the person is a director, such person must abstain from decision-making and have no authority to approve the transactions.

If there is a conflict of interest transaction that is not a general commercial condition, it must be proposed to the Board of Directors Meeting for approval and must fulfil the criteria established by the Capital Market Supervisory Board, the Securities and Exchange Commission, the Stock Exchange of Thailand, or any other applicable regulatory authority.

(2) Use of insider information for personal benefit

The Company has established policies and procedures for supervising directors and executives regarding the use of insider information for personal benefit, which are disclosed in Article 6.1.2 of Good Corporate Governance Policy, Policy and Practice Guideline concerning shareholders and stakeholders, Re: “Equal Treatment of Shareholders” and Re: “Supervision on the Use of Insider Information”.

(3) Anti-Corruption

The Company enforces anti-corruption policy, whistleblowing or complaints as disclosed on the Company’s website in which directors, executives, employees, and workers are forbidden to act in any way related to corruption in any form, neither directly nor indirectly, whether as a recipient, a giver, or offer a bribe to a person or organization involved. The policy and practice guidelines are regularly reviewed annually. To comply with changes in business, rules, regulations and legal requirements, the Company has signed the declaration of intent for the Thai Private Sector Collective Action Against Corruption (CAC) and has been certified as a member of the project since 2017 and has been certified as a member for the second time in a consecutive year in 2020. The Company also communicate and advertise to employees to create knowledge, understanding and cultivate culture and corporate values against corruption in every channel, and able to convey the essence of this policy to the stakeholders. In addition, the Company also encourages business partners to join the network and join the CAC as well.

(4) Whistleblowing

The Company has provided channels for complaints and whistleblowing if there is any doubt or have found any wrongdoing/violators of the following:

- 1 Discover an act of corruption relating to the Group directly or indirectly, such as finding a person in the organization bribery/grafting government officials or private agencies;
- 2 Discover an act that violates the procedures of the Group’s practice that affects the internal control system of the Company to the point where it can be assumed to be a channel for corruption;

- 3 Discover an act that results in the Group losing benefit and jeopardizes the Group’s reputation; and
- 4 Discover an act that is unlawful, immoral, and against business ethics.

Channels for Complaints and/or Reporting of Corruption Clue



Contact the Audit Committee:
audit_committee@gunkul.com



Website: www.gunkul.com
In the section “Whistle Blowing Form”



Send Sealed Postage to the Chairman of the Audit Committee
Gunkul Engineering Public Company Limited
1177 Pearl Bangkok Building, 8th Floor,
Phaholyothin Rd. Phayathai Subdistrict,
Phaya Thai District, Bangkok 10400



Whistleblowing and complaint boxes at the company
(Open the box by the Audit Committee and/or Secretary to the Audit Committee)

In 2021, the Company conducted a test to employees regarding the knowledge of anti-fraud and corruption, which resulted in a 100 percent pass rate. Additionally, new employees received training on anti-fraud and corruption on orientation day. Additionally, no instances of fraud or corruption have been discovered through the Company’s channels for reporting fraud and corruption.

Channel of Complaint about corruption	The Annual Follow up of Complaint about Corruption in 2021																							
	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
	15	31	15	25	15	31	15	30	15	31	15	30	15	31	15	31	15	30	15	31	15	30	15	31
Email	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Website	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Postage	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Complaints Box																								
- Pearl Bangkok Building Office	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
- Dusit Office									x	x	x	x	x	x	x	x	x	x						
- Pichai Warehouse Office	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
- GKA & GKP Office	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

x = Data collected and no complaint

8.2 Report of the Audit Committee

The Audit Committee consists of independent directors who are qualified and knowledgeable, competent and experienced in accounting, finance, legal, management and energy business. The qualifications of those independent directors are in accordance with the requirements of the Securities and Exchange Commission and the Stock Exchange of Thailand. The Audit Committee has 3 members namely, Dr. Chongrak Rarueysong as the Chairman of the Audit Committee, Assoc.Prof. Dr. Panarat Panmanee and Mr. Tarakorn Angpubate as Members of the Audit Committee.

The Audit Committee has performed their duties and responsibilities that assigned by the Board of Directors in full compliance with the Audit Committee Charter (Details are available on the Company's website at <https://www.gunkul.com/storage/download/cg/2022/20220316-gunkul-charter-audit-en.pdf> as well as in accordance with the requirements and best practices for the Audit Committee as specified by the Stock Exchange of Thailand. The Audit Committee also reported the performance to the Board of Directors on a regular basis.

In the year 2021, the Audit Committee held 5 meetings which were attended by all members of the Audit Committee. In addition, the financial and accounting management, Auditor and Head of Internal Audit as well as other executives were invited to attend the meetings in order to provide information, acquire comments and recommendations which were benefit to the Company's operation. Moreover, the Audit Committee arranged a meeting between the Audit Committee and the Auditor in an absence of the management. The results of each meeting were presented to the Board of Directors of the Company. During past year, the Audit Committee carried out important activities, which could be summarized as follows;

1. Reviewed the financial statements, the Audit Committee reviewed the Quarterly and Yearly Financial Statements, as well as related financial reports by cooperating with the Certified Public Accountant and the Company's management on material issues, adjustments of material accounting items, accounting estimation that affect financial information and financial reports, Key Audit Matters (KAM). The Audit Committee also reviewed the independency of the Auditor to ensure that the financial report of the Company had been prepared in accordance with the accounting standards, with adequate information disclosure, completely and reliable, complies with applicable laws and regulations, before the financial statements were submitted to the Board of Directors or shareholders for approval.



- 2. Reviewed the adequacy and appropriateness of the internal control system,** the Audit Committee reviewed the adequacy, appropriateness and effectiveness of the internal control system of the Company and its subsidiaries by appraised from the reports of the Company's internal audit and the Auditor. This included the evaluation of the internal control system in accordance with the guidelines set forth by the Securities and Exchange Commission. The Audit Committee was of the view that the Company has an appropriate and adequate internal control system and reasonably assure that the Company has sufficient and effective internal control system.
- 3. Supervised of internal audit,** the Audit Committee supervised the Internal Audit Department to have independence as specified in the Internal Audit charter, in order to ensure that the internal audit practices have efficiency and effectiveness, accurate and comply with the rules and regulations of the Securities and Exchange Commission and international standards. The Audit Committee reviewed the suitability and endorsed the annual internal audit plan by incorporated a risk-based approach, considered and reviewed the internal audit report of the Internal Audit Department, together with providing comments and recommendations for the internal control improvement. Furthermore, the Audit Committee reviewed the annual internal audit plan to ensure that the audit plan was adjusted to be applicable with changing situations effectively and efficiently.
- 4. Reviewed the risk management,** the Audit Committee reviewed the risk management procedure in order to ensure that the risk management procedure was appropriate and effective, resulting in reduction of the associated risks to an acceptable level. Since the Company has given priority to develop the risk management procedure, the Board of Directors also appointed the Risk Management Committee to establish the risk management framework and policies to be effectively implemented throughout the Company and its subsidiaries in accordance with the Company's goals.

- 5. Reviewed related party transactions that may have conflicts of interest,** the Audit Committee has given great importance to the consideration of related party transactions and transactions that may have conflicts of interest in accordance with the laws and regulations of the Stock Exchange of Thailand on a quarterly basis by assigning the Internal Audit Department to monitor and review the preliminary accuracy and forward to the Auditor to review such transactions annually. The Audit Committee was of the opinion that the considered related party transactions were conducted in a fair manner and at an arm's length basis and performed in accordance with normal trade conditions, reasonable, and was of the greatest benefit to the Company, without beneficial to any party. Moreover, the related party transactions were disclosed following the process guideline and relevant law and regulations.
- 6. Ensured the compliance with the Securities and Exchange Act,** the Audit Committee reviewed the operations and directed the Company to perform various transactions in accordance with the Securities and Exchange Act, notifications and regulations of the Stock Exchange of Thailand as well as other specific laws that relating to the Company's business. In addition, the Audit Committee urged the Company to follow up on the laws which under hearing process and may have an impact on the Company in order to prepare before the announcement. The Audit Committee also approved the establishment of the Compliance Unit under the Internal Audit Department to supervise and monitor operations in accordance with all relevant laws, in order to comply with the principles of good corporate governance.
- 7. Encouraged good corporate governance and considered complaints about fraud or corruption,** the Audit Committee emphasized the Company's operations to adhere with good corporate governance practice, the system for receiving complaints, including providing channels for employees, shareholders and stakeholders to be able to conveniently contact the Audit Committee directly in order to be able to make the complaints, illegal or business ethical misconduct, or inquiries in financial reports or internal control systems to the Audit Committee, via email, website, postal and whistleblower box as well as having measures to protect the informant and to be treated as confidential.

- 8. Considered, proposed the appointment and determined the remuneration of the Auditor of the Company,** the Audit Committee considered the qualification of the Auditors by taking into account the independency, business knowledge including audit fees. Hence, the Audit Committee proposed the Board of Directors to consider appointing an Auditor approved by the SEC, namely Mr. Waiyawut Kosamarnchaiyakij ,Certified Public Accountant No. 6333 and/or Mr. Natthaphong Tantichattanont, Certified Public Accountant No. 8829, and/or Ms. Sophit Prompol, Certified Public Accountant No. 10042 from KPMG Phoomchai Audit Ltd. to be the Auditor of the Company and its subsidiaries for the year 2022 , in order to propose to the 2022 Annual General Meeting of Shareholders for approval.

In conclusion, the Audit Committee was of the opinion that the Company provided accurate, complete and reliable financial reports, with an adequate internal control system and good corporate governance practices that complying with the Securities and Exchange Act, notifications and regulations of the Stock Exchange of Thailand and other relevant laws. The information on related party transactions or transactions that may have conflicts of interest were fully disclosed.



Dr. Chongrak Rarueysong
Chairman of the Audit Committee
February 23, 2022

8.3 Sub-Committee Report

8.3.1 Report of the Risk Management Committee

Risk management is an important and vital action that the organization must perform in operating business. The Company recognizes the importance of risk management in its business operations. The Company and its subsidiaries have therefore established a policy to assess the risks of their business operations by establishing the Risk Management Committee, which consists of four independent directors and executives, Mr. Tarakorn Angpubate as the Chairman, Mr. Somchai Trairattanapirom, Ms. Sopacha Dhumrongpiyawut, and Mr. Thitipong Techaratanayuenyong as members. They are in charge of considering and approving risk management plan, monitoring the Company's business risk assessment procedures, including the creation of preventative and corrective measures to such risks. In 2021, the Risk Management Committee held 4 meetings to consider important matters that can be summarized as follows:

1. Risk Management Plan for 2021

The Risk Management Committee has assigned the Secretary to the Risk Management Committee to organize risk management meetings for the management of all relevant departments can present a risk management plan for consideration and approval. The risk management plan addresses all aspects of business operations, such as risk in the formulation of business strategies, operational risk, financial risk, exchange rate and interest rate fluctuations risk, the risk of procurement partners and personnel with the expertise and knowledge to support the Company's future growth, information technology risk, relationship management risks with partners and stakeholders, including risks that may affect communities and the environment, compliance risks, and corruption risk. Also, during the COVID-19 pandemic in the previous year, the Company has prepared a backup plan for preventive surveillance and the group's business contingency plan (Gunkul Business Contingency Plan) to deal with unusual situations so that employees and the Company's business can operate normally.

2. Risk Assessment and Preventive or Corrective Measures

The Risk Management Committee has considered the risk assessment factors and results in accordance with the established risk management plan for the entire organization including risks from uncontrollable external factors, such as the impact of politics, impact of volatility in both domestic and international economic conditions, as well as natural disasters and, in particular, the spread of the COVID-19, which may have an impact on the achievement of the Company's business goals by specifying the level of risk from high to low and has assigned responsible persons to find ways to prevent and mitigate the effects of risks that may occur to an acceptable level in order to achieve business goals in accordance with established strategies.



In terms of preventative and corrective measures, during the COVID-19 pandemic, the Company has implemented Work from Home measure, strict screening measure on employees and visitors, as well as providing masks and disinfecting equipment for employees thoroughly. The Company also provides vaccine for employees, including providing COVID-19 insurance for all employees. In the event that an employee becomes sick, either as a patient or as a suspected infected employee, the Company shall conduct tracing on all people who come into close contact with the infected employee, as well as cleaning and disinfecting all work places. Employees in quarantine shall receive medicines and survival packs (Gunkul Care Kit).

3. Monitoring the Implementing Preventive and Risk Management Measures

- The Risk Management Committee closely monitors risk management by convening quarterly meetings with related departments to acknowledge risk management results and regularly review the Company's risks. In additions, the Risk Management Committee has made additional recommendations for ensuring effective and efficient risk management by continuously developing to have a corporate culture in risk management (Risk Culture) in the future.
- In terms of monitoring during the COVID-19 pandemic, the Company continues to conduct screenings and provide care to all employees on a continuous basis.

Based on the foregoing, the Risk Management Committee has considered that the Company has formed a risk management plan and has consistently and effectively implemented it. Internal control is sufficient and appropriate for the business, as well as accurate and complete compliance with relevant laws and regulations, in accordance with good corporate governance policy.

Mr. Tarakorn Angpubate

Chairman of the Risk Management Committee

February 23, 2022

8.3.2 Report of Nomination and Remuneration Committee

The Company recognizes the importance of nominating individuals to serve as directors and senior management, including determining such individuals' remuneration. As a result, the Board of Directors has established the Nomination and Remuneration Committee, with independent directors and management consist of 4 members to perform the nomination and selection of directors and senior management with knowledges, competencies, and qualifications including proposing the remuneration policy, as well as compensation guidelines to pay compensation and other benefits for the Board of Directors, sub-committees, and high-level executives, in accordance with responsibility, the Company's performance, and market conditions in order to create incentives and retain directors and executives who have the potential and qualifications that the Company requires.

In 2021, the Nomination and Remuneration Committee convened 2 meetings to discuss various issues and report the meeting results, along with opinions and recommendations, to the Board of Directors for ongoing consideration. The important issues to consider are summarized as following :

- **Considered the nomination and selection of qualified persons to serve as directors of the Company**

The Nomination and Remuneration Committee has considered, recruited and selected a person to be a director and an independent director of the Company, including the sub-committees that complete their terms, which has considered recruiting from persons with appropriate qualifications and completely in accordance with the requirements of the Securities and Exchange Commission and the Stock Exchange of Thailand and meet the specified rules taking into account the qualifications, experience, and useful knowledge and skills that can support the growth of the Company. The Board Skill Matrix is also reviewed as a tool for reviewing the completeness of the skills of directors and presenting them to the Board of Directors' and shareholders' meetings in order to consider the nomination and selection of qualified individuals to hold the position of director of the Company in the future.

- **Determined and review policies and guidelines.**

The Nomination and Remuneration Committee considered, stipulated, and reviewed the following policies and criteria in order to effectively operate the Company's business in compliance with the Company's regulations and policies which have been established in accordance with the international principles of good corporate governance and the current situation:

- The Nomination and Remuneration Committee Charter
- The Policy on Nomination and Appointment of Directors and Senior Management



- The Policy on Remuneration of the Board of Directors and Sub-Committee
- The Policy on Succession Plan and Talent Management
- The Policy on Remuneration and Welfare of Managements and Employees
- Self-Assessment Form of the Nomination and Remuneration Committee for the year 2021 by the whole committee

- **Considered and approved the welfare.**

To motivate and retain competent and high-performing employees, the Nomination and Remuneration Committee in collaboration with the Executive Committee have approved the annual adjustment and bonus payments based on the Company's operating results and the assessment of employees' skills, knowledge, and abilities to be at an appropriate rate and also in accordance with the Company's performance which is consistent with industry standard practice.

The Nomination and Remuneration Committee has consistently reported the results of every meeting to the Board of Directors. In 2021, the Nomination and Remuneration Committee completed all tasks assigned with duly care, prudence, and to the best of its ability; as well as, providing straightforward opinions in the best interests of shareholders and all stakeholders and is committed to operating under the principles of equity, fairness, and transparency in accordance with the principles of good corporate governance as stipulated by the Securities and Exchange Commission and the Stock Exchange of Thailand and to be accepted internationally.

Police Major General Visit Sukarasep

Chairman of the Nomination and Remuneration Committee

February 23, 2022

8.3.3 Report of the Good Corporate Governance Committee

The Good Corporate Governance Committee consists of 3 independent directors, namely Mr. Somchai Trairattanapirom, as the Chairman of the Good Corporate Governance Committee, Dr. Chongrak Rarueysong, and Mr. Pongtep Thithapand, as Members of the Good Corporate Governance Committee. In 2021, the Good Corporate Governance Committee held a total of 4 meetings as planned to follow the principles of good corporate governance and in accordance with the principles of good corporate governance of the Securities and Exchange Commission (SEC), recommendations from the Corporate Governance Assessment Report of the Thai Institute of Directors Association (IOD), and ASEAN Corporate Governance Scorecard according to the international principles of the Organization for Economic Co-operation and Development (OECD), including sustainability management, and a framework for the Anti-corruption guidelines established by the Company. The key points can be summarized as follows:

- **Supervision to be in compliance with laws, rules and regulations, as well as best practice**

- To supervise, review, amend, and improve policies and practices on good corporate governance in order to comply with the principles of practice in all 5 categories; Right of Shareholders Equitable Treatment of Shareholders, Recognition of the Roles of Stakeholders, Disclosure and Transparency, and the Responsibilities of the Board of Directors, as well as anti-corruption measures and practices that are up-to-date and in accordance with international guidelines, current situation and business operations of the Company.
- To ensure that shareholders are treated equally, and to provide shareholders with the opportunity to propose agendas and nominate candidates for election as directors of the Company in advance between 17 November 2021 and 31 January 2022, in accordance with the rules outlined on the Company's website.
- To supervise and provide recommendations on the organizing of the 2021 Annual General Meeting of Shareholders from the pre-meeting process, on the day of the meeting and after the meeting in order to organize the meetings both transparent and efficient.
- To supervise the directors and managements in preparing and submitting a report on stock holdings in order to meet the specified criteria, including report to the Good Corporate Governance Committee on a quarterly basis.
- To supervise the use of inside information (Inside Trading) from the level of directors, managements, staffs, employees, to the operation level, with transparency as the primary concern.
- To propose the formation of a Compliance Unit that will report to the Board of Directors.



- **Supervision of operations for sustainable development**

- To determine and prepare policies that benefit the organization's sustainable development which includes commenting on policies developed or reviewed by other responsible committees in order to be consistent with good corporate governance practices.
- To supervise business operations with concrete responsibility to stakeholders in accordance with the principles of good corporate governance by providing advice and continuously monitoring operating results through report presentation. It is also necessary to assess the level of confidence of various stakeholder groups in the Company's business operations in accordance with the principles of good corporate governance in order to plan the response to the expectations of each stakeholder group.
- To follow up, supervise, and provide advice on the Company's sustainable development operations to ensure the adherence to international standards, including reviewing all elements of the Company's sustainability framework in light of the rapidly changing global social situation and challenges.
- To consider disclosing information on sustainability operations with the intent of informing all stakeholders. This includes topics such as the environment, society, and governance (Environmental, Social, and Governance: ESG) in the Sustainability Report section of the Annual Registration Statement / Annual Report 2021 (Form 56-1 One Report).

- **Promotion of compliance with good corporate governance policies and business ethics**

- To consider and approve the review of the Company's policies in accordance with the SEC's good corporate governance policy and business ethics, as well as recommendations from the IOD's Corporate Governance Assessment Report.
- To consider and approve the review of anti-corruption policies and whistleblowing or complaints, manage to educate people involved, and implement corruption risk assessment for the Company personnel, including following up on various related reports.
- To consider disclosing reports on compliance with good corporate governance in the form 56-1 One Report to ensure that information is fully disclosed and in accordance with good corporate governance guidelines.

- **Director performance reporting, evaluation, and development**

- To consider reviewing the Good Corporate Governance Committee's Charter and participating in the review of the Board of Directors Charter, the Executive Committee Charter, and the Company Secretary Charter, as well as following up on a review Charters of other sub-committees.
- To improve the Good Corporate Governance Committee's self-assessment process and criteria for the year 2021 to be up-to-date and consistent with the current situation in accordance with international guidelines, as well as making suggestions to improve the process and criteria in the Board of Directors' and Executive Committee's self-assessment forms, including the Chief Executive Officer assessment form.
- To report the Good Corporate Governance Committee's performance to the Board of Directors on a quarterly basis, as well as the results of the Good Corporate Governance Committee's self-assessment for the year 2021 to the Board of Directors' meeting, including disclosure in the form 56-1 One Report.
- To continuously monitor and supervise directors' development in accordance with good corporate governance principles by encouraging directors to attend training courses offered by the Thai Institute of Directors Association (IOD) and other organizations.

The Company's commitment to implementing the principles of good corporate governance into concrete operations throughout the organization has resulted in the Company receiving an evaluation from the Good Corporate Governance Report of Thai Listed Companies (CGR) Project in 2021 at an excellent level of 97 points, compared to the assessment received in 2020 at an excellent level of 95 points, which the Company has been rated in the "Excellent" category.

The Company has also received an excellent score of 100 from the Thai Investors Association (TIA) for the third year in a row for the 2021 Annual General Meeting of Shareholders as a result of the Company placing importance on the rights of shareholders and stakeholders as the top priority in the Company's business operations. The results of these assessments demonstrate the Company's ongoing commitment to good corporate governance practices.

Furthermore, the Company places a high value on anti-corruption measures. Since 2017, the Company has been a member of the Private Sector Collective Action Coalition Against Corruption (CAC), and it has been certified as a member of the CAC for the second consecutive term in 2020.

The Good Corporate Governance Committee recognizes that good corporate governance is critical to the Company's business operations, as well as to shareholders and all stakeholders. As a result, the Good Corporate Governance Committee is committed to presenting guidelines and providing advice on good corporate governance to the Board of Directors and management as a guideline for the Company's operations to be managed with efficiency and effectiveness, be transparent and inspectable, and provide continuous and sustainable growth to the Company.

Mr. Somchai Trairattanapirom

Chairman of the Good Corporate Governance Committee

February 23, 2022

8.3.4 Report of the Executive Committee

In 2021, the country's economy has been severely impacted by the COVID-19 pandemic. The strict epidemic control measures have been in place until the middle of the year. However, after the outbreak control measures were relaxed at the construction site since late July, and with more progress in vaccination, overall economic activity has begun to improve. The Company has continued to grow and maintain a strong financial performance. This can be seen from the company's continuous growth in revenue and profit.

In 2021, the Executive Committee held 32 meetings to consider important matters of the Company in accordance with the framework assigned by the Board of Directors and reported the meeting result together with guidelines for solving problems and adjusting strategies to suit each period. The recommendations have been presented to the Board of Directors for proper and consistent consideration which can be summarized as follows;

- **Considered and formulated business plans and strategies in line with vision, mission, and corporate culture of the year 2021**

The Executive Committee has established strategies and operating plans of the Company, subsidiaries, and associated companies in each business line annually, and follow up on monthly and quarterly basis. Furthermore, such plans have been distributed to managements and staff at all levels of the business for them to acknowledge and implement in line with the established goals.

- **Reviewed the approval authority and budget for the Company's operations for the year 2021**

The Executive Committee has reviewed to amend the approval authority table to be consistent with the situation and business operations of the Company including considering the budget for the Company's business operations while taking into account the continuous growth of the Company before presenting to the Board of Directors for further consideration and approval.

- **Examined and monitored on the performance of the Company, subsidiaries, and associated companies**

The Executive Committee has examined and followed up on the performance of all business lines on a monthly basis to execute the plan and as assigned by the Board of Directors.

- **Considered and endorsed related party transactions, transactions that may have conflicts of interest, or conflict of interest transactions in accordance with the Company's Articles of Association or applicable legislation**

The Executive Committee has considered and endorsed the above mentioned transactions as specified in the Company's Articles of Association, policies, regulations and the announcement of the Capital Market Supervisory Board. The approval of such transactions must be submitted to the Board of Directors' meeting and/or the shareholders' meeting to consider and approve according to the Company's Articles of Association or related laws.



- **Considered and approved investments both domestically and internationally, participating in bidding for new projects and investing in hemp/cannabis-related ventures**

The Executive Committee has scrutinized, endorsed, or approved the investments and/or bidding on new projects, as well as undertaking various projects, especially investments in hemp/cannabis-related businesses. This business is considered the New S Curve that the Company considers that such business is in line with the National Strategic Plan for Health-Care Investment. It connects to other sectors that can be developed further into downstream products, generating returns from operation for the Company on a consistent basis. The principle of consideration is to assess the benefits of the Company, shareholders and all stakeholders equally before presenting to the Board of Directors for further consideration.

The Executive Committee is confident that the Company will be able to maintain a growth rate of at least 20% in 2022 as the target. This would be the Company's continuous growth for more than 10 years since being listed on the Stock Exchange of Thailand. This is due to the Company's readiness in terms of investment capital, executive's credentials, talents, personal experience as well as the Company's employees. Moreover, the Company is a market leader in integrated renewable energy and power systems business, with leading technology that can be used to develop sustainable infrastructure in accordance with government directive policies. The Company is also extending its operations into hemp/cannabis-related business since the Company foresee good short and long-term profits. The Company is ready and advantageous to invest in this project in many ways. Furthermore, the Company places a premium on operating the business in the best interests of the Company, its shareholders, and all stakeholders by ensuring that the Company is prepared and has an operating system that follows legal and ethical principles in accordance with good corporate governance principles in order to guide the organization toward stable and sustainable growth.

Ms. Sopacha Dhumrongpiyawut
Chairman of the Executive Committee
February 23, 2022

9. Internal Control and Related Party Transactions

9.1 Internal control

9.1.1 Opinion of the Board of Directors on the Company's Internal Control System

The Board of Directors recognizes the significances of the internal control of the Company and subsidiaries. This enables the Company to achieve key strategic and operational goals with greater efficiency and effectiveness. Financial reporting and other important reports are accurate and reliable, and they are in accordance with applicable laws and regulations. Several procedures have been implemented concisely to assist the Company in achieving its objectives, established strategy, and sustainable growth.

The Board of Directors has assigned the Audit Committee, comprised of 3 Independent Directors, to review and assess the adequacy of the internal control system provided by management in accordance with the international standard framework, COSO (The Committee of Sponsoring Organizations of the Treadway Commission Framework), as well as conducting internal audits to ensure that the operation is efficient and effective on a checks and balances basis. The use and protection of the Company's assets, as well as stakeholder investments, are closely monitored for the Company's benefit. The Internal Audit Department's audit results and the auditor's opinion on the Company's internal control system have been carefully considered.

The Board of Directors meeting No.1/2022 on February 4, 2022 attended by 5 Independent Directors, three of whom are Audit Committee members, and the other two are management and internal audit jointly assessed the Company's and its subsidiaries' internal control systems using the Securities and Exchange Commission's (SEC) internal control system sufficiency assessment form. The Board of Directors believes that the Company's internal control system is adequate, appropriate, and has been practiced and in accordance with the COSO guideline, covering five components: Control Environment, Risk Assessment, Control Activities, Information and Communication Systems, and Monitoring Activities, as follows:

- **Control Environment**

The Company's goals, visions, objectives, policies, and guidelines are all clearly defined. The Company follows the principles of good corporate governance and business ethics. The policy of good corporate governance and business ethics has been documented. This defines the roles, duties, and responsibilities of the Board of Directors, including establishment of work policies, employee handbook, organizational structure, and a regular review of organizational structure to ensure that it is appropriate. The Company has established the approval authority to operate according to the hierarchy in order to be in line with the strategy, action plan, and support the



growth of the business. Approval of important business transactions of the Company has been decentralized from top management to the level by specifying the type of transaction and the approval limit in writing with checks and balances, causing management to be efficient, flexible, appropriate, and in line with business conditions. In addition, important policies, such as the Charter of the Board of Directors and sub-committees, are reviewed and amended on a regular basis to ensure compliance with the Securities and Exchange Commission's good corporate governance principles.



The Company is committed to conducting business with integrity as it is a member of the Private Sector Collective Action Coalition Against Corruption since 2017. The Company complies with the anti-corruption policy specified by the Company and emphasizing employees to understand the issue of fraud risk by providing measures for whistleblowing or complaints against illegal actions, codes of conduct, or behaviors that may imply fraud or misconduct of individuals in the Company and subsidiaries both from employees and stakeholders.

• Risk Assessment

The Board of Directors places a high value on corporate risk management by appointing the Risk Management Committee (RMC) to determine and review the enterprise risk management framework policy, which includes supervision, support for risk management implementation, and internal control in the organization. They have implemented a risk management plan, system, or risk management process to mitigate the impact on the Company's operations, as well as monitoring and evaluating the organization's risk management framework's implementation. This is to encourage the regular improvement and development of the internal risk management system, as well as to ensure that the Company has adequate and appropriate internal control and risk management in accordance with the organization's strategy and business goals.

The Audit Committee recognizes the importance of an internal control system that is both appropriate and effective in preventing and managing significant risks by approving the annual internal audit plan, in which the Company's Internal Audit Department has prepared a Risk-Based Audit plan to ensure that the internal control system is adequate and sufficient for current risk management.

• Control Activities

The Company has a control over the operation of the Company and subsidiaries by planning and controlling, such as the use of key performance indicators (KPIs), the separation of duties and responsibility, and the delegation of approval authority. This includes the line of authority (LOA) for each level of business operations.

Including the use of an electronic document management system to help control the transaction's approval correctly. Guidelines for transactions that have or may have conflicts of interest have been implemented, with the best interests of the Company's shareholders and stakeholders in mind. There is monitoring and supervision of the subsidiary/associated company's operations through the appointment of executives to the position of director in the subsidiary/associated company to participate in policy making, stay informed, and follow up on performance. There is vigilance to prevent the Company's assets from being lost or misused. The Internal Audit Department performs a balance of checks. The Information Technology Department is in charge of implementing appropriate and effective information technology security controls. The Internal Audit Department and the auditor audit the internal control system on an annual basis. The Company Secretary is in charge of overseeing the operation of the Company, subsidiaries, and the Board of Directors, as well as the disclosure of information in accordance with the Securities and Exchange Act, SEC regulations, and related laws.

In addition, the Company has prepared for the Personal Data Protection Act (PDPA) of Thailand. The Board of Directors and the management has set policies and guidelines. A working group was established as well as considering having a Data Protection Officer and implementing an Electronic Document Management System to use in the preparation of personal data archives along with communication about personal data use and storage to prevent information leakage for all executives and employees to understand the importance and strictly follow the law.

• Information & Communication

The Company places an importance on information and communication quality. This is a critical component in enabling internal control to function successfully. With proper and appropriate design of general information technology controls, the Company set guidelines for information management. Every work system, in daily work and for other purposes, is supported by a database provided by the Company. The accuracy and security of the information in such a database are regularly checked and updated. The Company has internal information communication methods and channels that are appropriate and effective, such as public relations, electronic mail, the reporting process and activities, and so on. Furthermore, in accordance with the Company's good corporate governance policy, the Board of Directors has provided sufficient, reliable, and timely disclosure of the Company's information in both financial and non-financial matters for shareholders and stakeholders to receive information equally, as well as having an Investor Relations Department responsible for providing information to investors and the general public. Quarterly investor and analyst meetings, as well as press releases to the media, are held. According to the Company's privacy protection policy, there is also a guideline and channels for complaints.

• Monitoring Activities

The Company has reviewed the internal control system and monitored the operating results. Operating outcomes are compared to plans to ensure that the goals put forth are constantly met, as well as assessing the reasons if actual performance does not reach the plans or the defined criteria. The results are regularly

presented to the executives, the Audit Committee, and the Board of Directors. In addition, the Company's Internal Audit Department has an annual audit plan that takes into account significant risks, an increase in the number of projects, processes, or systems, and requests from executives and/or the Audit Committee to review the adequacy and appropriateness of each activity of internal control system. There has been a discussion with management about methods to strengthen the internal control system in order to improve its efficiency and effectiveness. Throughout 2021, the Internal Audit Department has submitted the results of the audits to the Audit Committee and the Company's executives on a regular basis, in accordance with the internal control audit plan.

9.1.2 Opinion of the Audit Committee on the Internal Control System

The Audit Committee has examined the adequacy of the Company's internal control system. There is no opinion that differs from the opinion of the Board of Directors.

9.1.3 Opinion of the Audit Committee on the Head of the Internal Audit of the Company

The Audit Committee meeting No. 4/2016 appointed Mr. Tanetsiri Fakmitr, Director of Internal Audit Division, as the Head of the Company's Internal Audit and as the Secretary to the Audit Committee, effective from October 20, 2016. Mr. Tanetsiri Fakmitr has internal auditing experience. He is a Certified Public Accountant (CPA) with extensive management expertise in the internal audit. As a result, the Audit Committee believes it is suitable for him to carry out these responsibilities effectively and adequately. The Company discloses the Head of Internal Audit's profile, training history and experience in the Attachment 3.

9.1.4 Appointment, Removal and Transfer Head of the Internal Audit

In this regard, the consideration and approval of the appointment, removal, or transfer of the Head of the Internal Audit of the Company must be approved or endorsed by the Audit Committee.

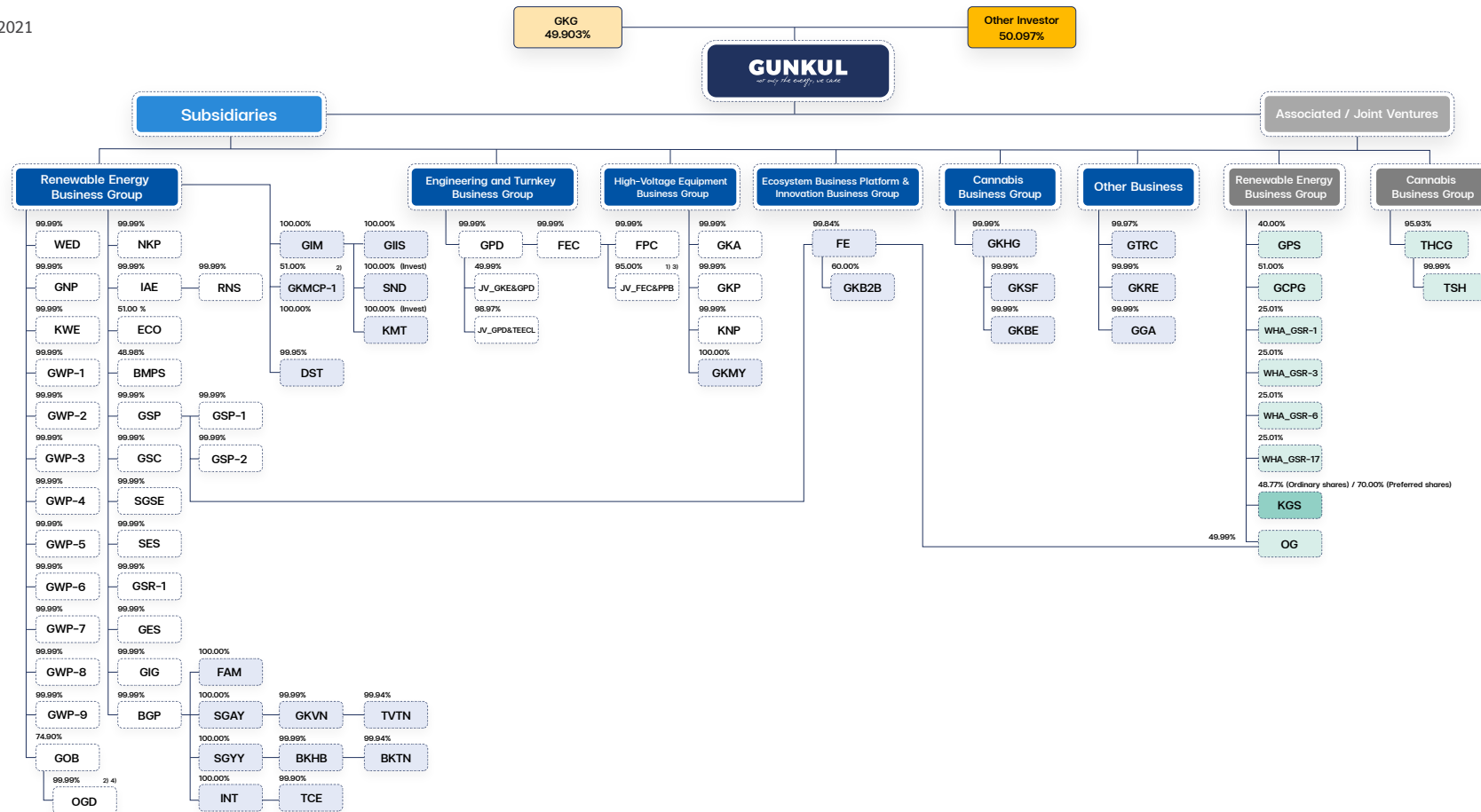


9.2 Related Party Transactions

Proportion of shareholding in the subsidiaries and associated companies

The related party transactions between the Company, subsidiaries and associated companies are normal business operation which are beneficial for the Company. The shareholding structure of the subsidiaries and associated companies is as follow.

As of 31 December 2021



Note

¹⁾ Registration of liquidation in 2021

²⁾ Registration of liquidation in 2022

³⁾ Completeness of liquidation in 2021

⁴⁾ Completeness of liquidation in 2022

Domestic Subsidiaries

Overseas Subsidiaries

Domestic Associated / Joint Ventures

Overseas Associated / Joint Ventures

Therefore, the related party transactions between the Company, subsidiaries and associated companies shall not cause any conflicts of interest in the future.

9.2.1 Related Party Transactions with Possible Conflict of Interest Persons

(1) Summary of relationship between the Company, Subsidiaries, Associated Companies/Joint Ventures and Related Companies/Persons as of December 31, 2021

Subsidiaries

Company	Symbol	Type of Business	Relationship
Renewable Energy Business Group			
1. Wind Energy Development Co., Ltd.	WED	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of WED for 99.99% stake. - Shared shareholder between GUNKUL and WED is Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.0000008% stake in WED. - Shared directors between WED and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut, daughter of Dr. Gunkul Dhumrongpiyawut.
2. Greenovation Power Co., Ltd.	GNP	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GNP for 99.99% stake. - Shared shareholders between GNP and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.00001% stake each in GNP. - Shared director between GNP and GUNKUL is Ms. Naruechon Dhumrongpiyawut
3. Korat Wind Energy Co., Ltd.	KWE	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of KWE for 99.99% stake. - Shared shareholders between KWE and GUNKUL is Dr. Gunkul Dhumrongpiyawut holding 0.000001% stake in KWE. - Shared directors between KWE and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
4. Gunkul Wind Power 1 Co., Ltd.	GWP-1	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-1 for 99.99% stake. - Shared shareholders between GWP-1 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in GWP-1 - Shared directors between GWP-1 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
5. Gunkul Wind Power 2 Co., Ltd.	GWP-2	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-2 for 99.99% stake. - Shared shareholders between GWP-2 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in GWP-2. - Shared directors between GWP-2 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
6. Gunkul Wind Power 3 Co., Ltd.	GWP-3	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-3 for 99.99% stake. - Shared shareholders between GWP-3 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in GWP-3. - Shared directors between GWP-3 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.

Company	Symbol	Type of Business	Relationship
7. Gunkul Wind Power 4 Co., Ltd.	GWP-4	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-4 for 99.99% stake. - Shared shareholders between GWP-4 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in GWP-4. - Shared directors between GWP-4 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
8. Gunkul Wind Power 5 Co., Ltd.	GWP-5	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-5 for 99.99% stake. - Shared shareholders between GWP-5 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0005% stake in GWP-5. - Shared directors between GWP-5 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
9. Gunkul Wind Power 6 Co., Ltd.	GWP-6	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-6 for 99.99% stake. - Shared shareholders between GWP-6 and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut holding 0.0003% stake in GWP-6. - Shared directors between GWP-6 and GUNKUL are Dr. Somboon Aueatchasai, Ms. Naruechon Dhumrongpiyawut and Mrs. Areewan Chaloemdan.
10. Gunkul Wind Power 7 Co., Ltd.	GWP-7	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-7 for 99.99% stake. - Shared shareholders between GWP-7 and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut holding 0.0003% stake in GWP-7. - Shared directors between GWP-7 and GUNKUL are Dr. Somboon Aueatchasai, Ms. Naruechon Dhumrongpiyawut and Mrs. Areewan Chaloemdan.
11. Gunkul Wind Power 8 Co., Ltd.	GWP-8	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-8 for 99.99% stake. - Shared shareholders between GWP-8 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in GWP-8. - Shared directors between GWP-8 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
12. Gunkul Wind Power 9 Co., Ltd.	GWP-9	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GWP-9 for 99.99% stake. - Shared shareholders between GWP-9 and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in GWP-9. - Shared directors between GWP-9 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
13. NKP Power Solar Co., Ltd.	NKP	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of NKP for 99.99% stake. - Shared shareholder between NKP and GUNKUL - None - Shared directors between NKP and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
14. Infinite Alternative Energy Co., Ltd.	IAE	Investing in Generating Electrical Power Business Company	<ul style="list-style-type: none"> - GUNKUL was major shareholder of IAE for 99.99% stake. - Shared shareholders between IAE and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.0000006% stake in IAE. - Shared directors between IAE and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.

Company	Symbol	Type of Business	Relationship
15.Rang Ngern Solution Co., Ltd.	RNS	Generating Electrical Power	<ul style="list-style-type: none"> - IAE was major shareholder of RNS for 99.99% stake, GUNKUL held RNS pass IAE - Shared shareholders between RNS and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.0000007% stake in RNS. - Shared director between RNS and GUNKUL is Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
16.Eco Thai Energy Co., Ltd.	ECO	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of ECO for 51.00% stake. - Shared directors between ECO and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
17.BMP Solar Co., Ltd.	BMPS	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of BMPS for 48.98% stake. - Shared director between BMPS and GUNKUL is Ms. Naruechon Dhumrongpiyawut.
18.Gunkul Solar Power Co., Ltd.	GSP	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GSP for 99.99% stake. - Shared shareholder between GUNKUL and GSP is Dr. Somboon Aueatchasai holding 0.000001% stake in GSP. - Shared director between GSP and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
19.Gunkul Solar Power 1 Co., Ltd.	GSP-1	Generating Electrical Power	<ul style="list-style-type: none"> - GSP was major shareholder of GSP-1 for 99.99% stake. GUNKUL holds GSP-1 through GSP. - Shared shareholder between GUNKUL and GSP-1 is Dr. Somboon Aueatchasai holding 0.00001% stake in GSP-1. - Shared director between GSP-1 and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
20.Gunkul Solar Power 2 Co., Ltd.	GSP-2	Generating Electrical Power	<ul style="list-style-type: none"> - GSP was major shareholder of GSP-2 for 99.99% stake. GUNKUL holds GSP-2 through GSP. - Shared shareholder between GUNKUL and GSP-2 is Dr. Somboon Aueatchasai holding 0.00001% stake in GSP-2. - Shared director between GSP-2 and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
21.Gunkul Solar Community Co., Ltd.	GSC	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GSC for 99.99% stake. - Shared shareholders between GSC and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut holding 0.0001% stake in GSC. - Shared directors between GSC and GUNKUL are Ms. Sopacha Dhumrongpiyawut, Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
22.Siam Gunkul Energy Co., Ltd.	SGSE	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of SGSE for 99.99% stake. - Shared shareholder between SGSE and GUNKUL is Dr. Somboon Aueatchasai holding 0.00002% stake in SGSE. - Shared director between SGSE and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
23.Solar Energy Society Co., Ltd.	SES	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of SES for 99.99% stake. - Shared director between SES and GUNKUL is Ms. Sopacha Dhumrongpiyawut, Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
24.Gunkul Solar Roof1 Co., Ltd.	GSR-1	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GSR-1 for 99.99% stake. - Shared shareholder between GSR-1 and GUNKUL is Dr. Somboon Aueatchasai holding 0.00004% stake in GSR-1 - Shared directors between GSR-1 and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.

Company	Symbol	Type of Business	Relationship
25.Gunkul Energy Solution and Lighting Co., Ltd.	GES	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GES for 99.99% stake. - Shared shareholders between GES and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut holding 0.00002% stake in GES. - Shared directors between GES and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
26.Gunkul Infinite Group Co., Ltd.	GIG	Rent, sublease and manage property, generate electricity for sale	<ul style="list-style-type: none"> - GUNKUL was a shareholder of GIG for 99.99% stake. - Shared shareholder between GIG and GUNKUL is Dr. Somboon Aueatchasai holding 0.000003 % stake in GIG. - Shared directors between GIG and GUNKUL are Ms. Sopacha Dhumrongpiyawut, Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
27.Bright Green Power Co., Ltd.	BGP	Generating Electrical Power and Investing in Generating Electrical Power Business Company	<ul style="list-style-type: none"> - GUNKUL was major shareholder of BGP for 99.99% stake.
28.GO Bio Energy Co., Ltd.	GOB	Investing in Generating Electrical Power Business Company	<ul style="list-style-type: none"> - GUNKUL was a shareholder of GOB for 74.90% stake. - Shared shareholder between GOB and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
29.Outgrow D Co., Ltd. ^{2) 5)}	OGD	Generating Electrical Power	<ul style="list-style-type: none"> - GOB was major shareholder of OGD for 99.99%. GUNKUL hold OGB through GOB. - Shared directors between OGD and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
30.Gunkul International (Mauritius)	GIM	Overseas Investment	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GIM for 100% stake.
31.Gunkul International Investment (Singapore) Pte. Ltd.	GIIS	Overseas Investment	<ul style="list-style-type: none"> - GIM was major shareholder of GIIS for 100 % stake.
32.Gunkul Myanmar Central Power 1 Co., Ltd. ²⁾	GKMCP-1	Generating Electrical Power	<ul style="list-style-type: none"> - GMP was shareholder of GKMCP-1 for 51% stake.
33.Sendai Okura GD Daiichi Godo Kaisha	SND	Generating Electrical Power	<ul style="list-style-type: none"> - GIM and BGP invested in SND in total for 100% stake.
34.Kimitsu Mega Solar Godo Kaisha	KMT	Generating Electrical Power	<ul style="list-style-type: none"> - GIM and BGP invested in KMT in total for 100% stake.
35.Future Asset Management Kabushiki Kaisha	FAM	Investing in Generating Electrical Power Business Company	<ul style="list-style-type: none"> - BGP was major shareholder of FAM for 100% stake.
36.Singapore An Yang Pte. Ltd.	SGAY	Overseas Investment	<ul style="list-style-type: none"> - BGP was major shareholder in SGAY for 100% stake.
37.Singapore Yun Yang Pte. Ltd.	SGYY	Overseas Investment	<ul style="list-style-type: none"> - BGP was major shareholder in SGAYY for 100% stake.

Company	Symbol	Type of Business	Relationship
38. Gunkul Vietnam Joint Stock Company (Formerly named: Tri Viet Hoa Binh Joint Stock Company (TVHB))	GKVN	Overseas Investment	- SGAY was major shareholder in GKVN for 99.99% stake.
39. Tri Viet Tay Ninh Joint Stock Company	TVTN	Generating Electrical Power	- GKVN was major shareholder in TVTN for 99.94% stake.
40. Bach Khoa A Chau Hoa Binh Joint Stock Company	BKHB	Overseas Investment	- SGYY was major shareholder in BKHB for 99.99% stake.
41. Bach Khoa A Chau Tay Ninh Joint Stock Company	BKTN	Generating Electrical Power	- BKHB was major shareholder in BKTN for 99.94% stake.
42. Doan Son Thuy Investment Joint Stock Company	DST	Generating Electrical Power	- GUNKUL was major shareholder in DST for 99.95% stake.
43. INT Energy Pte. Ltd.	INT	Overseas Investment	- BGP was major shareholder in INT for 100% stake.
44. Tan Chau Energy Joint Stock Company	TC	Generating Electrical Power	- INT was major shareholder in TC for 99.90% stake.
Engineering and Turnkey Business Group			
45. Gunkul Power Development Co., Ltd.	GPD	Engineering and Turnkey	- GUNKUL was major shareholder of GPD for 99.99% stake. - Shared shareholder between GPD and GUNKUL is Dr. Somboon Aueatchasai holding 0.000003 % stake in GPD. - Shared directors between GPD and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
46. Future Electrical Control Co., Ltd.	FEC	Engineering and Turnkey	- GPD was major shareholder of FEC for 99.99% stake, GUNKUL held FEC through GPD. - Shared shareholders between FEC and GPD are Dr. Somboon Aueatchasai and Ms. Sopacha Dhumrongpiyawut holding 0.00001% stake in FEC. - Shared director between FEC and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
47. Joint Venture GKE & GPD Co., Ltd.	JV_GKE&GPD	Engineering and Turnkey	- GUNKUL was shareholder of JV_GKE&GPD for 49.99% stake. - GPD is a shareholder of JV_GKE&GPD at 49.99% (GUNKUL holds 99.99% of GPD) - Shared shareholders of JV_GKE&GPD is Dr. Somboon Aueatchasai holding 0.00001% in JV_GKE&GPD. - Shared director between JV_GKE&GPD is Ms. Sopacha Dhumrongpiyawut.
48. Joint Venture GPD & TEECL Co., Ltd.	JV_GPD&TEECL	Engineering and Turnkey	- GPD was shareholder of JV_GPD&TEECL for 98.97% by GUNKUL was a shareholder of JV_GPD&TEECL through GPD. - Shared shareholders between JV_GPD&TEECL and GUNKUL is Dr. Somboon Aueatchasai holding 0.01% stake in JV_GPD&TEECL. - Shared director between JV_GPD&TEECL and GUNKUL is Ms. Sopacha Dhumrongpiyawut.

Company	Symbol	Type of Business	Relationship
49.Future Power Construction Co., Ltd.	FPC	Engineering and Turnkey	<ul style="list-style-type: none"> - FEC was a shareholder of FPC for 99.99% stake by GUNKUL was a shareholder of FPC through FEC - Shared shareholder between FPC and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% stake in FPC - Shared director between GUNKUL is Ms. Sopacha Dhumrongpiyawut.
50.Joint Venture FEC and PPB Co., Ltd. ^{1) 4)}	JV_FEC&PPB	Engineering and Turnkey	<ul style="list-style-type: none"> - FEC was a shareholder of JV FEC&PPB for 95.00% stake by GUNKUL was a shareholder of JV FEC&PPB though FEC. - Shared shareholder between JV_FEC&PPB and GUNKUL is Dr. Somboon Aueatchasai holding 0.0002% in JV_FEC&PPB - Shared director between GUNKUL is Dr. Somboon Aueatchasai.
High Voltage Equipment Business Group			
51.G.K. Assembly Co., Ltd.	GKA	Manufacturing Electrical Products	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GKA for 99.99% stake. - Shared shareholder between GKA and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Sopacha Dhumrongpiyawut holding total of 0.00001% stake in GKA. - Shared directors between GKA and GUNKUL are Ms. Sopacha Dhumrongpiyawut, Mrs. Areewan Chaloemdan and Mr. Chaloempon Sricharoen.
52.G.K.Power Products Co., Ltd.	GKP	Manufacturing Electrical Products	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GKP for 99.99% stake. - Shared shareholder between GUNKUL and GKP are Dr.Gunkul Dhumrongpiyawut and Ms. Sopacha Dhumrongpiyawut holding total of 0.0002% stake in GKP. - Shared directors between GKP and GUNKUL are Ms. Sopacha Dhumrongpiyawut, Mrs. Areewan Chaloemdan and Mr. Chaloempon Sricharoen.
53.K.N.P. Supply Co., Ltd.	KNP	Supplying Electrical Products	<ul style="list-style-type: none"> - GUNKUL was major shareholder of KNP for 99.99% stake. - Shared shareholder between GUNKUL and KNP is Dr. Gunkul Dhumrongpiyawut holding total of 0.00004% stake in KNP. - Shared director between KNP and GUNKUL are Ms. Sopacha Dhumrongpiyawut, Mrs. Areewan Chaloemdan and Mr. Chaloempon Sricharoen.
54.Gunkul Engineering (Myanmar) Co., Ltd.	GKMY	Overseas Investment	<ul style="list-style-type: none"> - GUNKUL was a major shareholder of GKMY for 100% stake.
Ecosystem Business Platform & Innovation Business Group			
55.Future Energy Corporation Co., Ltd.	FE	Application, Platform and Computer Programs	<ul style="list-style-type: none"> - GSP was a shareholder of FE for 99.84% stake by GUNKUL was shareholders of FE through GSP. - Shared director between FE and GUNKUL is Ms. Naruechon Dhumrongpiyawut.
56.Gunkul B2B Co., Ltd.	GKB2B	Application, Platform and Computer Programs	<ul style="list-style-type: none"> - FE was a shareholder of GKB2B for 60% stake by GUNKUL was a shareholder of GKB2B though GSP and FE. - Shared sharesholder between GKB2B and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.00002% stake in GKB2B. - Shared director between GKB2B and GUNKUL is Ms. Naruechon Dhumrongpiyawut.

Company	Symbol	Type of Business	Relationship
Cannabis Business Group			
57.G.K. Hemp Group Co., Ltd.	GKHG	Investment in hemp and cannabis business	<ul style="list-style-type: none"> - GUNKUL was a shareholder of GKHG for 99.99% stake. - Shared shareholder between GKHG and GUNKUL is Dr. Somboon Aueatchasai holding 0.000001% stake in GKHG. - Shared director between GKHG and GUNKUL are Ms. Naruechon Dhumrongpiyawut and Dr. Somboon Aueatchasai.
58.G.K. Smart Farming Co., Ltd.	GKSF	Hemp and Cannabis business	<ul style="list-style-type: none"> - GKHG was a shareholder of GKSF for 99.99% by GUNKUL was a sharehold of GKSF through GKHG. - Shared shareholders between GKSF and GUNKUL is Dr. Somboon Aueatchasai holding 0.000005% stake in GKSF. - Shared director between GKSF and GUNKUL are Ms. Naruechon Dhumrongpiyawut and Dr. Somboon Aueatchasai.
59.G.K. Bio Extraction Co., Ltd.	GKBE	Hemp and Cannabis business	<ul style="list-style-type: none"> - GKHG was a shareholder of GKBE for 99.99% by GUNKUL was a sharehold of GKBE through GKHG. - Shared shareholders between GKBE and GUNKUL is Dr. Somboon Aueatchasai holding 0.00001% stake in GKHG. - Shared director between GKBE and GUNKUL are Ms. Naruechon Dhumrongpiyawut and Dr. Somboon Aueatchasai.
Others Business			
60.Gunkul Training Solar Center Co., Ltd.	GTRC	Education Services, Seminar Management, Training management, etc.	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GTRC for 99.97% stake. - Shared shareholder between GTRC and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai holding 0.02% stake in GTRC. - Shared director between GTRC and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
61.G.K. Real Estate (2564) Co. Ltd.	GKRE	Real estate business	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GKRE for 99.99% stake. - Shared shareholder between GKRE and GUNKUL is Dr. Somboon Aueatchasai holding 0.00001% stake in GTRC. - Shared director between GKRE and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
62.Gunkul Grand Asset Co., Ltd.	GGA	Real estate business	<ul style="list-style-type: none"> - GUNKUL was major shareholder of GGA for 99.99% stake. - Shared shareholder between GGA and GUNKUL is Dr. Somboon Aueatchasai holding 0.00002% stake in GGA. - Shared director between GGA and GUNKUL is Dr. Somboon Aueatchasai.

Associated Companies/Joint Ventures

Company	Symbol	Type of Business	Relationship
1. G-Power Source Co., Ltd.	GPS	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of GPS for 40.00% stake. - Shared director between GPS and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Dr. Somboon Aueatchasai.
2. Gunkul Chubu Powergen Co., Ltd.	GCPG	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of GCPG for 51.00% stake. - Shared shareholder between GCPG and GUNKUL is Dr. Gunkul Dhumrongpiyawut holding 0.000002% stake in GCPG. - Shared director between GCPG and GUNKUL - None
3. Origin Gunkul Ennergy Co., Ltd.	OG	Electrical ennergy business	<ul style="list-style-type: none"> - FE was a shareholder of OG for 49.99% stake. - Shared shareholder between OG and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.0001% stake in OG - Shared director between OG and GUNKUL are Dr. Somboon Aueatchasai and Ms. Naruechon Dhumrongpiyawut.
4. WHA Gunkul Green Solar Roof 1 Co., Ltd.	WHA_GSR-1	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of WHA_GSR-1 for 25.01% stake. - Shared director between WHA_GSR-1 and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
5. WHA Gunkul Green Solar Roof 3 Co., Ltd.	WHA_GSR-3	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of WHA_GSR-3 for 25.01% stake. - Shared director between WHA_GSR-3 and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
6. WHA Gunkul Green Solar Roof 6 Co., Ltd.	WHA_GSR-6	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of WHA_GSR-6 for 25.01% stake. - Shared director between WHA_GSR-6 and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
7. WHA Gunkul Green Solar Roof 17 Co., Ltd.	WHA_GSR-17	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of WHA_GSR-17 for 25.01% stake. - Shared director between WHA_GSR-17 and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
8. Kenyir Gunkul Solar Snd Bhd.	KGS	Generating Electrical Power	<ul style="list-style-type: none"> - GUNKUL was a shareholder of KGS for 48.77% stake for Common shares and 70.00% stake for Preferred shares. - Shared director between KGS and GUNKUL is Ms. Naruechon Dhumrongpiyawut.
9. THCG Group Co., Ltd.	THCG	Hemp and Cannabis Business	<ul style="list-style-type: none"> - GKHG was a shareholder of THCG for 95.93% stake by GUNKUL as a shareholder of THCG through GKHG. - Shared director between THCG and GUNKUL is Dr. Somboon Aueatchasai.
10. Thai Stick Herb Co., Ltd.	TSH	Hemp and Cannabis Business	<ul style="list-style-type: none"> - THCG was a major shareholder of TSH for 99.99% stake by GUNKUL as a shareholder of TSH through THCG. - Shared director between TSH and GUNKUL is Dr. Somboon Aueatchasai.

Related Companies

Company	Symbol	Type of Business	Relationship
Related Companies			
1. Gunkul Group Co., Ltd.	GKG	Holding Company	<ul style="list-style-type: none"> - GKG was a shareholder of GUNKUL for 49.903% stake. - GKG is held by Dhumrongpiyawut family at 97.27% stake. - GKG has shared director with GUNKUL which is Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
2. Kulnatee Co., Ltd.	KNT	Marine Transport in Asia Region	<ul style="list-style-type: none"> - Major shareholder of KNT is Sricharoen family holding 98.00% stake, Sricharoen family is a family of Ms. Sopacha Dhumrongpiyawut.
3. Gunkul Trading & Agency Co., Ltd.	GKT	International Marine Transport	<ul style="list-style-type: none"> - GKT is held by Dhumrongpiyawut family, major shareholding of GKG, Dhumrongpiyawut family holds 67.00% stake. - Shared director between GKT and GUNKUL is Ms. Sopacha Dhumrongpiyawut.
4. Gunkul Marine Line Co., Ltd.	GKM	Halted the business	<ul style="list-style-type: none"> - GKM is held by Dhumrongpiyawut family holding 97.00% stake. - Shared director between GKM and GUNKUL is Dr. Gunkul Dhumrongpiyawut.
5. Gunkul Engineering Co., Ltd. (2000) ²⁾	GK2000	Lease	<ul style="list-style-type: none"> - Major shareholders of GK2000 are GKG and Dhumrongpiyawut family holding 100% stake. - Shared director between GK2000 and GUNKUL is Dr. Gunkul Dhumrongpiyawut.
6. G.M. Supply & Construction Co., Ltd.	GMS	Lease	<ul style="list-style-type: none"> - GMS is held by Dhumrongpiyawut family holding 100.00% stake. - Shared director between GMS and GUNKUL is Dr. Gunkul Dhumrongpiyawut.
7. Siam Future Co., Ltd. ²⁾	SF	Electricity Industry	<ul style="list-style-type: none"> - Major shareholder of SF is GKG holding 99.97% stake. - Shareholders between SF and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding of 0.00008% stake in SF. - Shared director between SF and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
8. Happy Green 2558 Co., Ltd.	HPG	Holding Company	<ul style="list-style-type: none"> - Major shareholder of HPG is GKG holding 99.94% stake. - Shareholders between HPG and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.04% stake in HPG. - Shared director between HPG and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
9. Tech-Green Co., Ltd. ^{1) 3)}	TG	Holding Company	<ul style="list-style-type: none"> - Major shareholder of TG is GKG holding 99.94% stake. - Shareholders between TG and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.04% stake in TG. - Shared director between TG and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.

Company	Symbol	Type of Business	Relationship
10.Entirety Sap Co., Ltd. ^{1) 3)}	ETS	Holding Company	<ul style="list-style-type: none"> - Major shareholder of ETS is GKG holding 99.94% stake. - Shareholders between ETS and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.04% stake each in ETS. - Shared director between ETS and GUNKUL are Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
11.Noppakul Co., Ltd.	NPK	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of NPK is Ms. Naruechon Dhumrongpiyawut holding 82.00% stake and Sricharoen family holds 18.00% stake. - Shared director between NPK and GUNKUL is Ms. Naruechon Dhumrongpiyawut.
12.Green Field Energy Co., Ltd.	GF	Real Estate	<ul style="list-style-type: none"> - Shareholder of GF is GMA which holding 99.99% stake and Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.00001% stake. - Shared directors of GF and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
13.Great Miracle Asset Co., Ltd.	GMA	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000002% stake in GMA. - Shared directors between GMA and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
14.Great Miracle Asset 2 Co., Ltd.	GMA-2	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-2 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-2 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000002% stake in GMA-2. - Shared directors between GMA-2 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
15.Great Miracle Asset 3 Co., Ltd.	GMA-3	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-3 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-3 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000001% stake in GMA-3. - Shared directors between GMA-3 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
16.Great Miracle Asset 4 Co., Ltd.	GMA-4	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-4 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-4 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000004% stake in GMA-4. - Shared directors between GMA-4 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.

Company	Symbol	Type of Business	Relationship
17.Great Miracle Asset 5 Co., Ltd.	GMA-5	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-5 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-5 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000038% stake in GMA-5. - Shared directors between GMA-5 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
18.Great Miracle Asset 7 Co., Ltd.	GMA-7	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-7 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-7 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000001% stake in GMA-7. - Shared directors between GMA-7 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
19.Great Miracle Asset 8 Co., Ltd.	GMA-8	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-8 is Dr. Gunkul Dhumrongpiyawut holding 99.02% stake. - Shareholders between GMA-8 and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.000001% stake in GMA-8. - Shared directors between GMA-8 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
20.Great Miracle Asset 9 Co., Ltd.	GMA-9	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-9 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-9 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000002% stake in GMA-9. - Shared directors between GMA-9 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
21.Great Miracle Asset 10 Co., Ltd.	GMA-10	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-10 is Ms. Sopacha Dhumrongpiyawut holding 99.99% stake. - Shareholders between GMA-10 and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.000006% stake in GMA-10. - Shared directors between GMA-10 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
22.Great Miracle Asset 11 Co., Ltd.	GMA-11	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-11 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between GMA-11 and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000005% stake in GMA-11. - Shared directors between GMA-11 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
23.Great Miracle Asset 12 Co., Ltd.	GMA-12	Movable and Immovable Property	<ul style="list-style-type: none"> - Shared shareholders between GMA-12 and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.000002% stake in GMA-12.

Company	Symbol	Type of Business	Relationship
24.Great Miracle Asset 13 Co., Ltd.	GMA-13	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-13 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholders between GMA-13 and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.00002% stake in GMA-13. - Shared directors between GMA-13 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
25.Great Miracle Asset 14 Co., Ltd.	GMA-14	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of GMA-14 is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholders between GMA-14 and GUNKUL are Dr. Gunkul Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut holding 0.000003% stake in GMA-14. - Shared directors between GMA-14 and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
26.Pranburi Boulevard Co., Ltd.	PB	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholder of PB is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shareholder between PB and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 11.61% stake in PB. - Shared directors between PB and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.
27.Green Field Energy Co., Ltd.	GF	Movable and Immovable Property	<ul style="list-style-type: none"> - Major shareholders of GF is Dr. Gunkul Dhumrongpiyawut holding 99.99% stake. - Shared shareholders between GF and GUNKUL is Ms. Naruechon Dhumrongpiyawut holding 0.000001% stake. - Shared directors of GF and GUNKUL are Dr. Gunkul Dhumrongpiyawut, Ms. Sopacha Dhumrongpiyawut and Ms. Naruechon Dhumrongpiyawut.

Related persons

Company	Symbol	Type of Business	Relationship
1. Dr. Gunkul Dhumrongpiyawut	-	Director	- Dr. Gunkul Dhumrongpiyawut and family hold 49.97% stake in GKG which is major shareholder of GUNKUL and holding position as Chairman of the Board of Directors of GUNKUL.
2. Ms. Sopacha Dhumrongpiyawut	-	Director	- Ms. Sopacha Dhumrongpiyawut is Dr. Gunkul Dhumrongpiyawut's spouse and holding position as Chairman of the Executive Committee of GUNKUL.
3. Ms. Naruechon Dhumrongpiyawut	-	Director	- Ms. Naruechon Dhumrongpiyawut is Dr. Gunkul Dhumrongpiyawut's daughter and holding position as a Director of GUNKUL.
4. Mr. Chaloepon Sricharoen	-	Director	- Mr. Chaloepon Sricharoen is Ms. Sopacha Dhumrongpiyawut's brother and holding position as a Director of GUNKUL.

¹⁾ Registered of dissolution on 2020

²⁾ Registered of dissolution on 2021

³⁾ Registration of liquidation on 2020

⁴⁾ Registration of liquidation on 2021

⁵⁾ Registration of liquidation on 2022

(2) Summary of Related Party Transactions in 2020-2021

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
(1) Sales of Goods and rendering of service					
GUNKUL	GKA	Sale of Goods	0.95	0.90	GUNKUL sold finished Goods to GKA for use in operations at cost plus profit of 5-30%.
		Sale of Properties	-	0.05	
		Account Receivable	0.03	0.02	
		Other Receivable (Cash advance)	0.16	-	
	GKP	Sale of Goods	0.03	-	GUNKUL sold finished Goods to GKP for use in operations at cost plus profit of 5-30%.
		Sale of Properties	0.04	0.03	
		Other Receivable	0.03	-	
		Other Receivable (Cash advance)	0.02	0.34	
	KNP	Sale of Goods	6.74	0.26	GUNKUL sold finished Goods to KNP for use in operations at cost plus profit of 5-30%.
		Account Receivable	0.31	-	
		Other Receivable (Cash advance)	0.11	-	
	GES	Sale of Goods	2.88	6.13	GUNKUL sold finished Goods to GES for use in operations at cost price plus profit 5-30%.
		Account Receivable	1.35	0.51	
		Other Receivable (Cash advance)	0.02	0.01	
	GPD	Sale of Goods	263.67	305.65	GUNKUL sold finished Goods to GPD for use in operations at cost price plus profit 5-30% according to the contract agreed between the parties.
		Service Revenue	2.11	0.59	
		Account Receivable	59.49	95.20	
		Other Receivable (Cash advance)	1.73	0.29	
	RNS	Sale of Goods	0.07	0.01	GUNKUL sold finished Goods to RNS for use in operations at cost price plus profit 5-30% according to the contract agreed between the parties.
		Service Revenue (S&A)	-	5.04	
		Other Receivable	-	0.45	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GSR-1	Sale of Goods	-	0.05	GUNKUL sold finished Goods to GSR-1 for use in operations at cost price plus profit 5-30%.
	GPS-2	Sale of Goods	0.05	0.01	GUNKUL sold finished Goods to GPS-2 for use in operations at cost price plus profit 5-30%.
	WED	Sale of Goods	-	0.04	GUNKUL sold finished Goods to WED for use in operations at cost price plus profit 5-30%.
	ECO	Management income (S&A service)	0.42	0.40	According to the contract agreed between the parties.
		Other Receivable	0.04	0.04	
	GNP	Sale of Goods	-	0.01	GUNKUL sold finished Goods to GNP for use in operations at cost price plus profit 5-30%.
		Account Receivable	-	0.01	
	KWE	Sale of Goods	-	0.04	GUNKUL sold finished Goods to KWE for use in operations at cost price plus profit 5-30%.
	NK	Advance received for O&M Service Fee	1.65	1.65	According to the contract agreed between the parties.
	GSC	Sale of Goods	83.57	0.92	GUNKUL sold finished Goods to GSC for use in operations at cost price plus profit 5-30%.
		Account Receivable	18.22	0.63	
		Other Receivable (Cash advance)	0.05	-	
	SES	Sales Revenue	30.22	-	GUNKUL sold finished Goods to SES for use in operations at cost price plus profit 5-30%.
		Account Receivable	12.95	0.01	
		Other Receivable (Cash advance)	0.02	-	
	JV_GKE&FEC	Sale of Goods	-	1.66	GUNKUL sold finished Goods to JV_GKE&FEC for use in operations at cost price plus profit 5-30%.
	GIG	Service Revenue (S&A)	0.36	0.36	GUNKUL sold finished Goods to GIG for use in operations at cost price plus profit 5-30%.
		Sale of Goods	5.85	6.84	
		Other Receivable	-	0.10	
		Other Receivable (Cash advance)	0.05	-	
	Tri Viet Tay Ninh JSC	Sale of Goods	-	0.63	GUNKUL sold finished Goods to Tri Viet Tay Ninh JSC for use in operations at cost price plus profit 5-30%
		Account Receivable	0.68	0.61	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
-	FEC	Sale of Goods	72.92	30.79	GUNKUL sold finished Goods to FEC for use in operations at cost price plus profit 5-30%.
		Account Receivable	0.58	19.57	
		Other Receivable (Cash advance)	0.16	0.06	
	BMPS	Sale of Goods	0.07	-	GUNKUL sold finished Goods to BMPS for use in operations at cost price plus profit 5-30%.
		Account Receivable	0.07	-	
	BGP	Other Receivable (Cash advance)	-	0.10	
	GCPG	Sale of Goods	-	0.38	GUNKUL sold finished Goods to GCPG for use in operations at cost price plus profit 5-30% according to the contract agreed between the parties.
		S&A Service Revenue	5.75	5.53	
		Other Receivable	0.51	0.49	
	FNC	Other Receivable (Cash advance)	0.03	-	
	DST	Sale of Goods	0.22	-	GUNKUL sold finished Goods to DST for use in operations at cost price plus profit 5-30%.
		Account Receivables	0.22	331.76	
	GKB2B	Sale of Goods	21.29	-	GUNKUL sold finished Goods to GKB2B for use in operations at cost price plus profit 5-30% according to the contract agreed between the parties.
		Service Revenue (S&A)	1.17	-	
		Other Receivable (Cash advance)	0.01	-	
	TAN CHAU	Sale of Goods	0.47	-	GUNKUL sold finished Goods to TAN CHAU for use in operations at cost price plus profit 5-30%.
		Account Receivable	0.47	-	
	JV_GPD&TEECL	Other Receivable (Cash advance)	0.04	-	
	GSF	Sale of Goods	0.19	-	GUNKUL sold finished Goods to GSF for use in operations at cost price plus profit 5-30%.
GKA	GKP	Sale of Goods	32.61	37.07	GKA sold finished Goods to GKP for use in operations at cost price plus profit 5-30%.
		Service Revenue	4.63	7.59	
		Account Receivable	7.39	24.63	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GES	Sale of Goods	-	0.52	GKA sold finished Goods to GES for use in operations at cost price plus profit 5-30%.
	GPD	Sale of Goods	3.33	6.99	GKA sold finished Goods to GPD for use in operations at cost price plus profit 5-30%.
		Account Receivable	-	0.01	
	FEC	Sale of Goods	2.63	1.76	GKA sold finished Goods to FEC for use in operations at cost price plus profit 5-30%.
		Service Revenue	0.01	-	
		Other Receivable	0.22	0.38	
	GSC	Sale of Goods	0.22	0.11	GKA sold finished Goods to FEC for use in operations at cost price plus profit 5-30%.
		Other Receivable	0.15	-	
	GCPG	Sale of Goods	0.81	0.24	GKA sold finished Goods to GCPG for use in operations at cost price plus profit 5-30%.
		Account Receivable	-	0.26	
	KNP	Sale of Goods	20.53	-	GKA sold finished Goods to KNP for use in operations at cost price plus profit 5-30%.
		Account Receivable	9.68	-	
	GKG	Sale of Goods	0.16	-	GKA sold finished Goods to GKG for use in operations at cost price plus profit 5-30%.
GKP	GPD	Sale of Goods	0.61	4.23	GKP sold finished Goods to GPD for use in operations at cost price plus profit 5-30%. According to the contract agreed between the parties.
		Service Revenue	0.37	0.19	
		Account Receivables	0.34	4.53	
	FEC	Sale of Goods	5.35	0.02	GKP sold finished Goods to FEC for use in operations at cost price plus profit 5-30%.
		Account Receivables	5.57	0.02	
	GCPG	Sale of Goods	-	0.02	GKP sold finished Goods to GCPG for use in operations at cost price plus profit 5-30%.
	FNC	Service Revenue	-	0.07	GKP sold finished Goods to FNC for use in operations at cost price plus profit 5-30%.
	GKB2B	Sale of Goods	0.03	-	GKP sold finished Goods to GKB2B for use in operations at cost price plus profit 5-30%.
	KNP	Sale of Goods	9.34	-	GKP sold finished Goods to KNP for use in operations at cost price plus profit 5-30%.
		Account Receivables	3.92	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	WED	Service Revenue	0.02	-	GKP sold finished Goods to WED for use in operations at cost price plus profit 5-30%.
		Account Receivables	0.02	-	
GPD	ECO	O&M Service Revenue	2.50	2.50	According to the contract agreed between the parties.
	BMPS	O&M Service Revenue	0.10	0.10	According to the contract agreed between the parties.
		O&M Deferred Income	0.03	0.03	
	SES	Construction Revenue	176.68	367.49	According to the contract agreed between the parties.
		O&M Service Revenue	5.74	1.11	
		Sale of Goods	0.12	-	
		Account Receivables	2.16	7.50	
		O&M Accrued Service Fee	0.27	-	
		Unbilled Receivables	30.75	80.51	
		Advance Payment	4.69	11.31	
		Construction Deferred Income	-	0.06	
		O&M Deferred Income	0.37	0.15	
	RNS	O&M Service Revenue	35.07	59.39	According to the contract agreed between the parties.
		Sale of Goods	0.36	-	
		Account Receivables	0.38	-	
		O&M Accrued Service Fee	0.72	1.59	
		O&M Deferred Income	2.48	2.03	
	FEC	Sale of Goods	0.09	0.02	GPD sold finished Goods to FEC for use in operations at cost price plus profit 5-30%.
		Account Receivables	0.02	-	
	GPS	O&M Service Revenue	28.94	44.46	According to the contract agreed between the parties.
		O&M Accrued Service Fee	1.59	1.59	
		O&M Deferred Income	-	1.30	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GCPG	O&M Service Revenue	23.03	23.03	According to the contract agreed between the parties.
		O&M Accrued Service Fee	-	0.19	
		O&M Accrued Service Fee	0.19	-	
		O&M Deferred Income	3.13	3.13	
	WHA_GSR-6	O&M Service Revenue	-	0.39	According to the contract agreed between the parties.
	GES	Sale of Goods	-	0.32	GPD sold finished Goods to GES for use in operations at cost price plus profit 5-30%.
		Service Revenue	0.48	-	
		Account Receivables	0.05	-	
	GSC	Sale of Goods	-	0.04	GPD sold finished Goods to GSC for use in operations at cost price plus profit 5-30%.
		Service Revenue	0.02	-	
		Account Receivables	0.17	-	
	GIG	Construction Income	12.73	15.18	According to the contract agreed between the parties.
		Accrued Revenue	1.76	1.52	
		Sales Revenue	2.36	-	
		O&M Service Revenue	0.26	-	
		O&M Accrued Service Fee	0.13	-	
	SGSE	Sales Revenue	0.05	-	GPD sold finished Goods to SGSE for use in operations at cost price plus profit 5-30%.
	GB2B	Sales Revenue	0.80	-	GPD sold finished Goods to GB2B for use in operations at cost price plus profit 5-30%.
FEC	GNP	Sales Revenue	-	0.63	FEC sold finished Goods to GNP for use in operations at cost price plus profit 5-30%.
	JV_GKE&FEC	Sales Revenue	-	4.21	FEC sold finished Goods to JV_GKE&FEC for use in operations at cost price plus profit 5-30%.
		Other Receivable	4.81	4.81	
	KWE	Sales Revenue	-	0.63	FEC sold finished Goods to KWE for use in operations at cost price plus profit 5-30%.

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	JV_GPD&TEECL	Construction Income	0.11	-	According to the contract agreed between the parties.
		Other Receivable	0.01	-	
KNP	FEC	Sales Revenue	0.05	-	KNP sold finished Goods to FEC for use in operations at cost price plus profit 5-30%.
		Other Receivable	0.05	-	
	GES	Sales Revenue	0.09	-	KNP sold finished Goods to GES for use in operations at cost price plus profit 5-30%.
		Other Receivable	0.10	-	
SES	GSC	Other Income	0.05	0.12	According to the contract agreed between the parties.
	GIG	Other Income	0.16	-	According to the contract agreed between the parties.
GES	SES	Construction Income	-	72.82	According to the contract agreed between the parties.
		Accrued Revenue	-	15.51	
		Advance Payment	-	1.37	
	WED	Sales Revenue	0.05	-	GES sold finished Goods to WED for use in operations at cost price plus profit 5-30%.
		Account Receivable	0.05	-	
	KWE	Sales Revenue	0.05	-	GES sold finished Goods to KWE for use in operations at cost price plus profit 5-30%.
		Account Receivable	0.05	-	
	GNP	Sales Revenue	0.05	-	GES sold finished Goods to GNP for use in operations at cost price plus profit 5-30%.
		Account Receivable	0.05	-	
	GSF	Sales Revenue	6.28	-	GES sold finished Goods to GSF for use in operations at cost price plus profit 5-30%.
		Account Receivable	3.61	-	
	GIG	Other Receivable	0.04	-	
	GMA	Sales Revenue	0.05	-	GES sold finished Goods to GMA for use in operations at cost price plus profit 5-30%.
BGP	KGS	Service Revenue	-	32.30	According to the contract agreed between the parties.
		Other Receivable	-	68.21	
	GIG	Sales Revenue	11.52	-	According to the contract agreed between the parties.

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
GSC	FNC	Sales Revenue	0.11	-	GSC sold finished Goods to FNC for use in operations at cost price plus profit 5-30%.
	GKB2B	Sales Revenue	11.09	-	GSC sold finished Goods to GKB2B for use in operations at cost price plus profit 5-30%.
	GKG	Sale of Goods	0.01	-	GSC sold finished Goods to GKG for use in operations at cost price plus profit 5-30%.
GTRC	GCPG	Sales Revenue	0.01	-	According to the contract agreed between the parties.
	GMA	Sales Revenue	0.01	-	According to the contract agreed between the parties.
		Other Receivable	0.01	-	
(2) Purchasing and receiving services					
GUNKUL	GKA	Purchase of Goods	58.33	107.78	GUNKUL bought finished Goods from GKA for use in operations at cost price plus profit 5-30%.
		Account Payables	8.52	25.65	
	GKP	Purchase of Goods	291.16	278.40	GUNKUL bought finished Goods from GKP for use in operations at cost price plus profit 5-30%.
		Account Payables	53.32	44.39	
	KNP	Purchase of Goods	2.74	0.26	GUNKUL bought finished Goods from KNP for use in operations at cost price plus profit 5-30%.
		Account Payables	1.70	-	
		Other Payables	2.43	-	
	GES	Purchase of Goods	-	0.76	GUNKUL bought finished Goods from GES for use in operations at cost price plus profit 5-30%.
	GPD	Purchase of Goods	0.02	-	GUNKUL bought finished Goods from GPD for use in operations at cost price plus profit 5-30%.
	GSC	Purchase of Goods	0.02	-	GUNKUL bought finished Goods from GSC for use in operations at cost price plus profit 5-30%.

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	FEC	Purchase of Goods	1.18	-	GUNKUL bought finished Goods from FEC for use in operations at cost price plus profit 5-30%.
		Cost of Construction	3.88	-	According to the contract agreed between the parties.
		Account Payables	0.51	-	
		Other Payables	0.50	-	
	GTRC	Training Fee	0.33	0.44	According to the contract agreed between the parties.
		Other Payables	0.06	0.14	
	SES	Purchase of Goods	0.04	-	GUNKUL bought finished Goods from SES for use in operations at cost price plus profit 5-30%.
	GKT	Purchase of Properties	0.02	-	
GKA	GKP	Purchase of Goods	0.75	0.43	GKA bought finished Goods from GKP for use in operations at cost price plus profit 5-30%.
		Other Payables	0.14	0.01	
	GES	Purchase of Goods	0.01	0.06	GKA bought finished Goods from GES for use in operations at cost price plus profit 5-30%.
		Other Payables	-	0.01	
	FEC	Purchase of Goods	-	0.03	GKA bought finished Goods from FEC for use in operations at cost price plus profit 5-30%.
	GTRC	Training Fee	0.06	0.18	According to the contract agreed between the parties.
		Purchase of Properties	-	0.01	
		Other Payables	0.01	0.01	
	KNP	Other Payables	0.43	-	
GKP	GES	Purchase of Goods	-	1.31	GKP bought finished Goods from GES for use in operations at cost price plus profit 5-30%.
	GTRC	Training Fee	0.03	0.06	According to the contract agreed between the parties.
		Other Payables	0.01	0.02	
	KNP	Other Payables	0.08	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
WED	GTRC	Training Fee	0.02	0.02	According to the contract agreed between the parties.
		Other Payables	0.01	0.01	
GPD	FEC	Purchase of Goods and Services	-	2.15	GPD bought finished Goods from FEC for use in operations at cost price plus profit 5-30%.
		Cost of Construction	1.51	-	According to the contract agreed between the parties.
		Account Payables	0.01	0.45	
		Other Payables	0.38	-	
	GES	Purchase of Goods and Services	0.19	-	GPD bought finished Goods from GES for use in operations at cost price plus profit 5-30%.
		Account Payables	2.72	1.05	
		Other Payables	0.14	-	
	GSC	Purchase of Goods and Services	-	0.81	GPD bought finished Goods from GSC for use in operations at cost price plus profit 5-30%.
	GTRC	Training Fee	0.12	0.09	According to the contract agreed between the parties.
		Other Payables	0.06	0.05	
	KNP	Purchase of Goods and Services	0.19	-	GPD bought finished Goods from KNP for use in operations at cost price plus profit 5-30%.
RNS	GTRC	Training Fee	0.01	0.01	According to the contract agreed between the parties.
		Other Payables	0.01	0.01	
KWE	GTRC	Training Fee	-	0.02	According to the contract agreed between the parties.
		Other Payables	-	0.01	
ECO	GTRC	Training Fee	0.01	0.01	According to the contract agreed between the parties.
		Other Payables	-	0.01	
GES	GTRC	Training Fee	0.04	0.04	According to the contract agreed between the parties.
		Other Payables	0.03	0.01	
FEC	GTRC	Training Fee	0.21	0.28	According to the contract agreed between the parties.
		Other Payables	0.02	0.03	
	JV_GPD&TEECL	Account Payables	0.35	-	FEC bought finished Goods from JV_GPD&TEECL for use in operations at cost price plus profit 5-30%.

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
BGP	GTRC	Training Fee	0.02	0.01	According to the contract agreed between the parties.
GSC	GTRC	Training Fee	0.04	0.01	According to the contract agreed between the parties.
		Other Payables	0.02	-	
	GKB2B	Purchase of Goods and Services	3.04	-	GSC bought finished Goods from GKB2B for use in operations at cost price plus profit 5-30%.
		Account Payables	2.67	-	
BMPS	GTRC	Training Fee	0.01	0.01	According to the contract agreed between the parties.
		Other Payables	-	0.01	
SES	GSC	Purchase of Goods and Services	2.06	-	SES bought finished Goods from GSC for use in operations at cost price plus profit 5-30%.
		Account Payables	124.91	-	
		Assets Payable	-	1.10	
	GTRC	Training Fee	0.02	0.01	According to the contract agreed between the parties.
		Other Payables	0.01	0.01	
GMA	GTRC	Training Fee	-	0.01	According to the contract agreed between the parties.
G.K. Realestate (2021)	GPS	Purchase of Properties	55.79	-	According to the contract agreed between the parties.
GB2B	GTRC	Training Fee	0.01	-	According to the contract agreed between the parties.
		Other Payables	0.01	-	
(3) Purchase-disposal of assets and rental fees					
GUNKUL	NK	Rental Income	0.23	0.23	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Accrued Dividend Income	0.30	0.28	
		GSR-1	Rental Income	0.02	0.02

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GB2B	Rental Income	0.29	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Accrued Rental Income	0.29	-	
	GMA	Right-of-Use Assets	-	8.88	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	6.02	8.88	
		Amortization - Right-of-Use Assets	2.96	-	
		Interest Payable - Liabilities under the Lease Agreement	0.27	-	
		Rental Income	-	3.12	
	GMA-2	Right-of-Use Assets	-	6.29	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	4.27	6.29	
		Amortization - Right-of-Use Assets	2.10	-	
		Interest Payable - Liabilities under the Lease Agreement	0.19	-	
		Rental Income	-	2.21	
	GMA-3	Right-of-Use Assets	5.61	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	3.81	-	
		Amortization - Right-of-Use Assets	1.87	-	
		Interest Payable - Liabilities under the Lease Agreement	0.17	-	
	GMA-8	Right-of-Use Assets	-	3.13	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	2.12	3.13	
		Amortization - Right-of-Use Assets	1.04	-	
		Interest Payable - Liabilities under the Lease Agreement	0.09	-	
		Rental Income	-	1.10	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
GKA	GKP	Rental Income	0.72	1.10	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
	GSR-1	Rental Income	0.12	0.12	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Accrued Rental Income	0.01	0.01	
	GMA-9	Right-of-Use Assets	-	2.46	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	1.65	2.46	
		Amortization - Right-of-Use Assets	0.82	0.80	
		Interest Payable - Liabilities under the Lease Agreement	0.03	0.02	
GKP	GMA-7	Right-of-Use Assets	-	1.98	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	1.33	1.98	
		Amortization - Right-of-Use Assets	0.66	0.65	
		Interest Payable - Liabilities under the Lease Agreement	0.03	0.01	
	GKA	Rental Income	0.79	0.79	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GES	Rental Income	0.79	0.79	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
	GPD	Rental Income	0.02	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Accrued Rental Income	0.02	-	
GPD	GMA-3	Right-of-Use Assets	0.66	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	0.45	-	
		Amortization - Right-of-Use Assets	0.22	-	
		Interest Payable - Liabilities under the Lease Agreement	0.02	-	
	GMA-4	Right-of-Use Assets	2.42	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	1.64	-	
		Amortization - Right-of-Use Assets	0.81	-	
		Interest Payable - Liabilities under the Lease Agreement	0.07	-	
FEC	GMA-3	Right-of-Use Assets	0.33	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	0.32	-	
		Amortization - Right-of-Use Assets	0.11	-	
		Interest Payable - Liabilities under the Lease Agreement	0.01	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GMA-4	Right-of-Use Assets	1.04	-	The rental price is based on the market price or the fair price based on the appraised value of an independent appraiser. In this regard, the conditions of the agreement are in accordance with the normal conditions that can be compared with the transactions with other unrelated persons.
		Lease Liabilities	1.01	-	
		Amortization - Right-of-Use Assets	0.35	-	
		Interest Payable - Liabilities under the Lease Agreement	0.03	-	
(4) Financial Support					
GUNKUL	GPD	Short-term loans			GUNKUL lent money to GPD for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.65-2.73% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	117.07	
		Loans During the Period	-	-	
		Payment Received	-	(117.07)	
		Balance	-	-	
		Interest Received	-	1.66	
		Accrued Interest Receivable	-	-	
	GES	Short-term loans			GUNKUL lent money to GES for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.60-3.13% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	34.34	
		Loans During the Period	-	-	
		Payment Received	-	(34.34)	
		Balance	-	-	
		Interest Received	-	0.34	
		Accrued Interest Receivable	-	-	
		Short-term loans	-	-	GUNKUL lent money to GES for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.11% per year. The interest rates are mutually agreed.
		Early rePayment Loan	10.00	-	
Loans During the Period		-	10.00		
Pay Back	(10.00)	-			

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
		Balance	-	10.00	
		Interest Expenses	0.05	-	
		Accrued Expenses	-	-	
	BGP	Short-term loans			GUNKUL lent money to BGP for the purpose of doing business by issuing promissory note with charged interest at the rate of 3.00% per year. The interest rates are mutually agreed.
		Early rePayment Loan	951.17	603.38	
		Loans During the Period	-	2,368.88	
		Payment Received	(951.17)	(2,021.09)	
		Balance	-	951.17	
		Interest Received	21.02	3.94	
		Accrued Interest Receivable	-	0.31	
		Short-term loans			GUNKUL borrowed money from BGP for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.35% per year. The interest rates are mutually agreed.
		Early rePayment Loan	10.00	-	
		Loans During the Period	30.00	10.00	
		Payment Received	(10.00)	-	
		Balance	30.00	10.00	
		Interest Expenses	0.25	-	
		Accrued Expenses	0.04	-	
	GIM	Short-term loans			GUNKUL lent money to GIM for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.20% per year. The interest rates are mutually agreed.
		Early rePayment Loan	1,315.65	-	
		Loans During the Period	-	1,321.73	
		Payment Received	(1,283.93)	-	
		Difference from Exchange Rate Change	5.90	(6.07)	
		Balance	37.63	1,315.65	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
		Interest Received	6.75	0.87	GUNKUL borrowed money from GIM for the purpose of doing business with no interest charge between them.
		Accrued Interest Receivable	0.39	0.87	
		Short-term loans			
		Early rePayment Loan	-	193.54	
		Loans During the Period	-	1,065.00	
		Payment Received	-	(1,272.77)	
		Difference from Exchange Rate Change	-	14.23	
		Balance	-	-	
		Interest Expenses	-	-	
	BMPS	Short-term loans			GUNKUL lent money to BMPS for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.95% per year. The interest rates are mutually agreed.
		Early rePayment Loan	344.93	368.48	
		Loans During the Period	-	-	
		Payment Received	(28.80)	(23.56)	
		Balance	316.13	344.93	
		Interest Received	9.77	13.41	
		Accrued Interest Receivable	0.13	0.25	
	GNP	Short-term loans			GUNKUL lent money to GNP for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.80-3.27% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	-	
		Loans During the Period	-	-	
		Payment Received	-	-	
		Balance	-	-	
		Interest Received	-	-	
		Accrued Interest Receivable	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GSP	Short-term loans			GUNKUL borrowed money from GSP for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.14-2.85% per year. The interest rates are mutually agreed.
		Early rePayment Loan	110.00	80.00	
		Loans During the Period	-	41.00	
		Pay Back	(45.00)	(11.00)	
		Balance	65.00	110.00	
		Interest Expenses	1.89	2.28	
		Accrued Expenses	0.99	0.20	
	SES	Short-term loans			GUNKUL lent money to SES for the purpose of doing business by issuing promissory note with charged interest at the rate of 2.14-3.49% per year. The interest rates are mutually agreed.
		Early rePayment Loan	500.00	40.00	
		Loans During the Period	300.00	491.00	
		Payment Received	(198.40)	(31.00)	
		Balance	601.60	500.00	
		Interest Received	14.10	7.28	
		Accrued Interest Receivable	3.25	6.56	
	FEC	Short-term loans			GUNKUL borrowed money from FEC for the purpose of doing business with charged interest at the rate of 2.50% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	-	
		Loans During the Period	-	200.00	
		Payment Received	-	(200.00)	
		Balance	-	-	
		Interest Expenses	-	1.14	
		Accrued Expenses	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	KGS	Short-term loans			GUNKUL lent money to KGS for the purpose of doing business with charged interest at the rate of 3.50% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	169.93	
		Loans During the Period	-	-	
		Payment Received	-	(169.93)	
		Balance	-	-	
		Interest Received	-	0.34	
		Accrued Interest Receivable	-	-	
	KNP	Short-term loans			GUNKUL borrowed money from KNP for the purpose of doing business with charged interest at the rate of 2.65% per year. The interest rates are mutually agreed.
		Early rePayment Loan	8.00	12.77	
		Loans During the Period	-	-	
		Payment Received	(8.00)	(4.77)	
		Balance	-	8.00	
		Interest Expenses	0.14	0.30	
		Accrued Expenses	-	0.01	
	GSC	Short-term loans			GUNKUL borrow money from GSC for the purpose of doing business with charged interest at the rate of 2.11% per year. The interest rates are mutually agreed.
		Early rePayment Loan	7.00	-	
		Loans During the Period	-	7.00	
		Payment Received	(7.00)	-	
		Balance	-	7.00	
		Interest Expenses	0.03	-	
		Accrued Expenses	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
		Short-term loans			GUNKUL lent money to GSC for the purpose of doing business with charged interest at the rate of 2.78 - 2.79% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	-	
		Loans During the Period	40.00	-	
		Payment Received	-	-	
		Balance	40.00	-	
		Interest Received	0.40	-	
		Accrued Interest Receivable	0.40	-	
	FAM	Short-term loans			GUNKUL lent money to FAM for the purpose of doing business with an interest at the rate of 2.20% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	57.38	-	
		Loans During the Period	-	57.64	
		Payment Received	(57.64)	-	
		Difference from Exchange Rate Change	0.26	(0.26)	
		Balance	-	57.38	
		Interest Received	0.09	0.04	
		Accrued Interest Receivable	-	0.04	
	DST	Short-term loans			GUNKUL lent money to DST for the purpose of doing business with no interest charge between them.
		Early rePayment Loan	89.60	-	
		Loans During the Period	-	90.29	
		Payment Received	(90.29)	-	
		Difference from Exchange Rate Change	0.69	(0.69)	
		Balance	-	89.60	
		Interest Received	-	-	
		Accrued Interest Receivable	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	IAE	Short-term loans			GUNKUL borrowed money from IAE for the purpose of doing business with an interest at the rate of 2.14% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	17.00	-	
		Loans During the Period	-	17.00	
		Payment Received	(17.00)	-	
		Balance	-	17.00	
		Interest Expenses	0.08	0.04	
		Accrued Expenses	-	0.04	
	SGSE	Short-term loans			GUNKUL borrowed money from SGSE for the purpose of doing business with an interest at the rate of 2.14% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	15.00	-	
		Loans During the Period	-	16.00	
		Payment Received	(15.00)	(1.00)	
		Balance	-	15.00	
		Interest Expenses	0.10	0.04	
		Accrued Expenses	-	0.02	
	GSR-1	Short-term loans			GUNKUL borrowed money from GSR-1 for the purpose of doing business with an interest at the rate of 2.11% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	5.00	-	
		Loans During the Period	-	5.00	
		Payment Received	(5.00)	-	
		Balance	-	5.00	
		Interest Expenses	0.05	-	
		Accrued Expenses	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GWP-1	Short-term loans			GUNKUL lent money to GWP-1 for the purpose of doing business with an interest at the rate of 5% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	-	-	
		Loans During the Period	11.80	-	
		Payment Received	-	-	
		Balance	11.80	-	
		Interest Received	0.05	-	
		Accrued Interest Receivable	0.05	-	
	GWP-2	Short-term loans			GUNKUL lent money to GWP-2 for the purpose of doing business with an interest at the rate of 5% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	-	-	
		Loans During the Period	7.50	-	
		Payment Received	-	-	
		Balance	7.50	-	
		Interest Received	0.02	-	
		Accrued Interest Receivable	0.02	-	
	GWP-3	Short-term loans			GUNKUL lent money to GWP-3 for the purpose of doing business with an interest at the rate of 5% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	-	-	
		Loans During the Period	5.30	-	
		Payment Received	-	-	
		Balance	5.30	-	
		Interest Received	0.02	-	
		Accrued Interest Receivable	0.02	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	GWP-4	Short-term loans			GUNKUL lent money to GWP-4 for the purpose of doing business with an interest at the rate of 5% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	-	-	
		Loans During the Period	2.00	-	
		Payment Received	-	-	
		Balance	2.00	-	
		Interest Received	0.01	-	
		Accrued Interest Receivable	0.01	-	
GPD	GSP-1	Short-term loans			GPD borrowed short-term loans from GSP-1 for use as working capital by issuing promissory note with charged interest at the rate of 2.87% per year. The interest rates are mutually agreed.
		Early rePayment Loan	7.00	15.00	
		Loans During the Period	-	-	
		Payment Received	(4.00)	(8.00)	
		Balance	3.00	7.00	
		Interest Expenses	0.16	0.33	
		Accrued Expenses	-	-	
	GSP-2	Short-term loans			GPD borrowed short-term loans from GSP-2 for use as working capital by issuing promissory note with charged interest at the rate of 2.87% per year. The interest rates are mutually agreed.
		Early rePayment Loan	9.00	17.00	
		Loans During the Period	-	-	
		Payment Received	(4.00)	(8.00)	
		Balance	5.00	9.00	
		Interest Expenses	0.21	0.39	
		Accrued Expenses	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	FEC	Short-term loans			GPD lent short-term loans to FEC for use as working capital by issuing promissory note with charged interest at the rate of 2.94% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	-	
		Loans During the Period	40.00	-	
		Payment Received	(40.00)	-	
		Balance	-	-	
		Interest Received	0.15	-	
		Accrued Interest Receivable	-	-	
		Short-term loans			GPD borrowed short-term loans from FEC for use as working capital by issuing promissory note with charged interest at the rate of 1.90% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	-	
		Loans During the Period	-	40.00	
		Payment Received	-	(40.00)	
		Balance	-	-	
		Interest Expenses	-	0.26	
		Accrued Expenses	-	-	
	JV_GPD&TEECL	Short-term loans			GPD lent short-term loans to JV_GPD&TEEPL for use as working capital by issuing promissory note with charged interest at the rate of 2.94% per year. The interest rates are mutually agreed.
		Early rePayment Loan	-	-	
		Loans During the Period	3.00	-	
		Payment Received	(3.00)	-	
		Balance	-	-	
		Interest Received	0.02	-	
		Accrued Interest Receivable	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
GSP	GSP-1	Short-term loans			GSP borrowed short-term loans from GSP-1 for use as working capital by issuing promissory note with charged interest at the rate of 2.14% per year. The interest rates are mutually agreed.
		Early rePayment Loan	13.00	-	
		Loans During the Period	-	13.00	
		Payment Received	(2.00)	-	
		Balance	11.00	13.00	
		Interest Expenses	0.26	0.03	
		Accrued Expenses	-	0.03	
	GSP-2	Short-term loans			GSP borrowed short-term loans from GSP-2 for use as working capital by issuing promissory note with charged interest at the rate of 2.14% per year. The interest rates are mutually agreed.
		Early rePayment Loan	18.00	-	
		Loans During the Period	-	18.00	
		Payment Received	(2.00)	-	
		Balance	16.00	18.00	
		Interest Expenses	0.37	0.05	
		Accrued Expenses	-	0.05	
FNC	GKB2B	Short-term loans			FNC lent short-term loans to GKB2B for use as working capital by issuing promissory note with charged interest at the rate of 1.50% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	-	-	
		Loans During the Period	0.03	-	
		Payment Received	(0.03)	-	
		Balance	-	-	
		Interest Received	-	-	
		Accrued Interest Receivable	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
GHG	GFS	Short-term loans			GHG lent short-term loans to GFS for use as working capital by issuing promissory note with charged interest at the rate of 2.76% per year, which is in accordance with the mutual agreement.
		Early rePayment Loan	-	-	
		Loans During the Period	17.00	-	
		Payment Received	-	-	
		Balance	17.00	-	
		Interest Received	0.13	-	
		Accrued Interest Receivable	0.13	-	
(5) Other items					
GUNKUL	GPS	Dividend Income	71.35	61.94	GUNKUL received dividends from GPS. In the year 2021 and 2020, the total dividend that received was THB 71.35 million and THB 61.94 million, respectively.
		Accrued Dividend Receivable	106.76	106.76	
	GCPG	Dividend Income	143.93	134.57	GUNKUL received dividends from GCPG. In the year 2021 and 2020, the total dividend that received was THB 143.93 million and THB 134.57 million, respectively.
	WHA_GSR-1	Dividend Income	0.20	0.16	GUNKUL received dividends from WHA_GSR-1. In the year 2021 and 2020, the total dividend that received was THB 0.20 million and THB 0.16 million, respectively.
	WHA_GSR-3	Dividend Income	0.42	0.42	GUNKUL received dividends from WHA_GSR-3. In the year 2021 and 2020, the total dividend that received was THB 0.42 million and THB 0.42 million, respectively.
	WHA_GSR-6	Dividend Income	0.47	0.42	GUNKUL received dividends from WHA_GSR-6. In the year 2021 and 2020, the total dividend that received was THB 0.47 million and THB 0.42 million, respectively.
	WHA_GSR-17	Dividend Income	0.40	0.48	GUNKUL received dividends from WHA_GSR-17. In the year 2021 and 2020, the total dividend that received was THB 0.40 million and THB 0.48 million, respectively.
	IAE	Dividend Income	355.03	232.88	GUNKUL received dividends from IAE. In the year 2021 and 2020, the total dividend that received was THB 355.03 million and THB 232.88 million, respectively.
	NK	Dividend Income	14.00	9.00	GUNKUL received dividends from NK. In the year 2021 and 2020, the total dividend that received was THB 14.00 million and THB 9.00 million, respectively.
		Accrued Dividend Income	-	-	

Company	Related Companies	Type of Transaction	Size		Reason and Necessity
			2021 (Million baht)	2020 (Million baht)	
	SGSE	Dividend Income	3.35	4.12	GUNKUL received dividends from SGSE. In the year 2021 and 2020, the total dividend that received was THB 3.35 million and THB 4.12 million, respectively.
	WED	Dividend Income	138.60	148.84	GUNKUL received dividends from WED. In the year 2021 and 2020, the total dividend that received was THB 138.60 million and THB 148.84 million, respectively.
	ECO	Dividend Income	4.20	5.40	GUNKUL received dividends from ECO. In the year 2021 and 2020, the total dividend that received was THB 4.20 million and THB 5.40 million, respectively.
	BMPS	Dividend Income	21.80	25.30	GUNKUL received dividends from BMPS. In the year 2021 and 2020, the total dividend that received was THB 21.80 million and THB 25.30 million, respectively.
	GNP	Dividend Income	377.19	307.39	GUNKUL received dividends from GNP. In the year 2021 and 2020, the total dividend that received was THB 377.19 million and THB 307.39 million, respectively.
	KWE	Dividend Income	466.93	946.82	GUNKUL received dividends from KWE. In the year 2021 and 2020, the total dividend that received was THB 466.93 million and THB 946.82 million, respectively.
	GIM	Dividend Income	1,068.51	699.45	GUNKUL received dividends from GIM. In the year 2021 and 2020, the total dividend that received was THB 1,068.51 million and THB 699.45 million, respectively.
	GTRC	Dividend Income	1.20	-	GUNKUL received dividend from GTRC. In the year 2021, the total dividend that received was THB 1.20 million.
IAE	RNS	Dividend Income	373.44	170.32	IAE received dividends from RNS. In the year 2021 and 2020, the total dividend that received was THB 373.44 million and THB 170.32 million, respectively.
GPD	FEC	Dividend Income	32.00	-	GPD received dividend from FEC. In the year 2021, the total dividend that received was THB 32.00 million.
BGP	Singapore AN YANG PTE.LTD.	Dividend Income	28.47	-	BGP received dividend from Singapore AN YANG PTE.LTD. In the year 2021, the total dividend that received was THB 28.47 million.
	Singapore YUN YANG PTE.LTD.	Dividend Income	24.18	-	BGP received dividend from Singapore YUN YANG PTE.LTD. In the year 2021, the total dividend that received was THB 24.18 million.

9.2.2 Necessity and Reasonability of the Related Party Transactions

Opinion of the Audit Committee for the Related Party Transactions between the Company, subsidiaries, associated companies, and related companies/persons

- Buy/Sell transactions were reasonable under normal commercial conditions and provide benefit to the Company
- Renting or leasing space transactions between the Company, subsidiaries and related persons, the Company and the Group have made a rental contract and the sub rental contract with the rental rates of land and buildings were determined by the independent appraiser couple with comparable terms and conditions as renting to third parties. Hence, those transactions were considered reasonable and necessary.
- Service of O&M and management fee between the Company and associated companies were made under agreed service fee which were useful for the Company's operation and were reasonable.
- The Company and the Group entered into an agreement with a related company for the construction of a renewable power plant with a reasonable price by the fair rate which was comparable to other clients. The Company strictly follows the regulations prescribed by the Stock Exchange of Thailand which in the case that considered not a "Normal business" under the definition of the SEC, transaction size more than THB 1 million or more than 0.03% of Net Tangible Asset (NTA), the Company shall submit to the Board of Director or the shareholders' meeting for approval prior entering such transaction (depended on transaction value).
- The Company and the Group entered solar rooftop power plant construction contracts with the reasonable agreed price.
- Asset acquisitions transactions for internal usage between the Company and the Group with related persons were similarly to any transactions done with the third party and were done for the sake of the Company's benefits.

The intercompany loans within the Group and all related companies were charged at the interest rate similar to the borrowing rate from financial institutions. These lending were necessary and reasonable for the benefit of the Company and the Group.

9.2.3 Policy or Trend to do Related Party Transaction in the Future and the Company's Obligations Provided in the Prospectus

Measure and procedure of Related Party Transaction approval

Related party transactions between the Company and subsidiaries and related companies/persons depend on reason, necessity and benefit to the Company as a whole. Price has to be fair or equivalent to normal business condition and in compliance with Securities and Exchange Act and other related rules and regulations. The Company sets procedures and steps of approving such related party transactions by not allowing management or related persons who have conflict of interest in that transaction to participate in the approval process. In case this transaction involves related persons who may have conflict of interest, or might happen in the future, the management may propose the transaction to the Board of Directors or shareholders meeting for approval depend on size of the transaction.

The Board of Directors has set up the policy to ensure the transparency and justice equally for all shareholders based on the following principles:

- The transaction shall gain the approval from the Directors and Executives with the careful, honest and transparent consideration, by which the interested person does not participate in the decision.
- The transaction is conducted with consideration of the Company's benefits like the transaction with the outsider.
- The Company establishes the monitoring and following up system to ensure that the transaction is in compliance with the process.
- The transaction information is disclosed completely and correctly in the proper time.

The Company's policy on the transaction categorizes the transactions as follows:

- The regular business and regular business promotion, for example, purchasing and selling product or OEM.

The regular business and regular business promotion between the Company and subsidiaries and associated companies, directors, executives or the related persons which gains the approval in principles from the Board of Directors shall be conducted by the Management, if the transaction has the trade agreement in the manner that the ordinary person would agree with counterpart in the same situation with the trade bargain leverage not influenced by the Directorship

position, Executive or the related person. The Table of Authority has been established to delegate approval authority based on the size of the transaction to ensure the transparent operation.

The Company shall summarize the transaction report to submit to the Audit Committee and the Board of Directors meetings on quarterly basis.

- Other transactions aside from the above-mentioned regular business and regular business promotion such as the short-term rent or lease of property, transaction in relation to the asset or service (for example the investment or sale of the financial investment in the business) or the offer or reception of the financial assistance.

The Company's policy specifies the approval authority in compliance with the principle of Stock Exchange of Thailand.

The Company shall summarize the transaction report to submit to the Audit Committee and the Board of Directors meetings on quarterly basis.

The Board of Directors shall comply with the Securities and Exchange Act, regulations, notifications, orders or requirements of the Stock Exchange of Thailand. Additionally, it shall comply with regulations regarding the related party transactions and the acquisition / disposal of the key assets of the Company or subsidiaries, so that the transaction does not bring any conflict of interest and cause the utmost benefits for all shareholders. In this regard, the Company shall disclose the details of transactions in the Annual Registration Statement / Annual Report (Form 56-1 One Report), and the notes to financial statement which shall be audited by the Company's auditor.



Policy and trend to do Related Party Transactions in the future

1. Trend of related party transactions with persons with possible conflict of interest

- High-Voltage Equipment Business. The Company continues to conduct related party transactions with its subsidiaries for product trading, asset trading, financial support including guaranteeing credit facilities for subsidiaries. Also, the use of the subsidiary's assets to guarantee the credit facilities of the Company.
- Renewable Energy Business. The Company continues to conduct related party transactions with its subsidiaries, associated companies, and joint ventures for the sale of products, power plant maintenance service, asset trading, financial support including the guarantee of credit facilities for the subsidiaries and the use of the subsidiaries' assets to guarantee the credit facilities of the Company.
- Engineering and Turnkey Business. The Company continues to conduct related party transactions with its subsidiaries for selling products, construction service and system contractor, financial support including the guarantee of credit facilities for the subsidiaries and the use of the subsidiaries' assets to guarantee the credit facilities of the Company.
- Business of foreign investment and project of foreign investment. The Company continues to conduct related party transactions with subsidiaries and projects continuously for providing financial support.
- The Company and the Group have leased real estate and movable properties for using in business operations from the group of companies with mutual directors.

2. Policy on Related Party Transactions in the future

The Company has a policy on related party transactions by set up a normal practical business terms, set up a market price which can compare with a price from outsider and comply with the law or the principle of Stock Exchange of Thailand including, regulations, notifications, orders or requirements. The Company sets measures and procedures of approving such related party transactions by not allowing management or related persons who have conflict of interest in that transaction to participate in the approval process. In case this transaction involves related persons who may have conflict of interest, or might happen in the future. The management may propose the transaction to the Board of Directors or shareholders meeting for approval depend on the transaction's size. In purpose to comply with a policy and a table of approval authority, which set up to be a guideline for proceeding the matter and for ensuring the transparency.

The Company will comply with regulations about disclosure of related party transactions as well as summarize the transaction report to submit to the Audit Committee and the Board of Directors meetings on quarterly basis. The Company will disclose related party transactions in Annual Registration Statement / Annual Report (Form 56-1 One Report) and in the notes to financial statement which shall be audited by the Company's auditor.

Part 3

Financial Statements

Board of Directors' Responsibility for
Financial Reporting 211

Financial Statements 212



Board of Directors' Responsibility for Financial Reporting

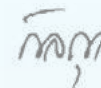
The Public Limited Companies Act B.E. 2535 (1992), Accounting Act B.E. 2543 (2000), Securities and Exchange Act B.E. 2535 (1992) and Notification of the Capital Market Supervisory Board Re: Rules, Conditions and Procedures for Disclosure regarding Financial and Non-financial Information of Securities Issuers stipulates that the Board of Directors is responsible for the financial statements and financial information appears in the Annual Registration Statement / Annual Report (Form 56-1 One Report) to be able to reflect the financial status, operating results and cash flow accurately, transparently and beneficial to the users of financial statement.

The Board of Directors has appointed the Audit Committee to review accounting policies and the quality of financial reports, establish and maintain a proper and efficient risk management system, internal control system, and internal audit in order to reasonably ensure that the accounting information is accurate, complete and adequate to sustain the Company's assets, as well as to prevent fraud, corruption or material irregular operations.

The financial statements ended December 31, 2021, were prepared in accordance with Financial Reporting Standards, with chosen appropriate accounting policies and regular practices. The discretion and estimates were provided carefully and reasonably. The information has been sufficiently disclosed in the Notes to the financial statements in a transparent and useful manner to all shareholders and general investors.

The consolidated financial statements of the Company and its subsidiaries as well as the separate financial statements of the Company for the year ended December 31, 2021, were audited by the Company's auditor, KPMG Phoomchai Audit Co., Ltd. The auditor was provided with supporting information and documents from the Company to be able to review and express opinion in accordance with the standards on auditing. The auditor's opinion has already stated in the auditor's report, which is shown in the Annual Registration Statement / Annual Report (Form 56-1 One Report).

The Board of Directors opined that the Company has maintained an effective internal control system at an adequate and appropriate level to assure the credibility of the consolidated financial statements of the Company and its subsidiaries and the separate financial statements of the Company for the year ended December 31, 2021, presenting accurate and reliable in all substantial aspects according with financial reporting standards as well as relevant rules, laws and regulations.



Dr. Gunkul Dhumrongpiyawut
Chairman of the Board of Directors
23 February 2022

Independent Auditor's Report

To the Shareholders of Gunkul Engineering Public Company Limited

Opinion

I have audited the consolidated and separate financial statements of Gunkul Engineering Public Company Limited and its subsidiaries (the “Group”) and of Gunkul Engineering Public Company Limited (the “Company”), respectively, which comprise the consolidated and separate statements of financial position as at 31 December 2021, the consolidated and separate statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of the Group and the Company, respectively, as at 31 December 2021 and their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements* section of my report. I am independent of the Group and the Company in accordance with the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Impairment testing of goodwill and investment in subsidiaries, associate and joint venture	
Refer to Note 3, 10, 11 and 14	
The key audit matter	How the matter was addressed in the audit
The Group consistently considered impairment testing of goodwill, and considered impairment testing of investment in subsidiaries, associate and joint venture when there is an indicator which all mainly affected by market situation. This required management's judgement. Therefore, this is an area of focus in my audit.	<p>My audit procedures in this area included, among others:</p> <ul style="list-style-type: none"> Understanding the impairment testing process of the management including estimated future cash flow and key assumptions used; Testing key assumptions that underpin management's discounted cash flows with reference to market situations and its operating environment, my knowledge of the industry, and other obtained information; Evaluating of the forecasting of financial performances by comparing historical estimation to the actual operating results and; Evaluating the adequacy of the disclosures in accordance with the relevant Thai Financial Reporting Standards.

Revenue and cost of construction services	
Refer to Note 3 and 8	
The key audit matter	How the matter was addressed in the audit
<p>The Group accounts for revenue from construction services by referencing the stage of completion of the constructions. This is assessed by the responsible project's engineers and considered with the actual costs and the estimated costs to complete the constructions.</p> <p>The management and the project's engineers are required to exercise significant judgement to estimate the cost of construction services to complete the contracts that will affect the stage of completion. I considered the stage of completion and estimation for cost of construction services as the key audit matter.</p>	<p>My audit procedures in this areas included, among others;</p> <ul style="list-style-type: none"> Understanding the processes of the estimation and revision of the estimated costs of construction services; Testing the estimated costs of construction services which were approved by the management, actual costs, revenue from construction services and unbilled revenue with related contracts and documents; Comparing the stage of completion determined by engineers with the ratio of actual costs and the estimated costs including tested customers' acceptance documents; Performing site visits together with the engineers to assess the appropriateness of the actual constructions progress and the stage of completion; Performing analyses of the actual costs incurred and the estimated costs comparison, gross profits, progress of constructions and challenging the management for any deviations; Testing the stage of completions and unbilled revenue calculations; Testing the actual costs incurred after the period ended with related documents; Evaluating the adequacy of the disclosures in accordance with the relevant Thai Financial Reporting Standards.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and request that the correction be made.

Responsibilities of Management and Those Charged with Governance for the Consolidated and Separate Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's and the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

(Waiyawat Kosamarnchaiyakij)
Certified Public Accountant
Registration No. 6333

KPMG Phoomchai Audit Ltd.
Bangkok
23 February 2022

Statement of financial position

Gunkul Engineering Public Company Limited and its Subsidiaries

Consolidated financial statements						Separate financial statements						Consolidated financial statements						Separate financial statements					
31 December						31 December						31 December						31 December					
Assets	Note	2021	2020	2021	2020	Assets	Note	2021	2020	2021	2020	Assets	Note	2021	2020	2021	2020						
(in Baht)																							
Current assets						Non-current assets																	
Cash and cash equivalents	5	1,728,926,133	4,391,924,583	360,005,802	339,673,750	Other non-current financial assets	4.3	155,509,325	132,868,873	110,584,556	111,360,565	Long-term deposits from financial institution											
Short-term deposits from financial institution						pledged as collateral	15	272,952,877	376,094,162	-	-												
pledged as collateral	15	2,120,006,725	1,724,375,404	-	-	Loan to related parties	4.3	-	-	296,125,280	324,925,280												
Trade and other current receivables	4.3, 6	1,465,511,393	2,863,723,261	185,360,111	966,903,135	Investments in associates	10	374,013,537	409,815,757	397,594,800	397,594,800												
Current portion of finance lease receivables	7	93,468,047	58,538,686	-	-	Investments in joint ventures	10	1,458,671,597	1,155,928,826	726,177,750	726,177,750												
Unbilled revenue	8	1,096,476,895	1,225,272,800	-	-	Investments in subsidiaries	11	-	-	15,567,925,805	15,712,437,525												
Revenue Department receivable		14,735,188	385,537,470	5,130,574	-	Finance lease receivables	7	1,685,055,462	821,785,263	-	-												
Short-term loans to related parties	4.3	-	-	725,826,044	2,933,806,406	Revenue Department receivable		95,268,474	-	-	-												
Inventories	9	808,911,788	637,408,172	350,589,544	377,178,712	Advance for shares subscription	11	60,000,000	-	60,000,000	-												
Derivative assets	27	1,691,907	-	621,900	-	Investment properties	4.3	55,788,305	-	3,143,658	3,143,658												
Other current financial assets	27	19,198,138	162,314,840	-	82,000,000	Property, plant and equipment	4.3, 12	26,535,629,122	26,914,415,177	36,104,708	46,856,891												
Other current assets		217,889,552	333,391,063	15,619,239	98,285,277	Right-of-use assets	4.3, 13	543,885,223	710,900,496	47,079,918	54,665,523												
Total current assets		7,566,815,766	11,782,486,279	1,643,153,214	4,797,847,280	Goodwill	14	163,476,324	163,476,324	-	-												
						Intangible assets	14	3,300,020,027	3,414,649,404	9,816,498	6,835,206												
						Deferred tax assets	24	53,361,647	56,761,808	27,046,695	37,905,714												
						Derivative assets	27	53,520,392	-	-	-												
						Other non-current assets		111,386,156	92,973,746	39,107,029	68,015,824												
						Total non-current assets		34,918,538,468	34,249,669,836	17,320,706,697	17,489,918,736												
						Total assets		42,485,354,234	46,032,156,115	18,963,859,911	22,287,766,016												

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Statement of financial position

Gunkul Engineering Public Company Limited and its Subsidiaries

Consolidated financial statements						Separate financial statements						Consolidated financial statements						Separate financial statements					
31 December						31 December						31 December						31 December					
Liabilities and equity	Note	2021	2020	2021	2020	Liabilities and equity	Note	2021	2020	2021	2020	Liabilities and equity	Note	2021	2020	2021	2020						
(in Baht)						(in Baht)						(in Baht)											
Current liabilities						Non-current liabilities																	
Short-term loans from financial institutions	15	1,644,687,925	4,659,281,879	1,219,551,025	4,590,160,022	Long-term loans	15	15,487,804,240	14,657,840,218	308,007,919	336,511,427												
Short-term loans from related parties	4.3	-	-	95,000,000	182,000,000	Debentures	15	3,142,260,354	4,135,584,021	3,142,260,354	4,135,584,021												
Trade and other current payables	4.3	1,681,236,038	2,403,918,800	381,430,809	513,709,350	Retention payables		17,819,979	15,924,784	604,265	87,500												
Unearned revenues		403,626,390	399,672,806	7,094,489	34,200,367	Lease liabilities	4.3, 15	522,807,375	552,532,255	25,073,134	37,132,462												
Payable for purchases of assets		50,920,441	1,532,604,348	-	-	Deferred tax liabilities	24	256,588,537	226,632,783	-	-												
Payables for share subscription	10	142,023,500	59,083,480	-	20,726,403	Provisions for employee benefit	16	110,151,361	86,538,736	61,055,144	54,463,259												
Retention payables		343,872,627	350,552,294	2,121,778	6,612,800	Provision for decommissioning costs																	
Current portion of long-term loans	15	1,671,895,542	1,496,265,900	28,503,508	28,482,094	of buildings and power plants	17	342,405,666	319,889,987	-	-												
Current portion of debentures	15	2,797,530,605	1,819,000,000	2,797,530,605	1,819,000,000	Derivative liabilities	27	257,881,409	571,894,192	50,414,138	143,633,082												
Current portion of lease liabilities	4.3, 15	43,887,801	42,155,085	19,236,757	15,409,287	Other non-current financial liabilities		618,571	618,571	618,571	618,571												
Derivative liabilities	27	6,375,293	20,705,137	6,375,293	20,520,943	Other non-current liabilities		10,198,118	6,814,409	572,724	10,486												
Income tax payable		22,870,422	29,390,046	-	-	Total non-current liabilities		20,148,535,610	20,574,269,956	3,588,606,249	4,708,040,808												
Other current liabilities		244,670,017	169,943,278	17,301,632	23,759,195																		
Total current liabilities		9,053,596,601	12,982,573,053	4,574,145,896	7,254,580,461	Total liabilities		29,202,132,211	33,556,843,009	8,162,752,145	11,962,621,269												

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Statement of financial position

Gunkul Engineering Public Company Limited and its Subsidiaries

Liabilities and equity	Note	Consolidated financial statements		Separate financial statements	
		31 December		31 December	
		2021	2020	2021	2020
		(in Baht)			
Equity					
Share capital	18				
Authorised share capital		2,220,632,743	2,220,632,743	2,220,632,743	2,220,632,743
Issued and paid-up share capital		2,220,632,743	2,220,632,743	2,220,632,743	2,220,632,743
Treasury shares	19	-	(304,674,256)	-	(304,674,256)
Additional paid in capital:					
Premium on ordinary shares	20	5,179,473,454	5,179,473,454	5,179,473,454	5,179,473,454
Share premium on treasury shares		121,791,814	-	121,791,814	-
Difference arising from business combination					
under common control		(467,953,968)	(467,953,968)	-	-
Deficit from changes in ownership					
interest in subsidiary		(205,957,015)	(205,957,015)	-	-
Retained earnings					
Appropriated					
Legal reserve	20	222,559,000	222,559,000	222,559,000	222,559,000
Treasury shares reserve	19	-	304,674,256	-	304,674,256
Unappropriated		6,172,752,229	5,781,434,415	3,056,650,755	2,702,479,550
Other components of equity	20	(121,689,324)	(380,345,758)	-	-
Equity attributable to owners of the parent		13,121,608,933	12,349,842,871	10,801,107,766	10,325,144,747
Non-controlling interests		161,613,090	125,470,235	-	-
Total equity		13,283,222,023	12,475,313,106	10,801,107,766	10,325,144,747
Total liabilities and equity		42,485,354,234	46,032,156,115	18,963,859,911	22,287,766,016

The accompanying notes form an integral part of these financial statements.

Statement of comprehensive income

Gunkul Engineering Public Company Limited and its Subsidiaries

	Note	Consolidated		Separate		Note	Consolidated		Separate		
		financial statements		financial statements			financial statements		financial statements		
		Year ended 31 December		Year ended 31 December			Year ended 31 December		Year ended 31 December		
		2021	2020	2021	2020		2021	2020	2021	2020	
		(in Baht)					(in Baht)				
Revenue						Expenses					
Revenue from sale	4.1	1,474,969,518	1,495,877,402	1,553,042,920	1,673,022,476	Cost of sale	4.2, 9	1,174,979,863	1,110,665,621	1,361,733,961	1,369,403,789
Revenue from sale of electricity		3,387,509,619	2,896,952,073	-	-	Cost of sale of electricity	4.2	1,895,975,490	1,738,354,708	-	-
Revenue from rendering of services	4.1	223,635,901	124,213,883	16,229,491	20,256,922	Cost of rendering of services		59,990,549	52,881,296	3,379,765	2,561,419
Revenue from construction services		1,888,968,782	2,022,418,375	62,230,516	-	Cost of construction services	4.2	1,571,729,057	1,814,550,944	39,302,264	-
Revenue from sale of assets under finance lease	7	970,089,249	913,476,986	-	-	Cost of sale of assets under finance lease	7	870,825,265	891,847,931	-	-
Revenue from adder		1,372,988,568	1,196,404,375	-	-	Selling expenses		61,773,369	58,491,311	25,815,845	29,498,367
Dividend income	4.1, 10, 11	-	-	2,667,588,121	2,577,185,095	Administrative expenses and others	4.2	910,307,379	896,785,305	398,761,797	423,580,484
Net foreign exchange gain		99,712,931	-	30,028,544	18,821,658	Net foreign exchange loss		-	13,867,001	-	-
Interest income	4.1	11,027,694	10,854,877	52,838,334	29,124,441	Loss on change in fair value of derivatives		-	13,219,384	-	-
Gain on change in fair value of derivatives		377,396,683	-	102,702,664	74,308,660	Loss on capital reduction of subsidiary	11	130,503,892	-	130,503,892	-
Gain on bargain purchase		-	259,273,007	-	-	Total expenses		6,676,084,864	6,590,663,501	1,959,497,524	1,825,044,059
Gain on sale of investment in subsidiary		-	1,977,595,728	-	-						
Other income	4.1	61,830,864	77,474,322	15,544,266	940,353	Share of profit of associates and joint ventures					
Total revenue		9,868,129,809	10,974,541,028	4,500,204,856	4,393,659,605	accounted for using equity method	10	217,836,997	72,595,791	-	-
						Profit before finance costs and income tax expense		3,409,881,942	4,456,473,318	2,540,707,332	2,568,615,546
						Finance costs	4.2, 23	970,526,311	911,768,869	340,841,686	321,391,732
						Profit before income tax expense		2,439,355,631	3,544,704,449	2,199,865,646	2,247,223,814
						Tax expense	24	187,837,750	119,411,606	12,458,498	50,072,144
						Profit for the year		2,251,517,881	3,425,292,843	2,187,407,148	2,197,151,670

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Statement of comprehensive income

Gunkul Engineering Public Company Limited and its Subsidiaries

		Consolidated financial statements		Separate financial statements	
		Year ended 31 December		Year ended 31 December	
	Note	2021	2020	2021	2020
		(in Baht)			
Other comprehensive income					
<i>Items that will be reclassified</i>					
<i>subsequently to profit or loss</i>					
Exchange differences on translating foreign operations		258,656,434	200,099,685	-	-
Loss on measurement of financial assets		-	(291,769)	-	-
Income tax relating to items that will be reclassified					
subsequently to profit or loss	24	-	22,658	-	-
Total items that will be reclassified					
subsequently to profit or loss		258,656,434	199,830,574	-	-
<i>Items that will not be reclassified to profit or loss</i>					
Loss on remeasurements of defined benefit plans	16	(13,893,041)	-	(7,997,395)	-
Income tax relating to items that will not be reclassified					
to profit or loss	24	2,778,608	-	1,599,479	-
Total items that will not be					
reclassified to profit or loss		(11,114,433)	-	(6,397,916)	-
Other comprehensive income (expense)					
for the year, net of tax		247,542,001	199,830,574	(6,397,916)	-
Total comprehensive income (expense) for the year		2,499,059,882	3,625,123,417	2,181,009,232	2,197,151,670

		Consolidated financial statements		Separate financial statements	
		Year ended 31 December		Year ended 31 December	
	Note	2021	2020	2021	2020
		(in Baht)			
Profit attributable to:					
Owners of parent		2,229,270,274	3,412,336,597	2,187,407,148	2,197,151,670
Non-controlling interests		22,247,607	12,956,246	-	-
Profit for the year		2,251,517,881	3,425,292,843	2,187,407,148	2,197,151,670
Total comprehensive income (expense) attributable to:					
Owners of parent		2,476,812,275	3,612,167,171	2,181,009,232	2,197,151,670
Non-controlling interests		22,247,607	12,956,246	-	-
Total comprehensive income (expense) for the year		2,499,059,882	3,625,123,417	2,181,009,232	2,197,151,670
Basic earnings per share (in Baht)	25	0.25	0.39	0.25	0.25

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Statement of changes in equity

Gunkul Engineering Public Company Limited and its Subsidiaries

Consolidated financial statements															
Note	Issued and paid-up share capital	Treasury shares	Share premium	Difference arising from business combination under common control	Deficit from changes in ownership interests in subsidiary	Retained earnings			Exchange differences on translating financial statements	Other components of equity			Equity attributable to owners of the parent	Non-controlling interests	Total equity
						Legal reserve	Treasury shares	Unappropriated		Gain (loss) on investments in debt instruments designated at fair value through other comprehensive income	Total other components of equity				
												(in Baht)			
Year ended 31 December 2020															
Balance at 1 January 2020	2,220,632,743	(304,674,256)	5,179,473,454	(467,953,968)	-	222,559,000	304,674,256	3,563,649,123	(580,445,443)	269,111	(580,176,332)	10,138,184,020	620,706,683	10,758,890,703	
Transactions with owners, recorded directly in equity															
Distributions to owners of the parent															
Subsidiary paid dividend	-	-	-	-	-	-	-	-	-	-	-	-	(5,218,784)	(5,218,784)	
Dividend paid to shareholders	26	-	-	-	-	-	-	(1,194,551,305)	-	-	-	(1,194,551,305)	-	(1,194,551,305)	
Total distributions to owners of the parent	-	-	-	-	-	-	-	(1,194,551,305)	-	-	-	(1,194,551,305)	(5,218,784)	(1,199,770,089)	
Changes in ownership interests in subsidiaries															
Acquisition of non-controlling interests without a change in control	-	-	-	-	(205,957,015)	-	-	-	-	-	-	(205,957,015)	(574,042,985)	(780,000,000)	
Acquisition of non-controlling interests from businesses combination	-	-	-	-	-	-	-	-	-	-	-	-	1,004,075	1,004,075	
Increase of ordinary shares in subsidiary	-	-	-	-	-	-	-	-	-	-	-	-	70,065,000	70,065,000	
Total changes in ownership interests in subsidiaries	-	-	-	-	(205,957,015)	-	-	-	-	-	-	(205,957,015)	(502,973,910)	(708,930,925)	
Total transactions with owners, recorded directly in equity															
-	-	-	-	-	(205,957,015)	-	-	(1,194,551,305)	-	-	-	(1,400,508,320)	(508,192,694)	(1,908,701,014)	
Comprehensive income (expense) for the year															
Profit	-	-	-	-	-	-	-	3,412,336,597	-	-	-	3,412,336,597	12,956,246	3,425,292,843	
Other comprehensive income (expense)	-	-	-	-	-	-	-	-	200,099,685	(269,111)	199,830,574	199,830,574	-	199,830,574	
Total comprehensive income (expense) for the year	-	-	-	-	-	-	-	3,412,336,597	200,099,685	(269,111)	199,830,574	3,612,167,171	12,956,246	3,625,123,417	
Balance at 31 December 2020	2,220,632,743	(304,674,256)	5,179,473,454	(467,953,968)	(205,957,015)	222,559,000	304,674,256	5,781,434,415	(380,345,758)	-	(380,345,758)	12,349,842,871	125,470,235	12,475,313,106	

The accompanying notes form an integral part of these financial statements.

Statement of changes in equity

Gunkul Engineering Public Company Limited and its Subsidiaries

Consolidated financial statements										Other components				
Note	Issued and paid-up share capital	Treasury shares	Share premium	Share premium on treasury share	Difference arising from business combination under common control	Deficit from changes in ownership interests in subsidiary	Retained earnings			Exchange differences on translating financial statements	Equity attributable to owners of the parent	Non-controlling interests	Total equity	
							Legal reserve	Treasury shares reserve	Unappropriated					
(in Baht)														
Year ended 31 December 2021														
Balance at 1 January 2021	2,220,632,743	(304,674,256)	5,179,473,454	-	(467,953,968)	(205,957,015)	222,559,000	304,674,256	5,781,434,415	(380,345,758)	12,349,842,871	125,470,235	12,475,313,106	
Transactions with owners, recorded directly in equity														
Contributions by and distributions to owners														
Treasury shares sold	19	-	304,674,256	-	121,791,814	-	-	-	(304,674,256)	304,674,256	-	426,466,070	-	426,466,070
Subsidiary paid dividend		-	-	-	-	-	-	-	-	-	-	(4,039,852)	(4,039,852)	
Issue of ordinary shares in subsidiary		-	-	-	-	-	-	-	-	-	-	17,935,100	17,935,100	
Dividend paid to shareholders	26	-	-	-	-	-	-	-	(2,131,512,283)	-	(2,131,512,283)	-	(2,131,512,283)	
Total contributions by and distributions to owners		-	304,674,256	-	121,791,814	-	-	-	(304,674,256)	(1,826,838,027)	-	(1,705,046,213)	13,895,248	(1,691,150,965)
Total transactions with owners, recorded directly in equity		-	304,674,256	-	121,791,814	-	-	-	(304,674,256)	(1,826,838,027)	-	(1,705,046,213)	13,895,248	(1,691,150,965)
Comprehensive income (expense) for the year														
Profit		-	-	-	-	-	-	-	2,229,270,274	-	2,229,270,274	22,247,607	2,251,517,881	
Other comprehensive income (expense)		-	-	-	-	-	-	-	(11,114,433)	258,656,434	247,542,001	-	247,542,001	
Total comprehensive income (expense) for the year		-	-	-	-	-	-	-	2,218,155,841	258,656,434	2,476,812,275	22,247,607	2,499,059,882	
Balance at 31 December 2021		2,220,632,743	-	5,179,473,454	121,791,814	(467,953,968)	(205,957,015)	222,559,000	-	6,172,752,229	(121,689,324)	13,121,608,933	161,613,090	13,283,222,023

The accompanying notes form an integral part of these financial statements.

Statement of changes in equity

Gunkul Engineering Public Company Limited and its Subsidiaries

Separate financial statements

				Retained earnings				
		Issued and paid-up share capital	Treasury shares	Share premium	Legal reserve <i>(in Baht)</i>	Treasury shares reserve	Unappropriated	Total equity
Year ended 31 December 2020								
Balance at 1 January 2020		2,220,632,743	(304,674,256)	5,179,473,454	222,559,000	304,674,256	1,699,879,185	9,322,544,382
Transactions with owners, recorded directly in equity								
Distributions to owners								
Dividend paid to shareholders	26	-	-	-	-	-	(1,194,551,305)	(1,194,551,305)
Total distributions to owners		-	-	-	-	-	(1,194,551,305)	(1,194,551,305)
Total transactions with owners, recorded directly in equity		-	-	-	-	-	(1,194,551,305)	(1,194,551,305)
Comprehensive income (expense) for the year								
Profit		-	-	-	-	-	2,197,151,670	2,197,151,670
Other comprehensive income (expense)		-	-	-	-	-	-	-
Total comprehensive income (expense) for the year		-	-	-	-	-	2,197,151,670	2,197,151,670
Balance at 31 December 2020		2,220,632,743	(304,674,256)	5,179,473,454	222,559,000	304,674,256	2,702,479,550	10,325,144,747

Statement of changes in equity

Gunkul Engineering Public Company Limited and its Subsidiaries

Separate financial statements

		Issued and		Share		Retained earnings			
		paid-up	Treasury	Share	premium	Legal	Treasury	Total	
	Note	share capital	shares	premium	on treasury share	reserve	shares reserve	Unappropriated equity	
					(in Baht)				
Year ended 31 December 2021									
Balance at 1 January 2021		2,220,632,743	(304,674,256)	5,179,473,454	-	222,559,000	304,674,256	2,702,479,550	10,325,144,747
Transactions with owners, recorded directly in equity									
Contributions by and distributions to owners									
Treasury shares sold	19	-	304,674,256	-	121,791,814	-	(304,674,256)	304,674,256	426,466,070
Dividend paid to shareholders	26	-	-	-	-	-	-	(2,131,512,283)	(2,131,512,283)
Total contributions by and distributions to owner		-	304,674,256	-	121,791,814	-	(304,674,256)	(1,826,838,027)	(1,705,046,213)
Total transactions with owners, recorded directly in equity									
		-	304,674,256	-	121,791,814	-	(304,674,256)	(1,826,838,027)	(1,705,046,213)
Comprehensive income (expense) for the year									
Profit		-	-	-	-	-	-	2,187,407,148	2,187,407,148
Other comprehensive income (expense)		-	-	-	-	-	-	(6,397,916)	(6,397,916)
Total comprehensive income (expense) for the year		-	-	-	-	-	-	2,181,009,232	2,181,009,232
Balance at 31 December 2021		2,220,632,743	-	5,179,473,454	121,791,814	222,559,000	-	3,056,650,755	10,801,107,766

Statement of cash flows

Gunkul Engineering Public Company Limited and its Subsidiaries

	Consolidated financial statements		Separate financial statements			Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December			Year ended 31 December		Year ended 31 December	
	2021	2020	2021	2020		2021	2020	2021	2020
	(in Baht)					(in Baht)			
Cash flows from operating activities					Changes in operating assets and liabilities				
Profit for the year	2,251,517,881	3,425,292,843	2,187,407,148	2,197,151,670	Short-term deposits from financial institution				
<i>Adjustments to reconcile profit to cash receipts (payments)</i>					pledged as collateral	(300,140,637)	810,934,192	-	200,103,712
Tax expense	187,837,750	119,411,606	12,458,498	50,072,144	Trade and other current receivables	1,374,641,989	(1,206,422,843)	783,426,570	(591,632,671)
Finance costs	970,526,311	911,768,869	340,841,686	321,391,732	Lease receivables	41,774,526	53,849,262	-	-
Depreciation and amortisation	1,541,984,302	1,353,456,948	30,841,553	14,863,386	Unbilled revenue	128,795,905	(600,101,336)	-	-
Provisions for employee benefits	13,260,381	10,772,722	1,910,410	6,400,674	Revenue Department receivable	275,533,808	(165,331,707)	(5,130,574)	2,570,255
Unrealised (gain) loss on foreign exchange	(4,891,608)	39,846,270	(10,848,979)	29,068,581	Inventories	(171,729,106)	1,893,548	26,589,167	(1,270,176)
(Gain) loss on change in fair value of derivatives	(377,396,683)	13,219,384	(102,702,664)	(74,308,660)	Other current assets	107,089,847	(130,204,646)	67,852,181	(62,559,878)
Share of profit of associates and joint ventures					Other non-current financial assets	(22,640,452)	(14,349,411)	776,009	132,622
accounted for using equity method	(217,836,997)	(72,595,791)	-	-	Other non-current assets	15,578,581	(4,830,540)	33,000,000	-
Dividend income	-	-	(2,667,588,121)	(2,577,185,095)	Trade and other current payables	(820,184,216)	(1,628,468,385)	(132,822,244)	147,971,477
(Reversal of) impairment loss recognised in profit or loss	(5,597,502)	5,890,475	(5,597,502)	5,570,988	Unearned revenues	3,953,584	(2,647,085)	(27,105,878)	14,672,238
Impairment loss on investment in subsidiary	-	-	13,512,943	-	Retention payables	(811,253)	(34,646,551)	(3,974,257)	(2,801,043)
Loss on inventories devaluation	225,490	13,477,851	-	4,998,462	Other current liabilities	74,726,739	8,012,228	(6,457,563)	3,983,453
Loss on disposal of property, plant and equipment	5,872,810	1,587,372	3,085,139	873,794	Provisions for employees benefits	(3,540,798)	(1,225,737)	(3,315,920)	(1,002,270)
Gain on disposal of other debts securities	(888,007)	(513,391)	(486,858)	(98,473)	Other non-current liabilities	2,090,489	28,861,999	562,240	(627,177)
Loss on fair value adjustment	144,678	188,298	-	-	Net cash generated from (used in) operating activities	5,189,374,010	689,402,832	613,898,542	(340,784,696)
Gain on bargain purchase	-	(259,273,007)	-	-	Taxes received (paid)	(180,328,634)	(77,931,180)	5,438,821	(9,532,177)
Gain on sale of investment in subsidiary	-	(1,977,595,728)	-	-	Net cash from (used in) operating activities	5,009,045,376	611,471,652	619,337,363	(350,316,873)
Loss on capital reduction of subsidiary	130,503,892	-	130,503,892	-					
Interest income	(11,027,694)	(10,854,877)	(52,838,334)	(29,124,441)					
	4,484,235,004	3,574,079,844	(119,501,189)	(50,325,238)					

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Statement of cash flows

Gunkul Engineering Public Company Limited and its Subsidiaries

	Consolidated		Separate			Consolidated		Separate	
	financial statements		financial statements			financial statements		financial statements	
	Year ended 31 December		Year ended 31 December			Year ended 31 December		Year ended 31 December	
	2021	2020	2021	2020		2021	2020	2021	2020
	(in Baht)					(in Baht)			
Cash flows from investing activities					Cash flows from financing activities				
Payment for incremental of capital in subsidiaries	-	-	(765,789,287)	(1,411,729,365)	Payment of change in ownership interest in subsidiaries				
Proceeds from reduction of shares in subsidiary	-	-	766,284,172	-	without a change in control	-	(780,000,000)	-	(780,000,000)
Acquisition of subsidiaries, net of cash acquired	-	(440,642,857)	-	(311,576,740)	Proceeds from short-term loans	-	3,620,874,153	-	3,617,171,295
Proceeds from disposal of subsidiaries	-	4,597,985,471	-	-	Repayment of short-term loans	(3,018,647,324)	-	(3,372,379,456)	-
Proceeds from incremental of shares in non-controlling interest	17,935,100	70,065,000	-	-	Proceeds from loans from related parties	-	-	21,000,000	1,371,000,000
Acquisition of business under common control	-	(2,535,975)	-	-	Repayment of loans from related parties	-	-	(108,000,000)	(1,489,537,147)
Acquisition of joint venture	(107,976,499)	-	-	-	Proceeds from long-term loans	2,433,105,808	1,743,669,366	-	-
Payment for incremental of capital in joint ventures	(499,990)	-	-	-	Repayment of long-term loans	(1,612,982,675)	(1,391,695,929)	(28,800,000)	(28,800,000)
Payment for payable for share subscription	(35,906,694)	-	(22,584,337)	-	Proceeds from debentures	1,791,900,000	1,343,837,657	1,791,900,000	1,343,837,657
Proceeds from sale of other debts securities	2,578,360,331	326,272,590	2,341,987,158	160,098,472	Repayment of debentures	(1,819,000,000)	(1,000,000,000)	(1,819,000,000)	(1,000,000,000)
Acquisition of other debts securities	(2,434,500,300)	(465,001,000)	(2,259,500,300)	(242,000,000)	Payment of lease liabilities	(74,739,303)	(247,016,227)	(17,214,350)	(7,903,215)
Payment for advance for shares subscription	(60,000,000)	-	(60,000,000)	-	Proceeds from sale of treasury shares	426,466,070	-	426,466,070	-
Acquisition of investment property	(55,788,305)	-	-	-	Dividend paid to shareholders	(2,131,106,784)	(1,194,489,983)	(2,131,106,784)	(1,194,489,983)
Acquisition of property, plant and equipment	(2,952,402,101)	(3,496,709,518)	(3,425,779)	(7,643,276)	Dividend paid to non-controlling interests	(4,039,852)	(5,218,784)	-	-
Acquisition of intangible assets	(8,422,244)	(8,720,885)	(6,192,600)	(2,846,680)	Interest paid	(887,131,249)	(905,271,702)	(326,491,867)	(304,724,370)
Proceeds from sale of property, plant and equipment	5,165,707	5,561,559	30,675	995,592	Net cash from (used in) financing activities	(4,896,175,309)	1,184,688,551	(5,563,626,387)	1,526,554,237
Proceeds from loans to related parties	-	169,928,657	2,610,237,372	2,396,986,952					
Payment for loans to related parties	-	-	(366,600,000)	(4,329,537,498)					
Dividend received	216,773,649	197,985,034	2,667,588,121	2,586,224,693					
Interest received	11,770,309	11,922,568	56,595,404	29,189,095					
Net cash from (used in) investing activities	(2,825,491,037)	966,110,644	4,958,630,599	(1,131,838,755)					

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Statement of cash flows

Gunkul Engineering Public Company Limited and its Subsidiaries

	Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December	
	2021	2020	2021	2020
	(in Baht)			
Net increase (decrease) in cash and cash equivalents	(2,712,620,970)	2,762,270,847	14,341,575	44,398,609
Effect of exchange rate changes on cash and cash equivalents	49,622,520	29,434,199	5,990,477	(8,479,681)
Cash and cash equivalents as at 1 January	4,391,924,583	1,600,219,537	339,673,750	303,754,822
Cash and cash equivalents at 31 December	1,728,926,133	4,391,924,583	360,005,802	339,673,750
Non-cash transactions				
Payables for purchases of property, plant and equipment	50,920,441	1,532,604,348	-	-
Acquisition of assets under finance lease contracts	20,216,823	10,038,242	8,982,491	42,054,486
Finance costs and front end fee capitalise as assets	249,338	1,290,836	-	-
Dividend payable	405,500	61,322	405,500	61,322
Payables for share subscription	142,023,500	59,083,480	-	20,726,403

Notes to the financial statements

Gunkul Engineering Public Company Limited and its Subsidiaries

For the year ended 31 December 2021

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These notes form an integral part of the financial statements.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from the Thai language statutory financial statements, and were approved and authorised for issue by the Board of Directors on 23 February 2022.

1 General information

Gunkul Engineering Public Company Limited, the “Company”, is incorporated in Thailand and was listed on the Stock Exchange of Thailand on 15 October 2010. The Company’s registered office at 1177 Pearl Bangkok Building, 8th floor, Phahonyothin Road, Phaya Thai district, Phaya Thai, Bangkok.

The Company’s major shareholder during the financial year was Gunkul Group Co., Ltd. (49.90% shareholding) which was incorporated in Thailand. The principal shareholder of the Company’s major shareholder is Dhumrongpiyawut family.

The principal activities of the Company and its subsidiaries, the “Group” are manufacturing and distribution of equipments for electrical systems, construction and investing in the generating and selling electricity business. Details of the Company’s subsidiaries as at 31 December 2021 and 2020 are given in note 11.

2 Basis of preparation of the financial statements

(a) Statement of compliance

The financial statements are prepared in accordance with Thai Financial Reporting Standards (“TFRS”), guidelines promulgated by the Federation of Accounting Professions and applicable rules and regulations of the Thai Securities and Exchange Commission.

(b) Functional and presentation currency

These financial statements are presented in Thai Baht, which is the Company’s functional currency.

(c) Use of judgements and estimates

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of the Group’s accounting policies. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively. Relevant information is included in the following notes:

- 3(m) and 7 Whether an arrangement contains a lease; reasonably certain to exercise extension or termination options and sub-lease;
- 3(s) and 8 Determination of stage of completion;
- 14 Key assumptions underlying recoverable amounts of the goodwill;
- 16 Key actuarial assumptions;
- 17 Recognition and measurement of provision for decommissioning costs of buildings and power plant

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

(a) Basis of consolidation

The consolidated financial statements relate to the Company and its subsidiaries (together referred to as the “Group”) and the Group’s interests in associates and joint ventures.

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

When there is a change in the Group’s interest in a subsidiary that do not result in a loss of control, any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received from the acquisition or disposal of the non-controlling interests with no change in control are accounted for as other surpluses/deficits in shareholders’ equity.

When the Group loses control over a subsidiary, it derecognises the assets and liabilities, any related non-controlling interests and other components of equity of the subsidiary. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

The Group recognised investments in associates and joint ventures using the equity method in the consolidated financial statements. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group’s dividend income and share of the profit or loss and other comprehensive income of equity-accounted investees, until the date on which significant influence or joint control ceases.

Intra-group balances and transactions, and any unrealised income or expenses arising from intra-group transactions, are eliminated on consolidation. Unrealised gains arising from transactions with associates and joint ventures are eliminated against the investment to the extent of the Group’s interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

Business combinations

The Group applies the acquisition method when the Group assess that the acquired set of activities and assets include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. The acquisition date is the date on which control is transferred to the Group, other than business combinations with entities under common control. Expenses in connection with a business combination are recognised as incurred.

Goodwill is measured as the fair value of the consideration transferred including the recognised amount of any non-controlling interest in the acquiree, less net fair value of the identifiable assets acquired and liabilities assumed. Any gain on bargain purchase is recognised in profit or loss immediately.

Consideration transferred includes assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, any contingent consideration and equity interests issued by the Group.

Any contingent consideration is measured at fair value at the date of acquisition, and remeasured at fair value at each reporting date. Subsequent changes in the fair value are recognised in profit or loss.

A contingent liability of the acquiree is assumed in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

Business combination under common control are accounted for using a method similar to the pooling of interest method, by recognising assets and liabilities of the acquired businesses at their carrying amounts in the consolidated financial statements of the ultimate parent company at the transaction date. The difference between the carrying amount of the acquired net assets and the consideration transferred is recognised as surplus or deficit from business combinations under common control in shareholder's equity. The surplus or deficit will be written off upon divestment of the businesses acquired. The results from operations of the acquired businesses will be included in the consolidated financial statements of the acquirer from the beginning of the comparative period or the moment the businesses came under common control, whichever date is later, until control ceases.

(b) Investments in subsidiaries, associates and joint ventures

Investments in subsidiaries, associates and joint ventures in the separate financial statements are measured at cost less allowance for impairment losses. Dividend income is recognised in profit or loss on the date on which the Group's right to receive payment is established. If the Company disposes of part of its investment, the deemed cost of the part sold is determined using the weighted average method. Gains and losses on disposal of the investments are recognised in profit or loss.

(c) Foreign currencies

Transactions in foreign currencies including non-monetary assets and liabilities denominated in foreign currencies are translated to the respective functional currencies of each entity in the Group at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate at the reporting date. Non-monetary assets and liabilities measured at fair value in foreign currencies are translated at the exchange rates at the dates that fair value was determined.

Foreign currency differences are generally recognised in profit or loss.

Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to Thai Baht at the exchange rates at the reporting date. The revenues and expenses of foreign operations, excluding foreign operations in hyperinflationary economies, are translated to Thai Baht at rates approximating the exchange rates at the dates of the transactions.

Foreign exchange differences are recognised in other comprehensive income and accumulated in the translation reserve until disposal of the investment, except to the extent that the translation difference is allocated to non-controlling interests.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal.

When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, exchange gains and losses arising from such a monetary item are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income, and presented in the translation reserve in equity until disposal of the investment.

(d) Financial instruments

(d.1) Classification and measurement

Debt securities that the Group issued are initially recognised when they are originated. Other financial assets and financial liabilities (except trade accounts receivables (see note 3(f))) are initially recognised when the Group becomes a party to the contractual provisions of the instrument, and measured at fair value, taking into account for transaction costs that are directly attributable to its acquisition or issue of the securities, except for financial assets and financial liabilities measured at FVTPL, which are initially and subsequently measured at fair value, and any transaction costs that are directly attributable to its acquisition or issue of the securities are recognised in profit or loss.

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income (FVOCI); or fair value through profit or loss (FVTPL). Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified prospectively from the reclassification date.

On initial recognition, financial liabilities are classified as measured at amortised cost using the effective interest method or FVTPL. Interest expense, foreign exchange gains and losses and any gain or loss on derecognition are recognised in profit or loss.

Financial assets measured at amortised costs are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by expected credit losses. Interest income, foreign exchange gains and losses, expected credit loss and any gain or loss on derecognition are recognised in profit or loss.

(d.2) Derecognition and offset

The Group derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

The difference between the carrying amount extinguished and the consideration received or paid is recognised in profit or loss.

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and the Group intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(d.3) Derivatives

Derivative are recognised at fair value and remeasured at fair value at each reporting date. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss.

(d.4) Impairment of financial assets other than trade accounts receivables

The Group recognises ECLs equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition or credit-impaired financial assets, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

ECLs are a probability-weighted estimate of credit losses based on forward-looking and historical experience. Credit losses are measured as the present value of all cash shortfalls discounted by the effective interest rate of the financial asset.

The Group considers a financial asset to have low credit risk when its credit rating is equivalent to the globally understood definition of 'investment grade'. The Group recognises ECLs for low credit risk financial asset as 12-month ECLs.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due, significant deterioration in credit rating, significant deterioration in the operating results of the debtor and existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

The Group considers a financial asset to be in default when:

- the debtor is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset is more than 90 days past due.

(d.5) Write offs

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering. Subsequent recoveries of an asset that was previously written off, are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

(d.6) Interest

Interest income and expense is recognised in profit or loss using the effective interest method. In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability.

(e) Cash and cash equivalents

Cash and cash equivalents comprise cash balances, call deposits and highly liquid short-term investments which has a maturity of three months or less from the date of acquisition.

(f) Trade and other accounts receivable

A receivable is recognised when the Group has an unconditional right to receive consideration. A receivable is measured at transaction price less allowance for expected credit loss. Bad debts are written off when incurred.

The Group estimates lifetime expected credit losses (ECLs), using a provision matrix to find ECLs rate. This method groups the debtors based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date.

(g) Inventories

Inventories are measured at the lower of cost and net realisable value. Cost is calculated using the first in first out principle. Cost includes direct costs incurred in acquiring the inventories. In the case of manufactured inventories and work-in-progress, cost includes an appropriate share of production overheads based on normal operating capacity. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

(h) Unbilled revenue

Unbilled revenue represents the gross unbilled amount expected to be collected from customers for contract work performed to date. They are measured at costs incurred plus profits recognised to date (see note 8) less progress billings and recognised losses, presented as current asset in the statement of financial position.

(i) Investment properties

Investment properties are measured at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the investment property.

(j) Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes capitalised borrowing costs, and the costs of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Differences between the proceeds from disposal and the carrying amount of property, plant and equipment are recognised in profit or loss.

Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item when the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is calculated on a straight-line basis over the estimated useful lives of each component of an asset and recognised in profit or loss. No depreciation is provided on freehold land and assets under construction.

The estimated useful lives are as follows:

Building, building improvement and utility system	25 - 30 years
Machinery and equipment	5 - 25 years
Fixtures and office equipments	3 - 5 years
Vehicles	8 - 10 years

(k) Goodwill

Goodwill is measured at cost less accumulated impairment losses. In respect of equity-accounted investee, the carrying amount of goodwill is included in the carrying amount of the investment.

(l) Intangible assets

Other intangible assets that have indefinite useful lives are measured at cost less impairment losses. Other intangible assets are measured at cost less accumulated amortisation and impairment losses. Subsequent expenditure is capitalised only when it will generate the future economic benefits. Amortisation is calculated on a straight-line basis over the estimated useful lives of intangible assets and recognised in profit or loss.

The estimated useful lives are as follows:

Software licences	3-5	years
Right to use electrical transmission line	20 and 25	years
Right to power purchase agreement and right to operate	20 and 25	years

(m) Leases

At inception of a contract, the Group assesses that a contract is, or contains, a lease when it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

As a lessee

At commencement or on modification of a contract, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices of each component.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date, except for leases of low-value assets and short-term leases which is recognised as an expense on a straight-line basis over the lease term.

Right-of-use asset is measured at cost, less any accumulated depreciation and impairment loss, and adjusted for any remeasurements of lease liability. The cost of right-of-use asset includes the initial amount of the lease liability adjusted for any prepaid lease payments, plus any initial direct costs incurred and an estimate of restoration costs, less any lease incentives received. Depreciation is charged to profit or loss on a straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

The lease liability is initially measured at the present value of all lease payments that shall be paid under the lease. The Group uses the Group's incremental borrowing rate to discount the lease payments to the present value. The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a lease modification, or a change in the assessment of options specified in the lease. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

As a lessor

At inception or on modification of a contract, the Group allocates the consideration in the contract to each component on the basis of their relative standalone selling prices.

At lease inception, the Group considers to classify a lease that transfers substantially all of the risks and rewards incidental to ownership of the underlying asset to lessees as a finance lease. A lease that does not meet this criteria is classified as an operating lease.

When the Group is an intermediate lessor, the Group classifies the sub-lease either as a finance lease or an operating lease with reference to the right-of-use asset arising from the head lease. In case of a head lease is a short-term lease, the sub-lease is classified as an operating lease. Those right-of-use assets are presented as investment properties.

The Group recognises finance lease receivables at the net investment of the leases, which includes the present value of the lease payments, and any unguaranteed residual value, discounted using the interest rate implicit in the lease. Finance lease income reflects a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

The Group recognises lease payments received under operating leases in profit or loss on a straight-line basis over the lease term as part of other income. Initial direct costs incurred in arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as other income in the accounting period in which they are earned.

The Group estimates lifetime expected credit losses (ECLs), using a provision matrix to find ECLs rate. This method groups the lease receivables based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date. The Group derecognises the lease receivables as disclosed in note 3(d).

(n) Impairment of non-financial assets

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill and intangible assets that have indefinite useful lives or are not yet available for use, the recoverable amount is estimated each year at the same time.

An impairment loss is recognised in profit or loss if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount.

The recoverable amount is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Impairment losses of assets recognised in prior periods is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(o) Employee benefits

Defined contribution plan

Obligations for contributions to the Group's provident funds are expensed as the related service is provided.

Defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in the current and prior periods. The defined benefit obligations is discounted to the present value, which performed annually by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognised immediately in OCI. The Group determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

The Group's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognised in profit or loss in the period in which they arise.

Termination benefits are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(p) Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as a finance cost.

Provision for decommissioning costs of buildings and power plants

The Group recognises provision for decommissioning costs of the buildings or structures with the present value of the estimate of the eventual costs at the lease end date. The recognised provision for decommissioning costs are based on removal cost estimates, removal period, discount rate and future inflation rate. Provision for decommissioning and restoration are discounted to be present value, and are included as part of the assets.

(q) Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which the Group has access at that date. The fair value of a liability reflects its non-performance risk.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: inputs for the asset or liability that are based on unobservable input.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Group measures assets and asset positions at a bid price and liabilities and liability positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. If the Group determines that the fair value on initial recognition differs from the transaction price, the financial instrument is initially measured at fair value adjusted for the difference between the fair value on initial recognition and the transaction price and the difference is recognised in profit or loss immediately. However, for the fair value categorised as level 3, such difference is deferred and will be recognised in profit or loss on an appropriate basis over the life of the instrument or until the fair value level is transferred or the transaction is closed out.

(r) Treasury Shares

When share capital recognised as equity is repurchased, the amount of consideration paid, including directly attributable costs, is classified as treasury shares and recognised as a deduction from equity. An equal amount is appropriated from retained earnings and taken to a reserve for treasury shares within equity. When treasury shares are sold, the amount received is recognised as an increase in equity by crediting the cost of the treasury shares sold, calculated using the weighted average method, to the treasury shares account and transferring the equivalent amount back from reserve for treasury shares to retained earnings. Surpluses on the sale of treasury shares are taken directly to a separate category within equity, 'Share premium on treasury shares'. Net deficits on sale or cancellation of treasury shares are debited to retained earnings after setting off against any remaining balance of surplus on treasury shares.

(s) Revenue from contracts with customers

(1) Revenue recognition

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax or other sales taxes and is after deduction of any trade discounts and volume rebates.

Sale of goods and services

Revenue from sales of goods is recognised on the date on which the goods are delivered to the customers. For the sales that permit the customers to return the goods, the Group estimates the returns based on the historical return data, does not recognise revenue for this transaction and remains recognition of inventory for the estimated products to be returned. data. Revenue for rendering of services is recognised over time as the services are provided.

For bundled packages, the Group recognises revenue from sales of products and rendering of services separately if a product or service is separately identifiable from other items and a customer can benefit from it or the multiple services are rendered in different reporting periods. The consideration received is allocated based on their relative stand-alone selling prices.

Revenue from sale of electricity

Revenue from sale of electricity is recognised in profit or loss based on the units of sales delivered at the applicable tariff rates.

Revenue from construction contracts

Contract revenue includes the initial amount agreed in the contract plus any variations in contract work, claims and incentive payments to the extent that it is probable that they will result in revenue and can be measured reliably. As soon as the outcome of a construction contract can be estimated reliably, contract revenue and expenses are recognised in profit or loss in proportion to the stage of completion of the contract.

The stage of completion is assessed by reference to surveys of work performed. When the outcome of a construction contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in profit or loss.

(2) Contract balances

Contract assets are recognised when the Group has recognised revenue before it has an unconditional right to receive consideration. The contract assets are measured at the amount of consideration that the Group is entitled to, less allowance for expected credit loss. The contract assets are classified as trade receivables when the Group has an unconditional right to receive consideration.

Contract liabilities are the obligation to transfer goods or services to the customer. The contract liabilities are recognised when the Group receives or has an unconditional right to receive non-refundable consideration from the customer before the Group recognises the related revenue.

A refund liability is the obligation to refund some or all of the consideration received from the customer and is measured at the amount the Group ultimately expects it will have to return to the customer. The refund liability is reassessed at each reporting date and make a corresponding change to the amount of revenue recognised.

(t) Income tax

Income tax expense for the year comprises current and deferred tax, which is recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is recognised in respect of the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries and joint ventures to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities, using tax rates enacted or substantively enacted at the reporting date. Current deferred tax assets and liabilities are offset in the separate financial statements.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(u) Earnings per share

EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

4 Related parties

A related party is a person or entity that has direct or indirect control or joint control, or has significant influence over the financial and managerial decision-making of the Group; a person or entity that are under common control or under the same significant influence as the Group; or the Group has direct or indirect control or joint control or has significant influence over the financial and managerial decision-making of a person or entity.

Relationships with subsidiaries, associates and joint ventures are described in notes 10 and 11. Other related parties that the Group had significant transactions with during the year were as follows:

Name of entities	Country of Incorporation	Nature of relationships
Gunkul Group Co., Ltd.	Thailand	Major shareholder
Rang-Ngern Solution Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Outgrow D Co.,Ltd. ⁽³⁾	Thailand	Indirect subsidiary and/or common directors
Gunkul Solar Power 1 Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Gunkul Solar Power 2 Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Future Electrical Control Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Joint Venture GPD & TEECL Co.,Ltd.	Thailand	Indirect subsidiary and/or common directors
Joint Venture FEC & PPB Co.,Ltd. ⁽²⁾	Thailand	Indirect subsidiary and/or common directors
Future Energy Corporation Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Gunkul B2B Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Gunkul International Investment (Singapore) Pte. Ltd.	Singapore	Indirect subsidiary and/or common directors
Gunkul Myanmar Central Power 1 Company Limited	Myanmar	Indirect subsidiary and/or common directors

Name of entities	Country of Incorporation	Nature of relationships
Singapore An Yang Pte. Ltd.	Singapore	Indirect subsidiary and/or common directors
Singapore Yun Yang Pte. Ltd.	Singapore	Indirect subsidiary and/or common directors
G.K. Smart Farming Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
G.K. Bio Extraction Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Future Power Construction Co., Ltd.	Thailand	Indirect subsidiary and/or common directors
Sendai Okura GD Daiichi Godo Kaisha	Japan	Indirect subsidiary
Kimitsu Mega Solar Godo Kaisha	Japan	Indirect subsidiary
Future Asset Management Kabushiki Kaisha	Japan	Indirect subsidiary
GD Solar Utsunomiya Godo Kaisha ⁽¹⁾	Japan	Indirect subsidiary
East Japan Solar 13 Godo Kaisha ⁽¹⁾	Japan	Indirect subsidiary
Tri Viet Hoa Binh Joint Stock Company	Vietnam	Indirect subsidiary
Bach Khoa A Chau Hoa Binh Joint Stock Company	Vietnam	Indirect subsidiary
Tri Viet Tay Ninh Joint Stock Company	Vietnam	Indirect subsidiary
Bach Khoa A Chau Tay Ninh Joint Stock Company	Vietnam	Indirect subsidiary
Tan Chau Energy Joint Stock Company	Vietnam	Indirect subsidiary
INT Energy Pte. Ltd.	Singapore	Indirect subsidiary
Gunkul Trading and Agency Co., Ltd.	Thailand	Common directors
G.M. Supply and Construction Co., Ltd.	Thailand	Common directors
Gunkul Engineering (2000) Co., Ltd.	Thailand	Common directors
Great Miracle Asset Co., Ltd.	Thailand	Common directors
Great Miracle Asset 2 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 3 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 4 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 5 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 7 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 8 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 9 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 10 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 11 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 13 Co., Ltd.	Thailand	Common directors
Great Miracle Asset 14 Co., Ltd.	Thailand	Common directors
Pranburi Boulevard Co., Ltd.	Thailand	Common directors
Noprakul Co., Ltd.	Thailand	Holding by the director
Gunkul Marine Line Co., Ltd.	Thailand	Holding by the director
Green Filed Energy Co., Ltd.	Thailand	Holding by the director
Kulnatee Co., Ltd.	Thailand	Holding by close relative of a director
P.M. Building Group Co., Ltd.	Thailand	Holding by close relative of a director
Thonglor 9 Co., Ltd. ⁽¹⁾	Thailand	Holding by major shareholder
Tech-Green Co., Ltd. ⁽²⁾	Thailand	Holding by major shareholder
Siam Future Co., Ltd.	Thailand	Holding by major shareholder
Entirety Sap Co., Ltd. ⁽²⁾	Thailand	Holding by major shareholder
Happy Green 2558 Co., Ltd.	Thailand	Holding by major shareholder

⁽¹⁾ Sale of investment during the year 2020.

⁽¹⁾ The liquidation was completed during the year 2020.

⁽³⁾ The liquidation was completed during the year 2021.

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Purchase and sale of goods	Cost plus 5% to 30%
Services fee	Contractually agreed prices
Interest income and expense	Interest rate equal to interest rate of loan from financial institution
Rental	Contractually agreed prices
Purchase and sales of assets	Net book value
Construction expense	Contractually agreed prices

4.1 Significant revenue transactions for the years ended 31 December with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Revenue from sale				
Subsidiaries	-	-	489,202	353,915
Joint ventures	811	640	-	378
Other related parties	216	-	-	-
Total revenue from sale	1,027	640	489,202	354,293
Revenue from rendering of services				
Revenue from operation and maintenance services				
Subsidiaries	-	-	3,759	2,242
Associate	28,945	27,866	-	-
Joint ventures	23,028	23,422	-	-
Management service income				
Subsidiaries	-	-	1,949	5,805
Joint ventures	5,748	5,527	5,748	5,527
Other services income				
Associate	-	16,590	-	-
Joint ventures	6	32,295	-	-
Other related parties	12	10	-	-
Total revenue from rendering of services	57,739	105,710	11,456	13,574
Dividend income				
Subsidiaries	-	-	2,450,814	2,379,200
Associate	-	-	71,350	61,938
Joint ventures	-	-	145,424	136,047
Total dividend income	-	-	2,667,588	2,577,185

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Interest income				
Subsidiaries	-	-	52,250	27,541
Joint ventures	-	342	-	342
Total interest income	<u>-</u>	<u>342</u>	<u>52,250</u>	<u>27,883</u>
Other income – rental income				
Subsidiaries	-	-	541	255
Total other income	<u>-</u>	<u>-</u>	<u>541</u>	<u>255</u>

4.2 Significant expenses transactions for the years ended 31 December with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Cost of goods sold - purchase of goods and services				
Subsidiaries	-	-	353,490	387,193
Total cost of goods sold	<u>-</u>	<u>-</u>	<u>353,490</u>	<u>387,193</u>
Cost of construction services				
Subsidiaries	-	-	3,880	-
Total cost of construction services	<u>-</u>	<u>-</u>	<u>3,880</u>	<u>-</u>
Administrative expenses and others				
Training expense				
Subsidiaries	-	-	327	438
Joint ventures	-	3	-	-
Office and warehouse rental fee				
Other related parties	-	6,438	-	6,438
Other administrative expenses				
Subsidiaries	-	-	1	3
Total administrative expenses and others	<u>-</u>	<u>6,441</u>	<u>328</u>	<u>6,879</u>
Finance costs				
Interest expense on loan				
Subsidiaries	-	-	2,588	3,805
Interest expense – lease liabilities				
Other related parties	915	28	722	-
Total finance costs	<u>915</u>	<u>28</u>	<u>3,310</u>	<u>3,805</u>

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Key management personnel				
Key management personnel compensation	189,740	181,310	142,744	145,486
Short-term employee benefit	3,234	3,225	2,891	2,901
Post-employment benefits	-	-	-	-
Total	<u>192,974</u>	<u>184,535</u>	<u>145,635</u>	<u>148,387</u>

4.3 Balances as at 31 December with related parties were as follows:

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Purchase of investment property				
Associate	55,788	-	-	-
Purchase of assets				
Other related parties	21	-	21	-
Sale of assets				
Subsidiaries	-	-	37	77
Purchase of right-of-use assets				
Other related parties	10,058	22,740	5,612	18,299
Trade accounts receivable				
Subsidiaries	-	-	94,394	448,316
Associate	1,586	1,586	-	-
Joint ventures	197	455	-	-
Other related parties	6	2	-	-
	1,789	2,043	94,394	448,316
Less allowance for expected credit loss	-	-	-	-
Total	<u>1,789</u>	<u>2,043</u>	<u>94,394</u>	<u>448,316</u>
Other receivables				
Subsidiaries	-	-	7,297	9,703
Joint venture	513	68,712	513	493
Total	<u>513</u>	<u>68,712</u>	<u>7,810</u>	<u>10,196</u>
Loans to				
Subsidiaries				
- Current portion of loans to	-	-	725,826	2,933,806
- Non - current portion of loans to	-	-	296,125	324,925
Other non-current financial assets				
Associate	106,764	106,764	106,764	106,764

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Trade accounts payable				
Subsidiaries	-	-	64,043	70,033
Other current payables				
Subsidiaries	-	-	4,027	424
Associate	-	1,301	-	-
Joint venture	3,126	3,126	-	-
Total	3,126	4,427	4,027	424
Lease liabilities				
Other related parties	22,618	22,740	16,221	18,299
Loans from				
Subsidiaries	-	-	95,000	182,000

Significant agreements with related parties

As at 31 December 2021, the Group had agreements with related parties as follows:

Land building and properties lease/sublease agreements

The Company has land lease agreement for power plants construction with a subsidiary for the period of 26 years expiring in September 2039. The subsidiary has committed to pay rental fee as stipulated in the agreement.

The Company and certain subsidiaries have land lease, sublease of land, building and properties with certain related parties. The agreements are for period of 2-3 years and shall be renewable. The Company and subsidiaries have committed to pay rental fee as stipulated in the agreements.

The Company and certain subsidiaries have lease/sublease of land, building, property and rooftop space with its subsidiaries in the Group. The agreements are for period of 2 to 26 years and shall be renewable. The Company and subsidiaries have committed to pay rental fee as stipulated in the agreements.

Operation and maintenance agreements

The Company and a subsidiary had several operation and maintenance agreements with subsidiaries, associate and joint ventures whereby the service fees are stipulated in the agreements. These agreements expire in December 2023 to October 2043.

Service agreements

Joint ventures and subsidiaries had several service agreements with the company whereby the agreements is for a period of 5 years and shall be renewable. The service fees are stipulated in the agreements. These agreements expire in January 2022 to December 2022.

Construction service agreements

The certain subsidiaries had several construction service agreements with its subsidiaries in the Group. The subsidiaries have committed to pay services fee as stipulated in the agreements.

Asset management service agreements

Two subsidiaries in Japan have asset management service agreements with a subsidiary in Japan. These agreements have a period of 20 years commencing from commercial operation date. The agreements expire during April 2038 to December 2041. The services fees are stipulated in the agreements.

Security

At 31 December 2021, the Company has pledged promissory notes of loan to related party with a book value of Baht 316.13 million as collateral to secure long-term loan received from a commercial bank.

Land purchase agreement

A subsidiary of the Group has acquired land from an associate in the amount of Baht 55.79 million according to land purchase agreement. At the present, the said subsidiary has no aim to use such land in the future. Therefore, they classified this land to investment property. As at 31 December 2021, the fair value of this land is Baht 78.79 million which was determined by an independent professional valuers based on the open market values for an existing use basis. The fair value of investment property has been categorised as a Level 3.

Valuation technique	Significant Unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
Market approach	The adjusted quoted price and the actual selling price of comparable investment properties	The estimated fair value increase (decrease) if land price were higher (lower).

5 Cash and cash equivalents

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Cash on hand	935	855	200	200
Cash at banks-current accounts	538,990	350,887	12,319	34,719
Cash at banks-savings accounts	1,070,294	3,904,377	333,952	303,176
Cheques on hand	118,707	135,805	13,535	1,579
Total	1,728,926	4,391,924	360,006	339,674

7 Lease receivables

		Consolidated financial statements		Separate financial statements	
	Note	2021	2020	2021	2020
		(in thousand Baht)			
Trade accounts receivable					
Related parties	4	1,789	2,043	94,394	448,316
Other parties		1,237,790	1,601,930	72,215	404,825
Less allowance for expected credit loss		(2,556)	(8,154)	(1,056)	(6,654)
Net		1,237,023	1,595,819	165,553	846,487
Other current receivables					
Related parties	4	513	68,712	7,810	10,196
Other parties		72,270	170,644	5,338	110,220
Retention receivables		155,705	77,373	6,659	-
Deposit		-	951,175	-	-
		228,488	1,267,904	19,807	120,416
Total		1,465,511	2,863,723	185,360	966,903

	Consolidated		Separate	
<i>Allowance for expected credit loss</i>	financial statements		financial statements	
	2021	2020	2021	2020
	<i>(in thousand Baht)</i>			
At 1 January	8,154	2,264	6,654	1,083
Addition	129	5,890	129	5,571
Reversal	(5,193)	-	(5,193)	-
Write-off	(534)	-	(534)	-
At 31 December	2,556	8,154	1,056	6,654

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Within credit terms	1,182,993	1,452,905	98,824	737,094
Overdue:				
Less than 3 months	31,745	113,366	44,426	102,332
3 - 6 months	20,431	19,520	20,227	-
6 - 12 months	666	2,929	580	607
Over 12 months	3,744	15,253	2,552	13,108
	<u>1,239,579</u>	<u>1,603,973</u>	<u>166,609</u>	<u>853,141</u>
Less allowance for expected credit loss	(2,556)	(8,154)	(1,056)	(6,654)
Net	<u>1,237,023</u>	<u>1,595,819</u>	<u>165,553</u>	<u>846,487</u>

The normal credit term granted by the Group ranges from 30 days to 120 days.

	Consolidated financial statements			
	Within 1 year	After 1 year but within 5 years (in thousand Baht)	After 5 years	Total
31 December 2021				
Lease receivables	239,127	976,419	2,299,816	3,515,362
Less unearned interest income	(145,659)	(731,443)	(859,736)	(1,736,838)
Total	93,468	244,976	1,440,080	1,778,524
Less allowance for expected credit loss	-	-	-	-
Net	93,468	244,976	1,440,080	1,778,524
31 December 2020				
Lease receivables	162,326	483,427	1,304,490	1,950,243
Less unearned interest income	(103,787)	(398,873)	(567,259)	(1,069,919)
Total	58,539	84,554	737,231	880,324
Less allowance for expected credit loss	-	-	-	-
Net	58,539	84,554	737,231	880,324

8 Unbilled revenue

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	<i>(in thousand Baht)</i>			
Cost and attributable profit	4,165,069	2,656,183	62,231	-
Progress billings and others	(3,068,592)	(1,430,913)	(62,231)	-
Net	1,096,477	1,225,270	-	-

9 Inventories

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Finished goods	555,492	442,261	367,906	341,285
Work in progress	903	411	-	-
Raw materials	188,569	171,205	-	-
Factory supplies	1,749	1,885	-	-
Construction in progress	103,541	9,633	-	-
Goods in transit	5,774	59,004	3,933	57,143
Total	856,028	684,399	371,839	398,428
Less allowance for declining in value of inventories	(47,116)	(46,991)	(21,249)	(21,249)
Net	808,912	637,408	350,590	377,179

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Inventories recognised in ‘cost of sales of goods’:				
- Cost	1,174,854	1,097,275	1,361,734	1,364,405
- Write-down to net realisable value	516	13,762	-	5,062
- Reversal of write-down	(390)	(371)	-	(63)
Net	1,174,980	1,110,666	1,361,734	1,369,404

10 Investments in associates and joint ventures

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
At 1 January	1,565,745	1,731,032	1,123,773	1,123,773
Share of net profit of associates and joint ventures	217,837	72,596	-	-
Acquisition of joint venture	250,000	-	-	-
Increase in share capital	500	-	-	-
Dividend income	(216,774)	(197,985)	-	-
Impact of changes in accounting policies	-	(6,623)	-	-
Elimination of unrealised profit on downstream sales	-	(35,924)	-	-
Exchange differences on translating financial statements	15,377	2,649	-	-
At 31 December	1,832,685	1,565,745	1,123,773	1,123,773

Acquisition of indirect joint venture

THCG Group Co., Ltd.

On 7 October 2021, G.K. Hemp Group Company Limited, the Company’s subsidiary, acquired ordinary shares of THCG Group Co., Ltd. according to the approval of the Board of Directors of the Company held on 24 September 2021 at the proportion of 50% of all ordinary shares to enter into joint venture arrangement in the amount of Baht 10.5 million and increase the capital in the type of preferred shares amounting to Baht 239.5 million in order to operate hemp and cannabis cultivation business for distribution, including production and selling products that derived from hemp and cannabis. Total investment value does not exceed Baht 250 million.

As at 31 December 2021, the subsidiary paid for share subscription of Baht 107.98 million, the remaining payables for share subscription is Baht 142.02 million.

	Type of business	Consolidated financial statements						Separate financial statements				Dividend income for the year	
		Ownership interest		Equity		Cost		Impairment		At cost - net		2021	2020
		2021	2020	2021	2020	2021	2020	2021	2020	2021	2020		
		(%)		(in thousand Baht)									
Associate													
Power Source Co., Ltd.	Generating and selling electricity	40.00	40.00	374,014	409,816	397,595	397,595	-	-	397,595	397,595	71,350	61,938
				374,014	409,816	397,595	397,595	-	-	397,595	397,595	71,350	61,938
Joint ventures													
Gunkul Chubu Powergen Co., Ltd.	Generating and selling electricity	51.00	51.00	993,909	998,531	505,920	505,920	-	-	505,920	505,920	143,934	134,575
A Gunkul Green Solar of 1 Co., Ltd.	Generating and selling electricity	25.01	25.01	2,254	2,222	2,876	2,876	-	-	2,876	2,876	201	158
A Gunkul Green Solar of 3 Co., Ltd.	Generating and selling electricity	25.01	25.01	3,046	3,187	3,626	3,626	-	-	3,626	3,626	417	417
A Gunkul Green Solar of 6 Co., Ltd.	Generating and selling electricity	25.01	25.01	3,054	3,216	3,626	3,626	-	-	3,626	3,626	472	417
A Gunkul Green Solar of 17 Co., Ltd.	Generating and selling electricity	25.01	25.01	2,277	2,175	4,002	4,002	-	-	4,002	4,002	400	480
Kenyer Gunkul Solar Sdn Bhd.	Generating and selling electricity	70.00	70.00	205,835	146,013	206,128	206,128	-	-	206,128	206,128	-	-
				1,210,375	1,155,344	726,178	726,178	-	-	726,178	726,178	145,424	136,047
Indirect joint ventures													
Joint venture SPI & GPD	Provide cleaning services and goods shipping	50.00	50.00	565	585	-	-	-	-	-	-	-	-
W Group Co., Ltd.	Production and selling products that derived from hemp and cannabis	50.00	-	247,299	-	-	-	-	-	-	-	-	-
Kenyer Gunkul Energy Co., Ltd.	Generating and selling electricity	50.00	-	432	-	-	-	-	-	-	-	-	-
				248,296	585	-	-	-	-	-	-	-	-
Total				1,832,685	1,565,745	1,123,773	1,123,773	-	-	1,123,773	1,123,773	216,774	197,985

All associate and joint ventures were incorporated in Thailand, except Kenyer Gunkul Solar Sdn Bhd. which was incorporated and operated in Malaysia. None of the Group's associate and joint ventures are publicly listed and consequently do not have published price quotations.

Material associates and joint ventures

The following table summarises the financial information of the associates and joint ventures as included in their own financial statements, adjusted for fair value adjustments at acquisition and differences in accounting policies. The table also reconciles the summarised financial information to the carrying amount of the Group's interest in these companies.

	Associate		Joint venture	
	G-Power Source Co., Ltd.		Gunkul Chubu Powergen Co., Ltd.	
	2021	2020	2021	2020
	<i>(in thousand Baht)</i>			
Revenue	526,067	494,111	535,791	565,262
Profit for the year	362,168	307,997	332,329	354,754
Less impairment losses	(282,690)	(342,739)	(51,081)	(206,602)
Net profit (loss)	79,478	(34,742)	281,248	148,152
Other comprehensive income (expense)	-	-	38	-
Total comprehensive income (expense) (100%)	79,478	(34,742)	281,286	148,152
Total comprehensive income (expense) of the Group's interest (40% and 51% hold)	31,791	(13,897)	143,456	75,558
Elimination of unrealised profit on sales of assets	8,140	8,140	7,251	7,251
Power purchase agreement	(4,384)	(4,384)	(11,394)	(11,394)
Group's share of total comprehensive income (expense)	35,547	(10,141)	139,313	71,415
Current assets	195,226	210,080	209,949	248,867
Non-current assets	1,389,773	1,713,353	1,817,950	1,973,969
Current liabilities	(460,234)	(566,333)	(195,788)	(213,693)
Non-current liabilities	(43,023)	(176,461)	(10,533)	(186,627)
Net assets (100%)	1,081,742	1,180,639	1,821,578	1,822,516
Group's share of net assets (40% and 51% hold)	432,697	472,256	929,005	929,483
Elimination of unrealised profit on sales of assets	(126,208)	(134,349)	(120,521)	(127,771)
Power purchase agreement	67,525	71,909	185,425	196,819
Carrying amount of interest in associate and joint venture	374,014	409,816	993,909	998,531

	Joint venture Gunkul Chubu Powergen Co., Ltd.	
	2021	2020
	(in thousand Baht)	
Remark:		
a. Includes:		
– depreciation and amortisation	110,288	123,430
– interest expense	13,589	25,137
– income tax expense	17,494	3,422
b. Includes cash and cash equivalents	10	10
c. Short-term deposits from financial institution pledged as collateral	111,026	137,454
d. Includes current financial liabilities (excluding trade, other payables and provisions)	172,429	199,168
e. Includes non-current financial liabilities (excluding trade, other payables and provisions)	8,399	179,243

Impairment assessment for power plants

During 2021, the managements of the associate and joint venture found a decline in budgeted net cashflow from revenues due to the subsidy income (Adder) will be soon expired. The managements of the associate and joint venture has calculated the recoverable amount using the value in use method. The value in use method is calculated by determining discounted future cashflows. The key assumptions used to determine value in use included electricity price, operating expenditures over the remaining economic useful life of the assets and discount rate referred to weighted average cost to capital (WACC) at 6.28% - 6.30% (2020: at 6.50% - 6.90%). As a results, the value in use of assets was lower than the carrying amounts. The Group recognised an impairment loss from the associate and joint venture in the proportion of the Group's interest amounting to Baht 113.08 million and Baht 26.05 million, respectively, and recorded in share of profit of associates and joint ventures accounted for using equity method account in the consolidated statement of comprehensive income for the year 2021 (2020: Associate of Baht 137.09 million and joint venture of Baht 105.37 million).

Immaterial joint ventures

The following is summarised financial information for the Group's interest in immaterial joint ventures based on the amounts reported in the Group's consolidated financial statements:

	Immaterial joint ventures	
	2021	2020
	(in thousand Baht)	
Carrying amount of interests in immaterial joint ventures	464,762	157,397
Group's share of:		
- Profit (loss) from continuing operations	29,815	11,322
- Other comprehensive income (expense)	-	-
- Total comprehensive income (expense)	<u>29,815</u>	<u>11,322</u>

11 Investments in subsidiaries

	Separate financial statements	
	2021	2020
	(in thousand Baht)	
At 1 January	15,712,438	13,188,215
Acquisition of subsidiaries	-	332,494
Increase in share capital of subsidiaries	765,789	1,411,729
Acquisition of non-controlling interests	-	780,000
Impairment loss	(13,513)	-
Decrease in share capital	(896,788)	-
At 31 December	<u>15,567,926</u>	<u>15,712,438</u>

Increase in share capital of subsidiaries

K.N.P Supply Co., Ltd.

During the year ended 31 December 2021, the Company was paid for additional share capital amounting to Baht 20.25 million, totalling paid-up share capital amount of Baht 32.75 million.

Gunkul Infinite Group Co., Ltd.

During the year ended 31 December 2021, the Company was paid for additional share capital amounting to Baht 23.81 million, totalling paid-up share capital amount of Baht 314 million.

At the Board of Directors Meeting of the Company held on 17 December 2021, the Board of Directors approved to purchase of additional ordinary shares in Gunkul Infinite Group Company Limited, the Group's subsidiary, in the number of 0.785 million shares which is the proportion of 25% of total paid-up share capital. At the present, the Company has 74.99% interest in the said subsidiary, after share transfer was completed, the Company's interest will be 99.99%. Total purchase price is Baht 120 million in order to support and expand the rental business, sublease, asset management and electricity generation from renewable energy businesses.

As at 31 December 2021, the Company paid for advance for shares subscription of Baht 60 million, share transferring was completed in January 2022.

Joint venture GKE & FEC

During the year ended 31 December 2021, the Company was paid for additional share capital amounting to Baht 2.10 million, totalling paid-up share capital amount of Baht 29.50 million.

Solar Energy Society Co., Ltd.

During the year ended 31 December 2021, the Company was paid for additional share capital amounting to Baht 366.54 million, totalling paid-up share capital amount of Baht 735 million.

Establishment of subsidiaries

G.K. Hemp Group Co., Ltd.

On 8 April 2021, the Company established G.K. Hemp Group Co., Ltd. in order to investing in other companies with registered capital of Baht 50 million that invests in G.K. Smart Farming Co., Ltd. and G.K. Bio Extraction Co., Ltd. to studying investment in the hemp project. The Company held 100% shareholding in such subsidiary and paid for the share capital during the year ended 31 December 2021 amounting to Baht 270 million.

Gunkul Wind Power 1 Co., Ltd.

On 22 April 2021, the Company established Gunkul Wind Power 1 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 1.25 million.

Gunkul Wind Power 2 Co., Ltd.

On 22 April 2021, the Company established Gunkul Wind Power 2 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 1.25 million.

Gunkul Wind Power 3 Co., Ltd.

On 22 April 2021, the Company established Gunkul Wind Power 3 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 1.25 million.

Gunkul Wind Power 4 Co., Ltd.

On 22 April 2021, the Company established Gunkul Wind Power 4 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 1.25 million.

Gunkul Wind Power 5 Co., Ltd.

On 22 April 2021, the Company established Gunkul Wind Power 5 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 2 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 2 million.

Gunkul Wind Power 6 Co., Ltd. (Formerly : Gunkul Bio Power 1 Co., Ltd.)

On 7 April 2021, the Company established Gunkul Wind Power 6 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 6 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 3 million.

Gunkul Wind Power 7 Co., Ltd. (Formerly : Gunkul Bio Power 2 Co., Ltd.)

On 7 April 2021, the Company established Gunkul Wind Power 7 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 6 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 3 million.

Gunkul Wind Power 8 Co., Ltd.

On 28 October 2021, the Company established Gunkul Wind Power 8 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 1.25 million.

Gunkul Wind Power 9 Co., Ltd.

On 28 October 2021, the Company established Gunkul Wind Power 9 Co., Ltd. in order to generating and selling electricity with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 1.25 million.

G.K. Real Estate (2564) Co., Ltd.

On 29 April 2021, the Company established G.K. Real Estate (2564) Co., Ltd. in order to operate in the real estate business with registered capital of Bath 60 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 57.60 million.

Gunkul Grand Asset Co., Ltd.

On 4 November 2021, the Company established Gunkul Grand Asset Co., Ltd. in order to operate in the construction business with registered capital of Bath 5 million and held 100% shareholding in such subsidiary. During the year ended 31 December 2021, the Company paid for the share capital amounting to Bath 10 million.

Decrease in share capital of subsidiary

Gunkul International (Mauritius)

On 22 January 2021, Gunkul International (Mauritius), the Company's subsidiary which was incorporated and operates in Mauritius. The shareholders of the said subsidiary approved to decrease the Company's registered capital by 21.92 million shares from the existing registered capital of 134.83 million shares at a par of U.S. Dollars 1 per share to 112.91 million shares. Later on 23 July 2021, the shareholders of the said subsidiary approved to decrease registered capital by 3.59 million shares from the existing registered capital of 112.91 million shares to 109.32 million shares. The Company recognised loss on capital reduction of subsidiary in the statement of comprehensive income for the year ended 31 December 2021.

Impairment loss on investment in subsidiary

GO Bioenergy Co., Ltd.

As at 31 December 2021, the Company recorded impairment loss on investment in GO Bioenergy Co., Ltd. amounting to Baht 13.5 million because the subsidiary is incorporated in order to generating and selling electricity from biomass. At the present, the subsidiary has no plan to start the operation yet. The management believes that the investment may be impaired.

Separate financial statements												
	Type of business	Country of operation	Ownership interest		Cost		Impairment		At cost - net		Dividend income for the year	
			2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
			(%)						(in thousand Baht)			
Subsidiaries												
G.K. Power Product Co., Ltd.	Manufacturing and selling of equipments for electrical systems	Thailand	100.00	100.00	80,425	80,425	-	-	80,425	80,425	-	-
G.K. Assembly Co., Ltd.	Manufacturing and selling of equipments for electrical system	Thailand	100.00	100.00	163,188	163,188	-	-	163,188	163,188	-	-
K.N.P Supply Co.,Ltd.	Import-export and selling equipments for electrical systems	Thailand	100.00	100.00	24,158	3,908	-	-	24,158	3,908	-	-
Greenovation Power Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	1,916,500	1,916,500	-	-	1,916,500	1,916,500	377,190	307,395
Wind Energy Development Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	2,226,150	2,226,150	-	-	2,226,150	2,226,150	138,600	148,837
NK Power Sola Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	40,854	40,854	-	-	40,854	40,854	14,000	9,001
Gunkul Solar Roof 1 Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	21,000	21,000	-	-	21,000	21,000	-	-
Gunkul Training Center Co., Ltd.	Provide training services	Thailand	100.00	100.00	1,000	1,000	-	-	1,000	1,000	1,200	-
Solar Energy Society Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	735,000	368,464	-	-	735,000	368,464	-	-
Bright Green Power Co., Ltd.	Investing in companies	Thailand	100.00	100.00	1,306,410	1,306,410	-	-	1,306,410	1,306,410	-	-
Gunkul Power Development Co., Ltd.	Construction	Thailand	100.00	100.00	300,000	300,000	-	-	300,000	300,000	-	-
Gunkul Solar Community Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	20,000	20,000	-	-	20,000	20,000	-	-
Siam Gunkul Solar Energy Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	40,899	40,899	-	-	40,899	40,899	3,354	4,123
Korat Wind Energy Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	1,538,750	1,538,750	-	-	1,538,750	1,538,750	466,933	946,817
Gunkul Energy Solution and Lighting Co., Ltd.	Manufacturing and selling of energy - saving products	Thailand	100.00	100.00	40,600	40,600	-	-	40,600	40,600	-	-
GO Bioenergy Co., Ltd.	Investing in companies	Thailand	74.90	74.90	25,690	25,690	(13,513)	-	12,177	25,690	-	-
Infinite Alternative Energy Co., Ltd.	Investing in companies	Thailand	100.00	67.00	1,868,576	1,868,576	-	-	1,868,576	1,868,576	355,028	232,880
Eco Thaienergy Co., Ltd.	Generating and selling electricity	Thailand	51.00	51.00	42,015	42,015	-	-	42,015	42,015	4,202	5,396

Separate financial statements												
	Type of business	Country of operation	Ownership interest		Cost		Impairment		At cost - net		Dividend income for the year	
			2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
			(%)						(in thousand Baht)			
Gunkul Infinite Group Co., Ltd.	Generating and selling electricity	Thailand	75.00	75.00	235,500	211,694	-	-	235,500	211,694	-	-
Gunkul International (Mauritius)	Investing in companies	Mauritius	100.00	100.00	3,843,657	4,740,445	-	-	3,843,657	4,740,445	1,068,510	699,454
Gunkul Solar Power Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	179,250	179,250	-	-	179,250	179,250	-	-
BMP Solar Co., Ltd.	Generating and selling electricity	Thailand	100.00	100.00	216,938	216,938	-	-	216,938	216,938	21,798	25,297
G.K. Hemp Group Co., Ltd.	Investing in companies	Thailand	100.00	-	270,000	-	-	-	270,000	-	-	-
G.K. Real Estate (2564) Co., Ltd.	Investing in real estate	Thailand	100.00	-	57,600	-	-	-	57,600	-	-	-
Gunkul Wind Power 1 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,250	-	-	-	1,250	-	-	-
Gunkul Wind Power 2 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,250	-	-	-	1,250	-	-	-
Gunkul Wind Power 3 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,250	-	-	-	1,250	-	-	-
Gunkul Wind Power 4 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,250	-	-	-	1,250	-	-	-
Gunkul Wind Power 5 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,999	-	-	-	1,999	-	-	-
Gunkul Wind Power 6 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	2,999	-	-	-	2,999	-	-	-
Gunkul Wind Power 7 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	2,999	-	-	-	2,999	-	-	-
Gunkul Wind Power 8 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,250	-	-	-	1,250	-	-	-
Gunkul Wind Power 9 Co., Ltd.	Generating and selling electricity	Thailand	100.00	-	1,250	-	-	-	1,250	-	-	-
Gunkul Grand Asset Co., Ltd.	Construction	Thailand	100.00	-	10,000	-	-	-	10,000	-	-	-
Joint venture GKE & GPD Company Limited	Construction	Thailand	50.00	50.00	10,000	10,000	-	-	10,000	10,000	-	-
Joint venture GKE & FEC	Construction	Thailand	60.00	60.00	17,700	15,600	-	-	17,700	15,600	-	-
Gunkul Engineering (Myanmar) Company Limited	Import and selling equipments for electrical systems	Myanmar	100.00	-	1,588	1,588	-	-	1,588	1,588	-	-
Doan Son Thuy Investment Joint Stock Company	Generating and selling electricity	Vietnam	100.00	-	332,494	332,494	-	-	332,494	332,494	-	-
Total					15,581,439	15,712,438	(13,513)	-	15,567,926	15,712,438	2,450,815	2,379,200

None of the Company's subsidiaries are publicly listed and consequently do not have published price quotations.

12 Property, plant and equipment

Consolidated financial statements

	Land	Building, building improvement and utility system	Machinery and equipment	Furniture, fixtures and office equipment <i>(in thousand Baht)</i>	Vehicles	Assets under construction	Total
Cost							
At 1 January 2020	1,728,637	1,061,397	22,741,217	86,730	46,274	1,355,217	27,019,472
Additions	-	67,923	22,677	13,871	668	2,262,257	2,367,396
Acquisitions of subsidiaries	-	364,046	2,609,867	-	-	578,329	3,552,242
Transfers	-	386,758	823,515	-	-	(1,210,273)	-
Transfers from right-of-use assets	-	-	3,147	-	45,533	-	48,680
Disposals	-	(1,342)	(242,206)	(358)	(3,865)	(435,012)	(682,783)
Sale of investment in subsidiaries	-	-	-	-	-	(2,027,345)	(2,027,345)
Effect of movements in exchange rates	35,376	(1,642)	269,737	246	-	128,948	432,665
At 31 December 2020 and 1 January 2021	1,764,013	1,877,140	26,227,954	100,489	88,610	652,121	30,710,327
Additions	-	355,769	29,163	6,180	-	904,186	1,295,298
Transfers	-	4,968	448,980	-	-	(453,948)	-
Transfers from right-of-use assets	-	-	-	-	12,635	-	12,635
Disposals	-	(351,473)	(471,193)	(14,064)	(116)	(5,133)	(841,979)
Effect of movements in exchange rates	(98)	104,314	407,402	44	-	-	511,662
At 31 December 2021	1,763,915	1,990,718	26,642,306	92,649	101,129	1,097,226	31,687,943

Consolidated financial statements

	Land	Building, building improvement and utility system	Machinery and equipment	Furniture, fixtures and office equipment (in thousand Baht)	Vehicles	Assets under construction	Total
Accumulated depreciation and impairment losses							
At 1 January 2020	-	(195,020)	(2,212,399)	(64,177)	(32,684)	(322)	(2,504,602)
Depreciation charge for the year	-	(54,121)	(1,098,588)	(9,633)	(9,906)	-	(1,172,248)
Acquisitions of subsidiaries	-	(7,868)	(97,995)	-	-	-	(105,863)
Transfers from right-of-use assets	-	-	(2,037)	-	(14,015)	-	(16,052)
Disposals	-	412	4,930	346	1,996	-	7,684
Effect of movements in exchange rates	-	866	(5,621)	(76)	-	-	(4,831)
At 31 December 2020 and 1 January 2021	-	(255,731)	(3,411,710)	(73,540)	(54,609)	(322)	(3,795,912)
Depreciation charge for the year	-	(81,509)	(1,225,665)	(10,265)	(4,731)	-	(1,322,170)
Transfers from right-of-use assets	-	-	-	-	(10,321)	-	(10,321)
Disposals	-	263	9,532	13,641	115	-	23,551
Effect of movements in exchange rates	-	(8,145)	(39,306)	(11)	-	-	(47,462)
At 31 December 2021	-	(345,122)	(4,667,149)	(70,175)	(69,546)	(322)	(5,152,314)
Net book value							
At 31 December 2020	1,764,013	1,621,409	22,816,244	26,949	34,001	651,799	26,914,415
At 31 December 2021	1,763,915	1,645,596	21,975,157	22,474	31,583	1,096,904	26,535,629

Separate financial statements

	Building and building improvement	Machinery and equipment	Furniture, fixtures and office equipment (in thousand Baht)	Vehicles	Assets under construction	Total
Cost						
At 1 January 2020	32,608	18,544	54,729	31,414	2,778	140,073
Additions	-	537	6,648	458	-	7,643
Transfers from right-of-use assets	-	-	-	28,669	-	28,669
Disposals	-	-	(322)	(3,864)	-	(4,186)
At 31 December 2020 and 1 January 2021	32,608	19,081	61,055	56,677	2,778	172,199
Additions	472	91	2,532	-	332	3,427
Transfers	-	(116)	(8,407)	-	(3,110)	(11,633)
At 31 December 2021	33,080	19,056	55,180	56,677	-	163,993
Accumulated depreciation						
At 1 January 2020	(29,766)	(17,899)	(37,342)	(19,853)	-	(104,860)
Depreciation charge for the year	(488)	(426)	(6,791)	(3,671)	-	(11,376)
Transfers from right-of-use assets	-	-	-	(11,423)	-	(11,423)
Disposals	-	-	321	1,996	-	2,317
At 31 December 2020 and 1 January 2021	(30,254)	(18,325)	(43,812)	(32,951)	-	(125,342)
Depreciation charge for the year	(490)	(264)	(7,023)	(3,286)	-	(11,063)
Disposals	-	116	8,401	-	-	8,517
At 31 December 2021	(30,744)	(18,473)	(42,434)	(36,237)	-	(127,888)
Net book value						
At 31 December 2020	2,354	756	17,243	23,726	2,778	46,857
At 31 December 2021	2,336	583	12,746	20,440	-	36,105

The gross amount of the Group's fully depreciated property, plant and equipment that was still in use as at 31 December 2021 amounting to Baht 269.48 million (2020: Baht 257.45 million).

Security

At 31 December 2021, the Group has pledged land, building and machinery with a net book value of Baht 22,332.06 million as collateral to secure long-term loans (See note 15) (2020: Baht 28,287.20 million).

13 Leases

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
Right-of-use assets At 31 December				
	(in thousand Baht)			
Land	457,150	608,699	-	-
Buildings	29,663	43,571	24,501	35,761
Warehouse	13,077	12,622	7,937	6,293
Rooftop for solar power plant	16,547	17,453	-	-
Vehicles	27,448	28,555	14,642	12,611
Total	543,885	710,900	47,080	54,665

In 2021, additions to the right-of-use assets of the Group and the Company were Baht 12.61 million and Baht 8.98 million, respectively (2020: Baht 737.25 million and Baht 42.05 million, respectively).

Extension options

The Group has extension options on property leases exercisable up to one year before the end of the contract period. The Group assesses at lease commencement date whether it is reasonably certain to exercise the extension options and will regularly reassess so.

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
For the year ended 31 December				
	(in thousand Baht)			
Amounts recognised in profit or loss				
Depreciation of right-of-use assets:				
- Land	23,410	22,735	-	-
- Buildings	13,909	660	11,261	-
- Warehouse	7,625	2,820	3,968	-
- Rooftop for solar power plant	906	906	-	-
- Vehicles	7,886	15,382	3,755	2,416
Interest on lease liabilities	22,037	18,149	1,390	-
Expenses relating to short-term leases and leases of low-value assets	5,193	19,202	1,944	17,819

In 2021, total cash outflow for leases of the Group and the Company were Baht 74.74 million and Baht 17.21 million respectively. (2020: Baht 247.02 million and Baht 7.9 million, respectively).

14 Intangible assets and goodwill

Consolidated financial statements						
	Software licences	Right to use electrical transmission line	Right to power purchase agreement and right to operate (in thousand Baht)	Goodwill	Software under installation	Total
Cost						
At 1 January 2020	25,327	889,057	3,382,304	163,476	-	4,460,164
Additions	6,004	2,722	-	-	-	8,726
Acquisitions of subsidiaries	3,180	-	380,004	-	-	383,184
Sale of investment in subsidiaries	-	-	(857,492)	-	-	(857,492)
Disposals	(66)	(975)	-	-	-	(1,041)
Effect of movements in exchange rates	7	-	80,048	-	-	80,055
At 31 December 2020 and 1 January 2021	34,452	890,804	2,984,864	163,476	-	4,073,596
Additions	4,716	1,320	-	-	4,710	10,746
Disposals	-	(1,622)	-	-	-	(1,622)
Effect of movements in exchange rates	407	-	47,936	-	-	48,343
At 31 December 2021	39,575	890,502	3,032,800	163,476	4,710	4,131,063
Accumulated amortisation and impairment losses						
At 1 January 2020	(10,831)	(80,176)	(252,612)	-	-	(343,619)
Acquisitions of subsidiaries	(98)	-	-	-	-	(98)
Amortisation charge for the year	(4,859)	(35,733)	(110,206)	-	-	(150,798)
Disposals	43	6	-	-	-	49
Effect of movements in exchange rates	-	-	(1,004)	-	-	(1,004)
At 31 December 2020 and 1 January 2021	(15,745)	(115,903)	(363,822)	-	-	(495,470)
Amortisation charge for the year	(5,995)	(35,647)	(128,722)	-	-	(170,364)
Effect of movements in exchange rates	(617)	-	(1,116)	-	-	(1,733)
At 31 December 2021	(22,357)	(151,550)	(493,660)	-	-	(667,567)
Net book value						
At 31 December 2020	18,707	774,901	2,621,042	163,476	-	3,578,126
At 31 December 2021	17,218	738,952	2,539,140	163,476	4,710	3,463,496

Impairment testing for cash-generating units containing goodwill

The recoverable amounts of the power plant asset containing goodwill have been determined using the value in use models. The key assumptions used in the estimation of the recoverable amount included the discount rate which was a pre-tax measure estimated based on 17 - 22 years government bond rate as a proxy for the risk free rate with debt leveraging of 60% - 70%. The cash flow projections were prepared using the external information, which included sales volumes, prices, operating costs, inflation rate and long-term growth rates for the period over the remaining of the power purchase agreements.

The key assumptions used in the estimation of the recoverable amount are set out below. The values assigned to the key assumptions represent management's assessment of future trends in the relevant industries and have been based on historical data from both external and internal sources.

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
		(%)		
Discount rate-Solar power stations	5.64 - 6.63	6.17 - 7.09	-	-
Discount rate-Wind Farm power stations	5.83 - 5.98	6.18 - 6.34	-	-

The discount rate was a pre-tax measure based on the rate of 17 - 22 years government bonds issued by the government in the relevant market and in the same currency as the cash flows, adjusted for a risk premium to reflect both the increased risk of investing in equities generally and the systematic risk of the specific CGU.

Revenue projection

Projections of all revenues for each power plant assets have been made as stated in the Power Purchase Agreements while applying the projections of revenue from external information for the post power purchase agreement periods. Assumptions included tariff from solar power plants and wind farms, inflation and other related factors.

The impairment test has been prepared by the management from information of the contracts entered with the counterparties while forecasting revenue and expenses from the external source and the possible together with systematic parameters and conservative approaches are used for its calculation and no impairment charges are required for goodwill.

Management believes that any reasonably possible change in the key assumptions such as discounted rates, adder and growth rate on which recoverable amount is based would not cause the carrying amount to exceed its recoverable amount.

	Separate financial statements		
	Software licences	Software in progress (in thousand Baht)	Total
Cost			
At 1 January 2020	10,654	-	10,654
Additions	2,846	-	2,846
At 31 December 2020 and 1 January 2021	13,500	-	13,500
Additions	4,352	1,841	6,193
At 31 December 2021	17,852	1,841	19,693
Accumulated amortisation			
At 1 January 2020	(4,521)	-	(4,521)
Amortisation charge for the year	(2,144)	-	(2,144)
At 31 December 2020 and 1 January 2021	(6,665)	-	(6,665)
Amortisation charge for the year	(3,211)	-	(3,211)
At 31 December 2021	(9,876)	-	(9,876)
Net book value			
At 31 December 2020	6,835	-	6,835
At 31 December 2021	7,976	1,841	9,817

15 Interest-bearing liabilities

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Current				
Short-term loans from financial institutions - unsecured	1,646,044	4,662,626	1,220,907	4,593,504
Less unamortised discount	(1,356)	(3,344)	(1,356)	(3,344)
	1,644,688	4,659,282	1,219,551	4,590,160
Current portion of long-term loans from financial institutions - secured	1,706,816	1,535,013	28,800	28,800
Less unamortised deferred financing fees	(34,920)	(38,747)	(297)	(318)
	1,671,896	1,496,266	28,503	28,482
Current portion of debentures - unsecured	2,800,000	1,819,000	2,800,000	1,819,000
Less unamortised deferred financing fees	(2,469)	-	(2,469)	-
	2,797,531	1,819,000	2,797,531	1,819,000
Current portion of lease liabilities	43,888	42,155	19,237	15,409
Total current interest-bearing liabilities	6,158,003	8,016,703	4,064,822	6,453,051

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Non-current				
Long-term loans from financial Institutions- secured	15,645,360	14,818,582	309,600	338,400
Less unamortised deferred financing fees	(157,556)	(160,742)	(1,592)	(1,889)
	15,487,804	14,657,840	308,008	336,511
Debentures - unsecured	3,148,700	4,148,700	3,148,700	4,148,700
Less unamortised deferred financing fees	(6,440)	(13,116)	(6,440)	(13,116)
	3,142,260	4,135,584	3,142,260	4,135,584
Lease liabilities	522,807	552,532	25,073	37,133
Total non-current interest-bearing liabilities	19,152,871	19,345,956	3,475,341	4,509,228
Total	25,310,874	27,362,659	7,540,163	10,962,279

Guarantee

As at 31 December 2021, The Company has pledged ordinary shares of certain subsidiaries, together with land and buildings, machinery and equipment and deposits of the said subsidiaries, including the right of land sublease and building lease agreements, land lease agreements, Power Purchase Agreement and the right of power plant project agreement in Japan and Vietnam as collateral against the credit facilities those entities received from commercial banks in amount of Baht 19,358.24 million, U.S. Dollars 91.66 million, JPY 11,699 million and VND 216,308.98 million (31 December 2020: Baht 18,881.45 million, U.S. Dollars 254.78 million, JPY 11,699 million and VND 202,000 million).

Long-term borrowings

Details of principal features of the Group's long-term borrowings as at 31 December 2021 and 2020 were as follows:

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Subsidiaries :				
1) Baht 3,730 million and U.S. Dollars 81 million Loan Facility Agreement at interest BIBOR 3M plus a margin, payable in three-months installments commencing in February 2017	1,971,145	2,321,879	-	-
2) Baht 4,080 million Loan Facility Agreement at interest THBFIX 6M plus a margin, payable in three-months installments commencing in November 2016	2,906,933	3,142,838	-	-
3) JPY 11,007 million Loan Facility Agreement at interest TIBOR 6M plus a margin, payable in six-months installments commencing in December 2018	2,585,134	2,753,861	-	-

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
4) Baht 4,522 million and U.S. Dollars 82 million Loan Facility Agreement at interest THBFIX 6M plus a margin, payable in three-months installments commencing in August 2018	3,189,784	3,533,317	-	-
5) Baht 207 million Loan Facility Agreement at interest rate 4.43%, payable in three-months installments commencing in September 2017	138,670	151,808	-	-
6) Baht 3,048 million Loan Facility Agreement at interest rate THBFIX 6M plus a margin, payable in three-months installments commencing in December 2018	2,051,730	2,248,666	-	-
7) Baht 432 million Loan Facility Agreement at interest MLR less a discount, payable in monthly installments commencing in October 2018	336,511	364,994	366,511	364,994
8) Baht 402 million Loan Facility Agreement at interest rate THBFIX 6M plus a margin, payable in three-months installments commencing in May 2020	260,011	289,502	-	-
9) U.S. Dollars 17 million Loan Facility Agreement at interest rate LIBOR 3M, payable in three-months installments commencing in May 2020	1,247,317	1,188,675	-	-
10) Baht 430 million Loan Facility Agreement at interest rate THBFIX 6M plus a margin, payable in monthly installments commencing in August 2020	351,076	158,566	-	-
11) VND 7,154.49 million Loan Facility Agreement and U.S. Dollars 25.19 million at interest rate BLR 3M and LIBOR 3M plus a margin, payable in three-months installments commencing in August 2021	823,970	-	-	-
12) VND 7,154.49 million Loan Facility Agreement and U.S. Dollars 31.69 million at interest rate BLR 3M and LIBOR 3M plus a margin, payable in three-months installments commencing in September 2021	1,033,996	-	-	-
13) Baht 316 million Loan Facility Agreement at interest rate BIBOR 1M plus a margin, payable in monthly installments commencing in June 2021	263,423	-	-	-
Total	17,159,700	16,154,106	366,511	364,994

Debentures

As at 31 December 2021, the Company has outstanding balances of issued unsecured, name registered, unsubordinated debentures. The details of issuance of debentures were as below:

Debenture issued on	3 October 2019
Unit and value	2,800,000 units at par value of Baht 1,000 each
Total debenture value	Baht 2,800 million
Period and maturity date	2 years 9 months will mature on 3 July 2022
Interest rate	Fixed rate of 4.50% per annum
Interest payment due	Every 3 months
Debenture issued on	30 April 2020
Unit and value	907,100 units at par value of Baht 1,000 each
Total debenture value	Baht 907.10 million
Period and maturity date	3 years will mature on 30 April 2023
Interest rate	Fixed rate of 3.7% per annum
Interest payment due	Every 3 months
Debenture issued on	30 April 2020
Unit and value	441,600 units at par value of Baht 1,000 each
Total debenture value	Baht 441.60 million
Period and maturity date	5 years will mature on 30 April 2025
Interest rate	Fixed rate of 4.2% per annum
Interest payment due	Every 3 months
Debenture issued on	22 April 2021
Unit and value	1,800,000 units at par value of Baht 1,000 each
Total debenture value	Baht 1,800 million
Period and maturity date	3 years 3 months will mature on 19 July 2024
Interest rate	Fixed rate of 4.10 % per annum
Interest payment due	Every 3 months

As at 31 December 2021, the Group had unutilised credit facilities totalling Baht 5,427.67 million and VND 38,967 million. (31 December 2020 : Baht 5,786.05 million and VND 38,967 million.).

The Group has to comply with certain conditions in accordance with those agreements including maintaining certain key financial ratios.

16 Provisions for employee benefits

Defined benefit plan

The Group and the Company operate a defined benefit plan based on the requirement of Thai Labour Protection Act B.E 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service. The defined benefit plans expose the Group to actuarial risks, such as longevity risk, interest rate risk and market (investment) risk.

<i>Present value of the defined benefit obligations</i>	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
		(in thousand Baht)		
At 1 January	86,539	76,992	54,463	49,065
Include in profit or loss:				
Current service cost	11,024	8,794	721	5,192
Interest on obligation	2,236	1,979	1,189	1,208
	13,260	10,773	1,910	6,400
Included in other comprehensive income				
Actuarial gain (loss)				
- Financial assumptions	520	-	544	-
- Experience adjustment	13,373	-	7,454	-
	13,893	-	7,998	-
Benefits paid	(3,541)	(1,226)	(3,316)	(1,002)
At 31 December	110,151	86,539	61,055	54,463

<i>Principal actuarial assumptions</i>	Consolidated financial statements and Separate financial statements	
	2021	2020
	(%)	(%)
Discount rate	2.27	2.84
Future salary growth	3.0 – 7.0	4.0 – 8.0
Turnover rate	0.0 – 30.0	0.0 – 30.0

Assumptions regarding future mortality have been based on published statistics and mortality tables.

At 31 December 2021, the weighted-average duration of the defined benefit obligation was 12.8 years (2020: 11.4 years.)

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the employee benefit obligations by the amounts shown below.

Effect to the defined benefit obligation at 31 December

	Consolidated financial statements		Separate financial statements	
	1% increase in assumption	1% decrease in assumption	1% increase in assumption	1% decrease in assumption
	2021	2020	2021	2020
		(in thousand Baht)		
Discount rate	(8,175)	(6,898)	9,300	7,932
Future salary growth	8,947	9,320	(7,974)	(8,215)

Effect to the defined benefit obligation at 31 December

	Consolidated financial statements		Separate financial statements	
	1% increase in assumption	1% decrease in assumption	1% increase in assumption	1% decrease in assumption
	2021	2020	2021	2020
		(in thousand Baht)		
Discount rate	(3,445)	(3,661)	3,862	4,172
Future salary growth	3,734	5,085	(3,358)	(4,531)

17 Provisions for decommissioning costs of building and power plants

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
		(in thousand Baht)		
At 1 January	319,890	209,434	-	-
Additions	9,763	46,283	-	-
Acquisitions of subsidiaries	-	58,325	-	-
Effect of movements in exchange rates	12,753	5,848	-	-
At 31 December	342,406	319,890	-	-

18 Share capital

	Par value per share (in Baht)	2021		2020	
		Number	Baht	Number	Baht
		(thousand shares / thousand Baht)			
Authorised					
At 1 January					
- ordinary shares	0.25	8,882,531	2,220,633	8,902,344	2,225,586
Reduction of shares	0.25	-	-	(19,813)	(4,953)
At 31 December					
- ordinary shares	0.25	8,882,531	2,220,633	8,882,531	2,220,633
Issued and paid-up					
At 1 January					
- ordinary shares	0.25	8,882,531	2,220,633	8,882,531	2,220,633
At 31 December					
- ordinary shares	0.25	8,882,531	2,220,633	8,882,531	2,220,633

At the annual general meeting of the shareholders of the Company held on 21 April 2020, the shareholders approved the decrease of the Company's registered capital in the amount of Baht 4.95 million from the existing registered capital of Baht 2,225.59 million to Baht 2,220.63 million, by cancelling the unissued registered ordinary shares in the amount of 19.81 million shares at a par value of Baht 0.25 per share.

19 Treasury shares

At the Board of Directors' Meeting of the Company held on 13 May 2021, the Board approved the sale of 99.04 million treasury shares, representing 1.34% of issued share and paid-up capital. The specified selling period is from 14 June 2021 to 23 October 2021 under the regulations of the Stock Exchange of Thailand.

During the year ended 31 December 2021, the Company has sold 99.04 million treasury shares in the amount of Baht 426.47 million which the cost of the treasury shares is Baht 304.67 million. The Company recognised share premium on treasury shares of Baht 121.79 million in separate category within equity and transferred the reserve for treasury shares of Baht 304.67 million to retained earnings.

As at 31 December 2021, the Company has no treasury shares outstanding (31 December 2020: 99.04 million treasury shares, equivalent to 1.34% of issued share and paid capital).

20 Additional paid-in capital and reserves

Share premium

Section 51 of the Public Companies Act B.E. 2535 requires companies to set aside share subscription monies received in excess of the par value of the shares issued to a reserve account ("share premium"). Share premium is not available for dividend distribution.

Legal reserve

Section 116 of the Public Companies Act B.E. 2535 requires that a public company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward, to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

Other components of equity

Translation reserve

The translation reserves comprises all foreign currency differences arising from the translation of the financial statements of foreign operations

21 Segment information and disaggregation of revenue

Management determined that the Group has four reportable segments which are the Group's strategic divisions for products and services, and are managed separately because they require different technology and marketing strategies. For each of the strategic divisions, the chief operating decision maker (CODM) reviews internal management reports on at least a quarterly basis. The following summary describes the operations in each of the Group's reportable segments.

- Segment 1 Manufacturing and selling of equipments for electrical systems
- Segment 2 Generating and selling electricity
- Segment 3 Construction service
- Segment 4 Maintenance service, rental service and others

Each segment's performance is measured based on segment gross profit, as included in the internal management reports that are reviewed by the Group's CODM. Segment gross profit is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries. Inter-segment pricing is determined on an arm's length basis.

	Manufacturing and selling of equipments for electrical systems		Generating and selling electricity		Construction service		Maintenance service, rental service and others		Eliminations		Total	
<i>For the year ended 31 December</i>	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
	<i>(in thousand Baht)</i>											
Information about reportable segments												
External revenues	1,474,970	1,495,878	5,279,548	4,301,112	1,888,969	2,022,418	674,675	829,935	-	-	9,318,162	8,649,343
Inter-segment revenue	946,018	801,862	-	-	565,477	455,494	67,353	80,503	(1,578,848)	(1,337,859)	-	-
Total revenue	2,420,988	2,297,740	5,279,548	4,301,112	2,454,446	2,477,912	742,028	910,438	(1,578,848)	(1,337,859)	9,318,162	8,649,343
Disaggregation of revenue												
Primary geographical markets												
Thailand	2,418,868	2,216,890	3,739,080	3,164,385	2,454,446	2,477,912	742,028	910,438	(1,578,848)	(1,337,859)	7,775,574	7,431,766
Japan	-	-	931,850	876,851	-	-	-	-	-	-	931,850	876,851
Vietnam	-	-	608,618	259,876	-	-	-	-	-	-	608,618	259,876
Other countries	2,120	80,850	-	-	-	-	-	-	-	-	2,120	80,850
Total revenue	2,420,988	2,297,740	5,279,548	4,301,112	2,454,446	2,477,912	742,028	910,438	(1,578,848)	(1,337,859)	9,318,162	8,649,343
Timing of revenue recognition												
At a point in time	2,420,988	2,297,740	471,423	207,756	-	-	498,667	705,721	(946,018)	(801,863)	2,445,060	2,409,354
Over time	-	-	4,808,125	4,093,356	2,454,446	2,477,912	243,361	204,717	(632,830)	(535,996)	6,873,102	6,239,989
Total revenue	2,420,988	2,297,740	5,279,548	4,301,112	2,454,446	2,477,912	742,028	910,438	(1,578,848)	(1,337,859)	9,318,162	8,649,343
Segment gross profit	285,811	394,634	2,965,527	2,383,033	385,010	298,373	168,402	132,633	(60,088)	(167,630)	3,744,662	3,041,043
Segment assets	2,157,797	2,905,876	37,140,867	40,946,084	2,257,391	2,370,554	1,780,277	918,222	(850,978)	(1,108,580)	42,485,354	46,032,156

(a) Reconciliation of reportable segment profit or loss

	Consolidated financial statements	
	2021	2020
	(in thousand Baht)	
Profit or loss		
Total gross profit for reportable segments	3,744,662	3,041,043
Unallocated amounts		
- Other corporate expenses	(1,523,143)	(1,805,804)
- Gain on sale of investment in subsidiary	-	1,977,596
- Gain on bargain purchase	-	259,273
- Share of profit of associates and joint ventures accounted for using equity method	217,837	72,596
Profit before income tax	2,439,356	3,544,704

(b) Geographical segments

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment assets are based on the geographical location of the assets.

Geographical information	Consolidated financial statements			
	Revenues		Assets	
	2021	2020	2021	2020
	(in thousand Baht)			
Thailand	7,775,574	7,431,766	28,081,080	29,098,122
Japan	931,850	876,851	7,208,371	10,558,135
Vietnam	608,618	259,876	5,263,358	4,761,557
Other countries	2,120	80,850	99,860	48,597
Investments in associates and joint ventures	-	-	1,832,685	1,565,745
Total	9,318,162	8,649,343	42,485,354	46,032,156

(c) Major customer

Revenue from three customers of the Group's manufacturing and selling of equipments for electrical systems, generating and selling electricity and domestic construction service segments represent approximately Baht 4,510.80 million of the Group's total revenues (2020: three customers, amount Baht 4,136.01 million).

The Group recognises revenue in an amount that corresponds directly with the value to the customer of the date on which the performance obligations are satisfied.

(d) Promotional privileges

By virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520, the subsidiaries have been granted privileges by the Board of Investment relating to generate electricity from wind energy, solar energy and solar rooftop energy. The Group has been granted several privileges including exemption and/or reduction from payment of income tax on the net profit derived from promoted operations with certain terms and conditions prescribed in the promotional certificates.

Consolidated financial statements

Year ended 31 December	2021			2020		
	Promoted businesses	Non-promoted businesses	Total	Promoted businesses	Non-promoted businesses	Total
	(in thousand Baht)					
Export sales	-	1,554,108	1,554,108	-	1,217,577	1,217,577
Local sales	3,742,178	5,600,724	9,342,902	3,189,018	5,580,607	8,769,625
Eliminations	-	(1,578,848)	(1,578,848)	-	(1,337,859)	(1,337,859)
Total revenue	3,742,178	5,575,984	9,318,162	3,189,018	5,460,325	8,649,343

22 Expenses by nature

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Changes in inventories of finished goods and work in progress	(113,723)	37,549	(26,621)	(1,270)
Raw materials and consumables used	1,211,180	970,629	1,384,931	1,361,694
Construction costs	1,571,729	1,814,551	39,302	-
Depreciation and amortisation	1,541,984	1,353,457	30,842	14,863
Cost of sale of assets under finance lease	870,825	891,848	-	-
Employee benefit expenses	632,712	595,767	291,076	315,894
Operation and maintenance service fee	202,729	221,149	3,338	2,452
Bank charge and others service fee	109,607	116,174	24,052	20,534
Consulting fees	85,131	136,496	18,462	38,005
Land and buildings Tax	66,361	75,034	36	22
Utility expense and supplies used	65,258	73,184	8,344	12,389
Insurance premium	65,283	60,109	1,953	1,665
Rental fee	14,167	27,918	7,749	21,846
Travelling and transportation expense	22,115	23,667	7,675	10,309
Impairment loss on investment in subsidiary	-	-	13,513	-
Others	200,223	166,045	24,342	26,641
Total cost of sales, cost of sale of electricity, cost of rendering of services, cost of construction services, distribution costs and administrative expenses	6,545,581	6,563,577	1,828,994	1,825,044

23 Finance costs

Note	Consolidated financial statements		Separate financial statements	
	2021	2020 (in thousand Baht)	2021	2020
Interest expense				
Related parties	4	-	2,588	3,805
Loans and overdrafts		655,612	72,843	48,304
Total		655,612	75,431	52,109
Debtenture		252,537	252,538	258,638
Amortisation of financing fees		31,175	11,274	9,134
Others		32,356	1,599	1,511
Total		316,068	265,411	269,283
<i>Less: amounts included in the cost of qualifying assets:</i>				
- Property, plant and equipment under construction		(1,154)	-	-
		(1,154)	-	-
Net		970,526	340,842	321,392

24 Income tax

<i>Income tax recognised in profit or loss</i>	Consolidated financial statements		Separate financial statements	
	2021	2020 (in thousand Baht)	2021	2020
Current tax expense				
Current year	155,873	64,634	-	-
Under (over) provided in prior years	-	(324)	-	-
	155,873	64,310	-	-
Deferred tax expense				
Movements in temporary differences	31,965	55,102	12,458	50,072
Total income tax expense	187,838	119,412	12,458	50,072

Reconciliation of effective tax rate

	Rate (%)	Consolidated financial statements		Rate (%)	2020 (in thousand Baht)
		2021 (in thousand Baht)	2020 (in thousand Baht)		
Profit before income tax expense		2,439,356	3,544,704		
Income tax using the Thai corporation tax rate	20.0	487,871	708,941	20.0	
Income not subject to tax		(248,883)	(594,663)		
Expenses not deductible for tax purposes		34,856	16,811		
Addition deductible expense for tax purpose		(5,911)	(5,594)		
Under (over) provided in prior years		-	(324)		
Recognition of previously unrecognised tax losses		(221,741)	(17,653)		
Current year losses for which no deferred tax asset was recognised		123,560	12,327		
Effect of different tax rates in each entity		18,086	(433)		
Total	7.70	187,838	3.37		119,412

Reconciliation of effective tax rate

	Rate (%)	Separate financial statements		Rate (%)	2020 (in thousand Baht)
		2021 (in thousand Baht)	2020 (in thousand Baht)		
Profit before income tax expense		2,199,866	2,247,224		
Income tax using the Thai corporation tax rate	20.0	439,973	449,445	20.0	
Income not subject to tax		(320,056)	(390,408)		
Expenses not deductible for tax purposes		989	3,155		
Addition deductible expense for tax purpose		(168)	-		
Recognition of previously unrecognised tax losses		(220,181)	(12,120)		
Current year losses for which no deferred tax asset was recognised		111,901	-		
Total	0.57	12,458	2.23		50,072

Deferred tax assets and liabilities

	Consolidated financial statements			
	Assets		Liabilities	
	2021	2020 (in thousand Baht)	2021	2020
Total	125,677	141,250	(328,904)	(311,121)
Set off of tax	(72,316)	(84,488)	72,316	84,488
Net deferred tax assets (liabilities)	53,361	56,762	(256,588)	(226,633)

Deferred tax assets and liabilities

	Separate financial statements			
	Assets		Liabilities	
	2021	2020 (in thousand Baht)	2021	2020
Total	27,047	38,331	-	(425)
Set off of tax	-	(425)	-	425
Net deferred tax assets	27,047	37,906	-	-

	Consolidated financial statements				
	(Charged) / credited to				At 31 December
	At 1 January	Profit or loss	Other comprehensive income (in thousand Baht)	Equity	Effect of movements in exchange rates
2021					
Deferred tax assets					
Trade account receivable and other receivables	2,256	(1,120)	-	-	1,136
Derivatives	22,818	(22,818)	-	-	-
Inventories	9,371	45	-	-	9,416
Provisions	10,073	4,824	-	-	15,125
Provisions for employee benefit	17,219	1,989	2,779	(90)	21,897
Profit in inventories	6,149	(1,416)	-	-	4,733
Profit in property, plant and equipment	22,476	-	-	-	22,476
Profit in intangible assets	23,334	-	-	-	23,334
Property, plant and equipment	27,479	-	-	-	27,479
Lease liabilities	11	6	-	-	17
Loss carry forward	64	-	-	-	64
Total	141,250	(18,490)	2,779	(90)	125,677
Deferred tax liabilities					
Lease receivables	-	(28)	-	-	(28)
Derivatives	-	(1,327)	-	-	(1,327)
Property, plant and equipment	(11,123)	(12,543)	-	90	(23,576)
Right to power purchase agreement and right to operate (See note 14)	(298,674)	-	-	-	(303,072)
Lease liabilities	(1,275)	388	-	-	(887)
Others	(49)	35	-	-	(14)
Total	(311,121)	(13,475)	-	90	(328,904)
Net	(169,871)	(31,965)	2,779	-	(4,170)
					(203,227)

Consolidated financial statements

	(Charged) / credited to					Effect of movements in exchange rates	
	At 1 January	Profit or loss	Other comprehensive income	Changes in accounting policies (in thousand Baht)	Acquisitions of subsidiaries		At 31 December
2020							
Deferred tax assets							
Trade account receivable and other receivables	1,078	1,178	-	-	-	-	2,256
Derivatives	-	(6,975)	-	29,793	-	-	22,818
Inventories	6,676	2,695	-	-	-	-	9,371
Provisions	6,781	3,111	-	-	-	181	10,073
Provisions for employee benefit	15,267	1,952	-	-	-	-	17,219
Profit in inventories	5,061	1,088	-	-	-	-	6,149
Profit in property, plant and equipment	22,476	-	-	-	-	-	22,476
Profit in intangible assets	23,334	-	-	-	-	-	23,334
Property, plant and equipment	27,479	-	-	-	-	-	27,479
Leases liabilities	366	(355)	-	-	-	-	11
Loss carry forward	51,657	(51,593)	-	-	-	-	64
Total	160,175	(48,899)	-	29,793	-	181	141,250
Deferred tax liabilities							
Property, plant and equipment	(3,265)	(7,858)	-	-	-	-	(11,123)
Right to power purchase agreement and right to operate (See note 14)	(264,263)	-	-	-	(34,341)	(70)	(298,674)
Leases liabilities	(2,993)	1,704	-	14	-	-	(1,275)
Others	(23)	(49)	23	-	-	-	(49)
Total	(270,544)	(6,203)	23	14	(34,341)	(70)	(311,121)
Net	(110,369)	(55,102)	23	29,807	(34,341)	111	(169,871)

Separate financial statements					
		(Charged)/ credited to:			
<i>Deferred tax</i>	At 1 January	Profit or loss	Other comprehensive income (in thousand Baht)	Changes in accounting policies	At 31 December
2021					
Deferred tax assets					
Trade account receivable and other receivables	1,330	(1,120)	-	-	210
Inventories	4,250	-	-	-	4,250
Provisions	315	(34)	-	-	281
Provisions for employee benefit	10,893	(281)	1,599	-	12,211
Derivative	21,543	(11,459)	-	-	10,084
Lease liabilities	-	11	-	-	11
Total	38,331	(12,883)	1,599	-	27,047
Deferred tax liabilities					
Lease liabilities	(425)	425	-	-	-
Total	(425)	425	-	-	-
Net	37,906	(12,458)	1,599	-	27,047
2020					
Deferred tax assets					
Trade account receivable and other receivables	216	1,114	-	-	1,330
Inventories	3,250	1,000	-	-	4,250
Provisions	492	(177)	-	-	315
Provisions for employee benefit	9,814	1,079	-	-	10,893
Derivative	-	(3,676)	-	25,219	21,543
Loss carry forward	51,549	(51,549)	-	-	-
Total	65,321	(52,209)	-	25,219	38,331
Deferred tax liabilities					
Leases liabilities	(2,562)	2,137	-	-	(425)
Total	(2,562)	2,137	-	-	(425)
Net	62,759	(50,072)	-	25,219	37,906
Unrecognised deferred tax assets					
	Consolidated financial statements		Separate financial statements		
	2021	2020	2021	2020	
	(in thousand Baht)				
Loss carry forward	122,953	259,244	110,269	220,105	
Total	122,953	259,244	110,269	220,105	

The tax losses expire in 2026. The Group has not recognised these items as deferred tax assets because it is not probable that the Group will have sufficient future taxable profit to utilise the benefits therefrom.

25 Earnings per share

The calculations of basic earnings per share for the year ended 31 December 2021 and 2020 were based on the profit for the year attributable to ordinary shareholders of the Company and the weighted average number of ordinary shares outstanding during the year after adjusting the number of treasury shares as follows:

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht/ thousand shares)			
Profit attributable to ordinary shareholders for the year ended 31 December	2,229,270	3,412,337	2,187,407	2,197,152
Number of ordinary shares outstanding as at 1 January	8,882,531	8,882,531	8,882,531	8,882,531
- ordinary shares of Baht 0.25 each	(46,451)	(99,044)	(46,451)	(99,044)
Effect of treasury shares				
Weighted average number of ordinary shares outstanding at 31 December	8,836,080	8,783,487	8,836,080	8,783,487
Earnings per share (basic) (in Baht)	0.25	0.39	0.25	0.25

26 Dividend

The shareholders of the Company have approved dividends as follows:

	Approval date	Payment schedule	Dividend rate per share (Baht)	Amount (in thousand Baht)	Legal reserve
2021					
Annual dividend 2020	28 April 2021	May 2021	0.182	1,598,566	-
Interim dividend 2021	11 August 2021	September 2021	0.06	532,946	-
				2,131,512	-
2020					
Annual dividend 2019	21 April 2020	May 2020	0.136	1,194,551	-

27 Financial instruments

(a) Carrying amounts and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy for financial instruments measured at fair value. It does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

	Consolidated financial statements					Fair value			
	Fair value – applied hedge accounting	Fair value through profit or loss	Carrying amount Fair value through other comprehensive income	Amortised cost - net (in thousand Baht)	Total	Level 1	Level 2	Level 3	Total
At 31 December 2021									
Financial assets									
Other current financial assets	-	19,198	-	-	19,198	-	19,198	-	19,198
Forward exchange contracts	-	1,692	-	-	1,692	-	1,692	-	1,692
Interest rate swap contracts	-	53,520	-	-	53,520	-	53,520	-	53,520
Total financial assets	-	74,410	-	-	74,410	-			
Financial liabilities									
Loans from financial institutions	-	-	-	138,670	138,670	-	134,081	-	134,081
Debentures	-	-	-	5,939,791	5,939,791	-	5,975,966	-	5,975,966
Interest rate swap contracts	-	207,467	-	-	207,467	-	207,467	-	207,467
Cross currency and interest rate swap contracts	-	56,789	-	-	56,789	-	56,789	-	56,789
Total financial liabilities	-	264,256	-	6,078,461	6,342,717				

	Consolidated financial statements					Fair value			
	Fair value – applied hedge accounting	Fair value through profit or loss	Carrying amount Fair value through other comprehensive income	Amortised cost - net (in thousand Baht)	Total	Level 1	Level 2	Level 3	Total
At 31 December 2020									
Financial assets									
Other current financial assets	-	162,315	-	-	162,315	-	162,315	-	162,315
Forward exchange contracts	-	5,284	-	-	5,284	-	5,284	-	5,284
Total financial assets	-	167,599	-	-	167,599				
Financial liabilities									
Loans from financial institutions	-	-	-	151,809	151,809	-	146,402	-	146,402
Debentures	-	-	-	5,954,584	5,954,584	-	5,989,252	-	5,989,252
Forward exchange contracts	-	20,705	-	-	20,705	-	20,705	-	20,705
Interest rate swap contracts	-	428,261	-	-	428,261	-	428,261	-	428,261
Cross currency and interest rate swap contracts	-	143,633	-	-	143,633	-	143,633	-	143,633
Total financial liabilities	-	592,599	-	6,106,393	6,698,992				

	Carrying amount			Separate financial statements		Fair value			
	Fair value – applied hedge accounting	Fair value through profit or loss	Fair value through other comprehensive income	Amortised cost - net (in thousand Baht)	Total	Level 1	Level 2	Level 3	Total
At 31 December 2021									
Financial assets									
Forward exchange contracts	-	622	-	-	622	-	622	-	622
Total financial assets	-	622	-	-	622				
Financial liabilities									
Debentures	-	-	-	5,939,791	5,939,791	-	5,975,966	-	5,975,966
Cross currency and interest rate swap contracts	-	56,789	-	-	56,789	-	56,789	-	56,789
Total financial liabilities	-	56,789	-	5,939,791	5,996,580				
At 31 December 2020									
Financial assets									
Other current financial assets	-	82,000	-	-	82,000	-	82,000	-	82,000
Forward exchange contracts	-	5,284	-	-	5,284	-	5,284	-	5,284
Total financial assets	-	87,284	-	-	87,284				
Financial liabilities									
Debentures	-	-	-	5,954,584	5,954,584	-	5,989,252	-	5,989,252
Forward exchange contracts	-	20,521	-	-	20,521	-	20,521	-	20,521
Cross currency and interest rate swap contracts	-	143,633	-	-	143,633	-	143,633	-	143,633
Total financial liabilities	-	164,154	-	5,954,584	6,118,738				

Financial instruments measured at fair value

Type	Valuation technique
Investments in marketable unit trusts classified as financial assets measured at FVTPL or FVOCI	The net asset value as of the reporting date.
Interest rate swaps contracts	<i>Swap models:</i> The present value of estimated future cash flows, using an observable yield curve.
Forward exchange contracts	<i>Forward pricing:</i> The fair value is determined using quoted forward exchange rates at the reporting date and present value calculations based on high credit quality yield curves in the respective currencies.
Cross currency and interest rate swap contracts	Derived by using a valuation technique incorporating observable market data.

Financial instruments not measured at fair value

Type	Valuation technique
Long-term loans	Discounted cash flow
Debentures	Bid prices from the Thai Bond Market Association as of the reporting date. If not available, the Government Bond Yield Curve from the Thai Bond Market Association for the same period is used, adjusted by an appropriate risk premium.

(b) Movement of marketable debt securities

	Consolidated financial statements				
Marketable debt securities	At 1 January	Purchase	Disposal	Fair Value adjustment	At 31 December
			(in thousand Baht)		
2021					
Current financial assets					
Debt securities measured at - FVTPL	162,315	2,434,500	(2,577,472)	(145)	19,198
Total	162,315	2,434,500	(2,577,472)	(145)	19,198
2020					
Current financial assets					
Debt securities measured at - FVTPL	23,553	465,001	(326,050)	(189)	162,315
Total	23,553	465,001	(326,050)	(189)	162,315

	Separate financial statements				
Marketable debt securities	At 1 January	Purchase	Disposal	Fair Value adjustment	At 31 December
			(in thousand Baht)		
2021					
Current financial assets					
Debt securities measured at - FVTPL	82,000	2,259,500	(2,341,500)	-	-
Total	82,000	2,259,500	(2,341,500)	-	-
2020					
Current financial assets					
Debt securities measured at - FVTPL	-	242,000	(160,000)	-	82,000
Total	-	242,000	(160,000)	-	82,000

(c) Financial risk management policies

Risk management framework

The Group's board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The board of directors has established the risk management committee, which is responsible for developing and monitoring the Group's risk management policies. The committee reports regularly to the board of directors on its activities.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to maintain a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group audit committee oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group audit committee is assisted in its oversight role by internal audit. Internal audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the audit committee.

(c.1) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers.

(c.1.1) Trade accounts receivables and unbilled receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the factors that may influence the credit risk of its customer base, including the default risk associated with the industry and country in which customers operate. Detail of concentration of revenue are included in note 21(b) and (c).

The risk management committee has established a credit policy under which each new customer is analysed individually for creditworthiness before the Group's commercial terms and conditions are offered. The Group's review includes external ratings, if they are available, financial statements, credit agency information, industry information and in some cases bank references. Sale limits are established for each customer and reviewed regularly. Any sales exceeding those limits require approval from the management.

The Group limits its exposure to credit risk from trade accounts receivables by establishing a maximum payment period. Outstanding trade receivables are regularly monitored by the Group. An impairment analysis is performed by the Group at each reporting date. The provision rates of expected credit loss are based on days past due for individual trade receivables or groupings of various customer segments with similar credit risks to reflect differences between economic conditions in the past, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

The Group has concentrations of credit risk since most of its revenues are contracted under long-term agreements with a small number of parties. However, counterparties are generally government authorities and large public or private corporations, and the risk perceived is low.

(c.1.2) Cash and cash equivalent and derivatives

The Group's exposure to credit risk arising from cash and cash equivalents and derivative assets is limited because the counterparties are banks and financial institutions which the Group considers to have low credit risk.

(c.2) Liquidity risk

The Group monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations and to mitigate the effects of fluctuations in cash flows.

The following table are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted and include contractual interest payments and exclude the impact of netting agreements.

Consolidated financial statements						
At 31 December 2021	Carrying amount	At Call	Contractual cash flows			Total
			Within 1 year	1 – 5 years	More than 5 years	
			(in thousand Baht)			
Non-derivative financial liabilities						
Short-term borrowings from financial institutions	1,644,688	394,100	1,251,944	-	-	1,646,044
Trade and other current payables	1,681,236	-	1,681,236	-	-	1,681,236
Payable for purchases of assets	50,920	-	50,920	-	-	50,920
Payables for share subscription	142,024	-	142,024	-	-	142,024
Retention payables	361,693	-	343,873	17,820	-	361,693
Loans from financial institutions	17,159,700	-	2,118,856	9,165,524	8,381,446	19,665,826
Debentures	5,939,791	-	2,989,773	3,317,418	-	6,307,191
Lease liabilities	566,695	-	66,849	188,442	660,582	915,873
Other non-current financial liabilities	618	-	-	-	618	618
	<u>27,547,365</u>	<u>394,100</u>	<u>8,645,475</u>	<u>12,689,204</u>	<u>9,042,646</u>	<u>30,771,425</u>
Derivative financial liabilities						
Cross currency and interest rate swap contracts						
- Cash outflow	(56,789)	-	(124,507)	(523,841)	(142,949)	(791,297)
- Cash inflow	-	-	113,855	485,625	133,463	732,943
Interest rate swap contracts						
- Cash outflow	(207,467)	-	(470,573)	(1,378,183)	(1,096,084)	(2,944,840)
- Cash inflow	-	-	325,663	1,290,765	1,179,069	2,795,497
	<u>(264,256)</u>	<u>-</u>	<u>(155,562)</u>	<u>(125,634)</u>	<u>73,499</u>	<u>(207,697)</u>

Consolidated financial statements

			Contractual cash flows			
<i>At 31 December 2020</i>	Carrying amount	At Call	Within 1 year	1 – 5 years	More than 5 years	Total
			<i>(in thousand Baht)</i>			
Non-derivative financial liabilities						
Short-term borrowings from financial institutions	4,659,282	-	4,662,626	-	-	4,662,626
Trade and other current payables	2,403,919	-	2,402,552	1,367	-	2,403,919
Payable for purchases of assets	1,532,604	-	1,532,604	-	-	1,532,604
Payables for share subscription	59,083	-	59,083	-	-	59,083
Retention payables	366,477	-	350,552	15,925	-	366,477
Loans from financial institutions	16,154,106	-	1,911,979	8,197,577	8,357,346	18,466,902
Debentures	5,954,584	-	2,023,124	4,318,950	-	6,342,074
Lease liabilities	594,687	-	64,891	173,684	733,840	972,415
Other non-current financial liabilities	618	-	-	-	618	618
	31,725,360	-	13,007,411	12,707,503	9,091,804	34,806,718
Derivative financial liabilities						
Cross currency and interest rate swap contracts						
- Cash outflow	(143,633)	-	(122,079)	(513,405)	(277,892)	(913,376)
- Cash inflow	-	-	99,613	429,869	238,534	768,016
Forward exchange contracts						
- Cash outflow	(20,705)	-	(2,149,752)	-	-	(2,149,752)
- Cash inflow	-	-	2,129,047	-	-	2,129,047
Interest rate swap contracts						
- Cash outflow	(428,261)	-	(401,296)	(1,234,015)	(1,139,745)	(2,775,056)
- Cash inflow	-	-	259,776	946,311	1,143,413	2,349,500
	(592,599)	-	(184,691)	(371,240)	(35,690)	(591,621)

Separate financial statements

At 31 December 2021	Carrying amount	At Call	Contractual cash flows			Total
			Within 1 year	1 – 5 years	More than 5 years	
			(in thousand Baht)			
Non-derivative financial liabilities						
Short-term borrowings from financial institutions	1,219,551	294,100	926,807	-	-	1,220,907
Short-term loan from related parties	95,000	95,000	-	-	-	95,000
Trade and other current payables	381,431	-	381,431	-	-	381,431
Retention payables	2,726	-	2,122	604	-	2,726
Loans from financial institutions	336,511	-	38,392	145,093	213,962	397,447
Debentures	5,939,791	-	2,989,773	3,317,418	-	6,307,191
Lease liabilities	44,310	-	20,531	25,912	-	46,443
Other non-current financial liabilities	618	-	-	-	618	618
	8,019,938	389,100	4,359,056	3,489,027	214,580	8,451,763
Derivative financial liabilities						
Cross currency and interest rate swap contracts						
- Cash outflow	(56,789)	-	(124,507)	(523,841)	(142,949)	(791,297)
- Cash inflow	-	-	113,855	485,625	133,463	732,943
	(56,789)	-	(10,652)	(38,216)	(9,486)	(58,354)

			Separate financial statements			
			Contractual cash flows			
	Carrying amount	At Call	Within 1 year	1 – 5 years	More than 5 years	Total
<i>At 31 December 2020</i>			<i>(in thousand Baht)</i>			
<i>Non-derivative financial liabilities</i>						
Short-term borrowings from financial institutions	4,590,160	-	4,593,504	-	-	4,593,504
Short-term loan from related parties	182,000	182,000	-	-	-	182,000
Trade and other current payables	513,709	-	513,709	-	-	513,709
Payables for share subscription	20,726	-	20,726	-	-	20,726
Retention payables	6,701	-	6,613	88	-	6,701
Loans from financial institutions	364,993	-	39,241	148,491	248,955	436,687
Debentures	5,954,584	-	2,023,124	4,318,950	-	6,342,074
Lease liabilities	52,541	-	17,034	38,787	-	55,821
Other non-current financial liabilities	618	-	-	-	618	618
	<u>11,686,032</u>	<u>182,000</u>	<u>7,213,951</u>	<u>4,506,316</u>	<u>249,573</u>	<u>12,151,840</u>
<i>Derivative financial liabilities</i>						
Cross currency and interest rate swap contracts						
- Cash outflow	(143,633)	-	(122,079)	(513,405)	(277,892)	(913,376)
- Cash inflow	-	-	99,613	429,869	238,534	768,016
Forward exchange contracts						
- Cash outflow	(20,521)	-	(2,144,360)	-	-	(2,144,360)
- Cash inflow	-	-	2,123,839	-	-	2,123,839
	<u>(164,154)</u>	<u>-</u>	<u>(42,987)</u>	<u>(83,536)</u>	<u>(39,358)</u>	<u>(165,881)</u>

The cash outflows disclosed in the above table represent the contractual undiscounted cash flows relating to derivative financial liabilities held for risk management purposes and which are not usually closed out before contractual maturity. The disclosure shows net cash flow amounts for derivatives that are net cash-settled and gross cash inflow and outflow amounts for derivatives that have simultaneous gross cash settlement.

(c.3) Market risk

The Group is exposed to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk is as follows:

(c.3.1) Foreign currency risk

The Group is exposed to foreign currency risk relating to purchases material, purchases of asset, costs of operation and maintenance and have long-term loan which are denominated in foreign currencies. However, the Group entered into cross currency and interest rate swap contracts to mitigate the exposure of foreign exchange rate. At 31 December, the Group and the Company were exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

Consolidated financial statements

	31 December 2021			31 December 2020			
	United States Dollars	Euro	Total	United States Dollars	Euro	Malaysian Ringgit	Total
<i>Exposure to foreign currency</i>				<i>(in thousand Baht)</i>			
Cash and cash equivalents	111,048	273	111,321	225,518	266	-	225,784
Trade and other current receivables	42,442	-	42,442	1,321,555	-	68,219	1,389,774
Deposits from financial institution pledged as collateral	153,148	-	153,148	149,780	-	-	149,780
Interest-bearing liabilities	(147,335)	-	(147,335)	(336,943)	-	-	(336,943)
Trade and other current payables	(246,958)	(53,973)	(300,931)	(285,043)	(82,449)	-	(367,492)
Payables for share subscription	-	-	-	(38,357)	-	-	(38,357)
Payable for purchases of assets	(11,228)	-	(11,228)	(820,752)	-	-	(820,752)
Retention payables	(154,528)	-	(154,528)	(138,952)	-	-	(138,952)
Gross balance sheet exposure	(253,411)	(53,700)	(307,111)	76,806	(82,183)	68,219	62,842
Estimated forecast payable for operation and maintenance service fee of power plants	(576,559)	(236,934)	(813,493)	(595,078)	(275,309)	-	(870,387)
Estimated forecast trade payables	(114,588)	-	(114,588)	(343,005)	-	-	(343,005)
Estimated forecast cash received	-	-	-	1,014,431	-	-	1,014,431
Gross exposure	(944,558)	(290,634)	(1,235,192)	153,154	(357,492)	68,219	(136,119)
Cross currency and interest rate swap contracts	774,973	-	774,973	891,549	-	-	891,549
Forward exchange contracts	114,588	-	114,588	(671,426)	-	-	(671,426)
Net exposure	(54,997)	(290,634)	(345,631)	373,277	(357,492)	68,219	84,004

Separate financial statements

	31 December 2021				31 December 2020			
	United States Dollars	Japanese Yen	Euro	Total	United States Dollars	Japanese Yen	Euro	Total
<i>Exposure to foreign currency</i>				(in thousand Baht)				
Cash and cash equivalents	103,229	-	270	103,499	217,790	-	263	218,053
Trade and other current receivables	1,365	-	-	1,365	333,329	908	-	334,237
Short-term loans to related parties	-	37,626	-	37,626	89,602	1,373,029	-	1,462,631
Interest-bearing liabilities	(6,807)	-	-	(6,807)	(292,329)	-	-	(292,329)
Trade accounts payable	(131,112)	-	(17)	(131,129)	(118,431)	(62)	-	(118,493)
Gross balance sheet exposure	(33,325)	37,626	253	4,554	229,961	1,373,875	263	1,604,099
Estimated forecast trade payables	(60,728)	-	-	(60,728)	(337,612)	-	-	(337,612)
Estimated forecast cash received	-	-	-	-	1,014,431	1,791,496	-	2,805,927
Gross exposure	(94,053)	37,626	253	(56,174)	906,780	3,165,371	263	4,072,414
Cross currency and interest rate swap contracts	774,973	-	-	774,973	891,549	-	-	891,549
Forward exchange contracts	60,728	-	-	60,728	676,819	(1,791,496)	-	(1,114,677)
Net exposure	741,648	37,626	253	779,527	2,475,148	1,373,875	263	3,849,286

Cross currency and interest rate swap contracts

The Group is exposed to foreign currency risk relating to purchases goods, purchases assets and long-term loans which are denominated in foreign currencies. However, the Group entered into cross-currency and interest rate swap contracts for migrates effect of exchange rate.

As at 31 December 2021, the Group has outstanding cross currency and interest rate swap contracts as follow:

Currency and Interest Receive Rate Swap agreements	Currency and Interest Pay Rate Swap agreements	Termination date
U.S. dollars 1.61 million at the rate 0.00%	Baht 56.44 million at the rate 0.64%	25 November 2022
U.S. dollars 1.80 million at the rate 0.00%	Baht 63.32 million at the rate 0.65%	15 November 2022
U.S. dollars 7.45 million at the rate 0.00%	Baht 260.82 million at the rate 0.65%	24 February 2027
U.S. dollars 11.27 million at the rate 0.00%	Baht 394.38 million at the rate 0.65%	15 November 2027

Sensitivity analysis

A reasonably possible strengthening (weakening) of Thai Baht against all other foreign currencies at the reporting date would have affected the measurement of financial instruments denominated in a foreign currency. This analysis assumes that all other variables, in particular interest rates, remain constant.

Impact to profit or loss	Movement (%)	Consolidated financial statements		Separate financial statements	
		Strengthening	Weakening <i>(in thousand Baht)</i>	Strengthening	Weakening
<i>At 31 December 2021</i>					
United States Dollars	1.00	2,534	(2,534)	333	(333)
Euro	1.00	537	(537)	(3)	3
Japanese Yen	1.00	-	-	(376)	376
<i>At 31 December 2020</i>					
United States Dollars	1.00	(768)	768	(2,300)	2,300
Euro	1.00	822	(822)	(3)	3
Japanese Yen	1.00	-	-	(13,739)	13,739
Malaysian Ringgit	1.00	(682)	682	-	-

(c.3.2) Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Group's operations and its cash flows because loan interest rates are mainly floated. The Group is primarily exposed to interest rate risk from its borrowings (see note 15). The Group mitigates this risk by ensuring that the majority of its borrowings are at fixed interest rates and uses derivatives, principally interest rate swaps, to manage exposure to fluctuations in interest rates on specific debt securities and borrowings.

Exposure to interest rate risk at 31 December	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Loans from financial institutions	17,352,175	16,353,596	338,400	367,200
Interest rate swap contracts	(14,894,789)	(11,903,712)	-	-
Net	<u>2,457,386</u>	<u>4,449,884</u>	<u>338,400</u>	<u>367,200</u>

Interest Rate Swap Agreements

As at 31 December 2021, the Group has outstanding interest rate swap agreements as follow:

Loan facility and outstanding principal	Interest Receive Rate Swap agreements	Interest Pay Rate Swap agreements	Termination date
Loan facility of Baht 3,730 million and U.S. Dollars 81 million and the outstanding principal in interest rate swap agreement of Baht 1,988.54 million.	Floating rate BIBOR 3M +1.50% per annum	Fixed coupon rate 4.485% per annum	27 August 2026
Loan facility of Baht 2,743 million and the outstanding principal in interest rate swap agreement of Baht 2,014.42 million.	Floating rate THBFIX 6M +1.8% per annum	Fixed coupon rate 3.00% per annum	20 December 2027
Loan facility of Baht 3,583 million and the outstanding principal in interest rate swap agreement of Baht 3,225.87 million.	Floating rate THBFIX 6M +1.8% per annum	Fixed coupon rate 3.00% per annum	27 March 2031
Loan facility of Baht 4,080 million and the outstanding principal in interest rate swap agreement of Baht 2,929.85 million.	Floating rate THBFIX 6M +1.8% per annum	Fixed coupon rate 3.00% - 3.53% per annum	29 April 2033
Loan facility of JPY 11,699 million and the outstanding principal in interest rate swap agreement of JPY 7,270 million.	Floating rate TIBOR 6M +1.3% per annum	Fixed coupon rate 2.126% per annum	30 June 2036
Loan facility of U.S. Dollars 33.93 million and the outstanding principal in interest rate swap agreement of U.S. Dollars 31.26 million.	Floating rate LIBOR 3M per annum	Fixed coupon rate 0.68% and 1.00% per annum	31 March 2033
Loan facility of U.S. Dollars 20.90million and the outstanding principal in interest rate swap agreement of U.S. Dollars 20.90 million.	Floating rate LIBOR 3M per annum	Fixed coupon rate 1.715 per annum	31 December 2031

Cash flow sensitivity analysis for variable-rate instruments

A reasonable possible change of 1% in interest rates at the reporting date; this analysis assumes that all other variables, in particular foreign currency exchange rates, remain constant.

Impact to profit or loss	Consolidated financial statements		Separate financial statements	
	1% increase in interest rate	1% decrease in interest rate	1% increase in interest rate	1% decrease in interest rate
	(in thousand Baht)			
2021				
Cash flow sensitivity (net)	(24,574)	24,574	(3,384)	3,384
2020				
Cash flow sensitivity (net)	(44,499)	44,499	(3,672)	3,672

(d) Capital management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board regularly monitors the return on capital, by evaluating result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

28 Commitments with non-related parties

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
	(in thousand Baht)			
Capital commitment				
Design, construction and installment for project under construction	44,422	140,771	-	-
Total	44,422	140,771	-	-

Letters of Guarantee

The Group and the Company had commitment to local banks and Thailand office of foreign financial institutions for letter of guarantee issued for sales and purchase of electricity, electricity used, purchase of machinery and rental agreements to certain government sector and private sectors. As at 31 December 2021, the Group had outstanding commitments being amount of Baht 2,044.29 million (31 December 2020: Baht 1,759.58 million, U.S. Dollars 31.5 million and Malaysian Ringgit 10.98 million).

Significant Agreements

Consultant Agreement

The Group was committed the consultant fee to prepare environmental impact reports, consultant fee of project development and engineering feasibility studies. As at 31 December 2021, the Group had outstanding commitments being amount of Baht 6.71 million and JPY 245.40 million (31 December 2020: Baht 8.05 million and JPY 259.80 million).

Service Agreement

The Group had obligation commitment in operation and maintenance service of power plant contracts. As at 31 December 2021, the Group outstanding obligation remains at Baht 46.81 million, EUR 6.19 million, U.S. Dollars 19.84 million, JPY 3,759.19 million and VND 32,522.14 million. (31 December 2020: Baht 72.92 million, EUR 7.41 million, U.S. Dollars 23.39 million, JPY 3,957.04 million and VND 40,836.42 million).

Power Purchase Agreement

The Group has the power purchase agreements for 15 - 25 years, 5 years and renew 5 years automatically with the Electricity Generating Authority of Thailand, Provincial Electricity Authority, Metropolitan Electricity Authority, including power purchase agreements in overseas and private sectors whereby the Group will supply the electric energy at the agreed quantity and price. The Group must comply with conditions and restrictions provided for in the agreement.

29 Events after the reporting period

At the Board of Directors' meeting of the Company held on 23 February 2022, the Board approved to submit for approval at the annual general meeting of the shareholders of the Company on 27 April 2022. The appropriation of the profit allocation from the results of the Company's operation to be cash dividend at the rate of Baht 0.12 per share, total amount does not exceed Baht 1,068 million. The balance of dividend is subject to the approval of the shareholders at the annual general meeting on 27 April 2022.

30 Thai Financial Reporting Standards (TFRS) not yet adopted

Revised TFRS due to Interbank Offer Rate (IBOR) reform - Phase 2, which are relevant to the Group's operations, expected to have material impact on the consolidated and separate financial statements when initially adopted, and will become effective for the financial statements in annual reporting periods beginning on or after 1 January 2022, are as follows:

TFRS	Topic
TFRS 7	Financial Instruments: Disclosures
TFRS 9	Financial Instruments
TFRS 16	Leases

The amendments are applicable when an existing interest rate benchmark is replaced by another interest rate benchmark. The amendments provide a practical expedient that modifications to asset and liability values as a direct consequence of the interest rate benchmark reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis (i.e. the basis immediately preceding the change), can be accounted for by only updating the effective interest rate.

The amendments to these standards are effective for the financial statements in annual reporting periods beginning on or after 1 January 2022. Management is currently considering the potential impact from these amendment in the initial period adopted.

31 Reclassification of accounts

Certain accounts in the 2020 financial statements, which are included in the 2021 financial statements for comparative purposes, have been reclassified to conform to the presentation in the 2021 financial statements as follows:

	2020					
	Consolidated financial statements			Separate financial statements		
	Before reclass.	Reclass.	After reclass.	Before reclass.	Reclass.	After reclass.
			(in thousand Baht)			
Statement of financial position as at 31 December 2020						
Property, plant and equipment	26,942,971	(28,555)	26,914,415	59,468	(12,611)	46,857
Right-of-use assets	682,345	28,555	710,900	42,055	12,611	54,666
		-			-	

The reclassifications have been made in the opinion of management, the new classification is more appropriate to the Group's business.

Part 4

Attachments

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Attachment 1

1.1 Details of Directors, Executives, Controlling Persons, the Person Assigned to Take the Highest Responsibility in Accounting and Finance, the Person Supervising Accounting, the Company Secretary





Dr. Gunkul Dhumrongpiyawut

- Chairman of the Board of Directors (Non-Executive Director)

Date and month of appointment as Director

- 10th August 2009 (12 Years 5 months)

Age 67 Years

Educational Qualifications

- The Honorary Doctor of Engineering, Rajamangala University of Technology Thanyaburi in 2018
- The Honorary Doctor of Art, Rajamangala University of Technology Phra Nakhon in 2016
- Honorary Master of Engineering, Western University in 2010

Training History

- Intermediate Certificate Courses - Good Governance for Medical Executives Class 8/2020 (IGM8), The Medical Council together with King Prajadhipok's Institute
- Thai - Chinese Leadership Studies (TCL) Class 2/2019 Huachiew Chalermprakiet University
- Rule of Law for Democracy Class 6/2018 (RLD.6), College of the Constitutional Court
- Top Executives Program Class 15/2012, Capital Market Academy
- Director Certification Program (DCP) Class 111/2008, Thai Institute of Director (IOD)
- Director Accreditation Program (DAP) Class 70/2008, Thai Institute of Director (IOD)
- Managing Finance for Business Owners by Peter Ho in 2007
- Secrets to Doubling Your Sales, Productivity & Profits Program in 2006
- Anti-Corruption Training Course

Training in 2021

- The program of senior executives on justice administration, Class 25/2021, Judicial Training Institute

Pride Award

Year	List
2020	"National Model Father" Award by presentation from Dusit District, Bangkok
2015	<p>Outstanding Award Category "Company Performance Awards of the Year 2015" at the SET Awards 2015, The Stock Exchange of Thailand</p> <p>Outstanding Establishment Award for Promotion of Skill Development from the Minister of Labor General Surasak Kanchanarat</p> <p>Received Plaque of Honor for Contributors to Education from Mrs. Phusadee Tamtai, Deputy Governor of Bangkok</p>
2014	<p>"National Outstanding Father" Award by presentation from Dusit District, Bangkok</p> <p>Outstanding Award Category "Investor Relations Awards of the Year 2014" at the SET Awards 2014, The Stock Exchange of Thailand</p> <p>Shortlisted and certified by CNBC Asia at "CNBC's 13th Asia Business Leaders Awards 2014" in Singapore.</p> <p>Received a plaque of honor as a sponsor of the university from Associate Professor Dr. Sakkarin Phumirat, President of King Mongkut's University of Technology Thonburi</p>

Year	List
2013	<p>Outstanding Award Category “Investor Relations Awards of the Year 2013” at the SET Awards 2013, The Stock Exchange of Thailand</p> <hr/> <p>CSR-DIW for beginner 2013 Award by Department of Industrial Works, Ministry of Industry</p> <hr/> <p>Plaque of Honor for those who have made contributions to the school's education under the Dusit District Office</p>
2012	<p>Received the Golden Bell Award from Somdej Phra Maharatchamongkhalachan and Received a Golden Bell Shield from H.E. General Phichit Kullavanich, Privy Councilor by the Assembly of Radio, Television News, Newspaper Programmers of Thailand</p>
2011	<p>Received Plaque of Honor for Good Corporate Governance from Mr. Panthep Klanarongran, Chairman of the National Anti-Corruption Commission (NACC)</p>

Working Experience during the Past 5 Years

GUNKUL's Group

- **2012 - Present** Gunkul Engineering PCL Chairman of the Board of Directors (Non-Executive Director)
- **2009 - Present** Gunkul Engineering PCL Director

Other Companies / Entities

- **2020 – Present** Green Field Energy Co.,Ltd. Director
- **2017 - Present** Group of Great Miracle Asset Director
- **2000 - Present** Gunkul Engineering (2000) Co., Ltd. Director
- **1996 - Present** Gunkul Marine Line Co., Ltd. Director
- **1994 - Present** G.M. Supply and Construction Co., Ltd. Director
- **1991 - Present** Gunkul Group Co., Ltd. Director

Number of companies currently holding the position of a director

- Listed Company (s) : 1
 - Gunkul Engineering PCL Chairman of the Board of Directors (Non-Executive Director)
- Non-Listed Company (s) : 18

Share Holding Percentage as at 31 December 2021

- 231,458,670 shares, representing 2.6058 percent of the issued and paid-up capital

Relationship between Management

- Spouse of Ms. Sopacha Dhumrongpiyawut and Father of Ms. Naruechon Dhumrongpiyawut



Dr. Chongrak Rarueysong

- Director (Independent Director)
- Chairman of the Audit Committee ¹⁾
- Member of the Good Corporate Governance Committee ¹⁾

Date and month of appointment as Director, Member of the Audit Committee and Member of the Good Corporate Governance Committee

- 3rd July 2015 (6 Years 6 months) / 3rd July 2015 (6 Years 6 months) / 3rd July 2015 (6 Years 6 months)

Age 68 Years

Educational Qualifications

- Ph.D., Economics, University of Illinois at Urbana - Champaign, U.S.A.
- Bachelor of Economics (Hons), Thammasat University

History of Training Programs

- Certificate, Economic Statistics, United Nations (UN)
- Certificate, Public Finance, International Monetary Fund (IMF)
- Certificate, Securities Market, U.S. Securities and Exchange Commission (SEC)
- Certificate, Directors Certification Program (DCP), Class 14/2002, Thai Institute of Director (IOD)
- Certificate, Effective Audit Committee, Class 4/2002, Thai Institute of Director (IOD)
- Certificate, Japan Capital Market, Japan Securities Dealers Association (JSDA)

Training in 2021

- Seminar on “Audit Committee Forum No. 44 Preparing for the new reality: Key considerations for Audit Committees”
- Seminar on “Audit Committee Forum No. 46: Sustain Trends and Priority in 2021”
- Seminar on “KPMG Asia Pacific Board Leadership & Assurance Summit 2021”

Working Experience during the Past 5 Years

GUNKUL's Group

- **2020 – Present** Gunkul Engineering Public Company Limited
Director (Independent Director) / Chairman of the Audit Committee / Member of the Good Corporate Governance Committee
- **2015 – 2020** Gunkul Engineering Public Company Limited
Director (Independent Director) / Member of the Audit Committee / Chairman of the Good Corporate Governance Committee

Other Companies / Entities

- **2016 – Present** Kingsford Holdings Public Company Limited
Group Executive Committee
- **2020 – 2020** Apple Cash Company Limited
Director
- **2018 – 2020** Hatari Wireless Company Limited
Director
- **2004 – 2014** KTB Computer Services Company Limited
Director / Chairman of the Audit Committee
- **2002 – 2003** PTT Public Company Limited
Director / Member of the Audit Committee
- **2001 – 2007** Thai Bond Dealing Centre
Director
- **2001 – 2002** Petroleum Authority of Thailand
Director
- **1998 – 2007** TRIS Corporation Limited
Director
- **1998 – 2007** Thailand Securities Institute
Director
- **1996 – 2012** Thai Securities Finance Company Limited
Director / Executive Director
- **1996 – 2012** Association of Securities Companies (Thailand)
President
- **1996 – 2012** ASCO Training Institute (ATI)
President
- **1995 – 1996** Vachira Dhanadhun Securities Company Limited
Managing Director
- **1992 – 1995** The Stock Exchange of Thailand
Director of Research and Development
- **1991 – 1992** Dhana Siam Finance and Securities Co., Ltd.
Director of Research and Development
- **1983 – 1991** Fiscal Policy Office, Ministry of Finance
Senior Specialist Loan Policy Division and Fiscal & Tax Policy Division



Number of companies currently holding the position of a director

- Listed Company (s) : 1
 - Gunkul Engineering PCL

Director (Independent Director) / Chairman
of the Audit Committee / Member of the
Good Corporate Governance Committee
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None

¹⁾ Appointed as Chairman of the Audit Committee and Member of the Corporate Governance Committee on December 14, 2020.



Associate Professor Dr. Panarat Panmanee

- Director (Independent Director)
- Member of the Audit Committee

Date and month of appointment as Director and Member of the Audit Committee

- 20th April 2018 (3 years 8 months) / 14th May 2018 (3 years 8 months)

Age 73 Years

Educational Qualifications

- Ph.D. in Management and Accounting, Keio University, Japan
- Master of Accountancy, Thammasat University
- Bachelor of Accountancy, Thammasat University

History of Training Programs

- Professional Training in Accounting and Others, in accordance with the requirements of the Federation of Accounting Professions for certified auditors, totaling 40 hours per year
- Certificate, Top Executive Program in Commerce and Trade (TEPCoT), Class 10, Commerce Academy
- Certificate, Directors Certification Program (DCP), Class 264/2018, Thai Institute of Director (IOD)

Training in 2021

- Professional Training in Accounting 20 hours per year and Others 20 hours per year, in accordance with the requirements of the Federation of Accounting Professions for certified auditors
- Seminar on "Audit Committee Forum No. 44 Preparing for the new reality: Key considerations for Audit Committees"
- Seminar on "Audit Committee Forum No. 46: Sustain Trends and Priority in 2021"
- Seminar on "KPMG Asia Pacific Board Leadership & Assurance Summit 2021"

Working Experience during the Past 5 Years

GUNKUL's Group

- **2018 - Present** Gunkul Engineering PCL Director (Independent Director)
- **2018 - Present** Gunkul Engineering PCL Member of the Audit Committee

Other Companies / Entities

- **2021 - Present** Faculty of Management Science, Silpakorn University Professor
- **2020 - Present** Federation of Accounting Professions Royal Patronage Advisor to the Technology Development and Professional Accounting Subcommittee

- **2018 - Present** PROEN Corp Public Company Limited Director (Independent Director) / Member of the Audit Committee
- **2017 - 2020** Federation of Accounting Professions Royal Patronage Consultant in Accounting Professional Education and Accounting Technology
- **2016 - 2019** University of the Thai Chamber of Commerce Dean Faculty of Accounting
- **2009 - 2015** Rajamangala University of Technology Specialist PhD program, Faculty of Business Administration
- **2002 - 2007** Thammasat University Deputy Dean for Academic Affairs
- **1991 - 1999** KPMG Peat Marwick & Suthee Ltd. Faculty of Commerce and Accountancy
- **1976 - 2009** Thammasat University Partner
- Professor, Faculty of Commerce and Accountancy

Number of companies currently holding the position of a director

- Listed Company (s) : 2
 - Gunkul Engineering PCL Director (Independent Director) / Member of the Audit Committee
 - PROEN Corp Public Company Limited Independent Director / Member of the Audit Committee

- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Gen. Tarnchaiyan Srisuwan

- Director (Independent Director)

Date and month of appointment as Director

- 18th April 2019 (2 years 8 months)

Age 63 Years

Educational Qualifications

- Master of Arts, Faculty of Political Science, Ramkhamhaeng University
- Army Staff School, United Kingdom
- Army Staff School, Thailand
- Chulachomklao Royal Military Academy
- Military School

History of Training Programs

- Certificate, Thai - Chinese Leadership Studies (TCL), Class 2, Huachiew Chalermprakiet University
- Certificate, Director Accreditation Program (DAP) Class 160/2019, Thai Institute of Directors: IOD
- Certificate, National Defense Joint with Private Sector, National Defence College of Thailand
- Certificate, Leader Program, Class 23, Capital Market Academy

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

- **2019 – Present** Gunkul Engineering PCL Director (Independent Director)

Other Companies / Entities

- | | | |
|---------------|--------------------------------------|---|
| • 2017 | Royal Thai Armed Forces Headquarters | Supreme Commander |
| • 2016 | Royal Thai Armed Forces Headquarters | Chief of Staff |
| • 2015 | Royal Thai Armed Forces Headquarters | Deputy Chief of Staff |
| • 2014 | Royal Thai Armed Forces Headquarters | Chief of Staff of the Supreme Commander |
| • 2012 | Royal Thai Armed Forces Headquarters | Military commander |

Number of companies currently holding the position of a director

- Listed Company (s) : 1
 - Gunkul Engineering PCL Director (Independent Director)
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Tarakorn Angpubate

- Director (Independent Director)
- Member of the Audit Committee ¹⁾
- Chairman of the Risk Management Committee

Date and month of appointment as Director, Member of the Audit Committee and Member of the Risk Management Committee

- 20th April 2018 (3 years 8 months)/ 14th December 2020 (1 year 1 month)/ 20th November 2019 (2 years 10 months)

Age 57 Years

Educational Qualifications

- MBA, Finance and Marketing, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Bachelor's Degree in Engineering (Computer), Chulalongkorn University

History of Training Programs

- Certificate, Leader Program (Class 24), Capital Market Academy, The Stock Exchange of Thailand
- Certificate, Senior Finance Executive Program in 2014, Institute of Personnel Development in Finance and Accounting, the Comptroller General's Department
- Certificate, Senior Executive Administration Program, Class 5, College of Justice Office of the Administrative Court
- Certificate, National Defense Course (NDC, 55/2012), The National Defence College of Thailand
- Certificate, Corporate Governance for Director and Senior Executive of State Enterprises and Public Organization (Class 9/2012), King Prajadhipok's Institute
- Certificate, Director Certification Program (DCP) 155/2012, Thai Institute of Directors: IOD
- Fast Track MD Program, Managing Director Training Urgent program at McDonald's Singapore Company and Hamburger University, Sydney, Australia

Training in 2021

- Seminar on "Audit Committee Forum No. 44 Preparing for the new reality: Key considerations for Audit Committees"
- Seminar on "Audit Committee Forum No. 46: Sustain Trends and Priority in 2021"

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|------------------------|---|
| • 2020 – Present | Gunkul Engineering PCL | Member of the Audit Committee |
| • 2019 – Present | Gunkul Engineering PCL | Chairman of the Risk Management Committee |

- | | | |
|------------------|------------------------|---|
| • 2018 – Present | Gunkul Engineering PCL | Director (Independent Director) |
| • 2018 – 2019 | Gunkul Engineering PCL | Chairman of the Nomination and Remuneration Committee |

Other Companies / Entities

- | | | |
|------------------|--------------------------------------|-------------------------------------|
| • 2017 – Present | 988 Plus Company Limited | Chief Executive Officer (CEO) |
| • 2019 – 2020 | Thai Agro Exchange Company Limited | Chairman of the Executive Committee |
| • 2018 – 2020 | Thai Agro Exchange Company Limited | Director |
| • 2016 – 2017 | Food Capitals Public Company Limited | Chief Executive Officer (CEO) |
| • 2013 – 2014 | Government Housing Bank | Director |
| • 2012 – 2013 | Islamic Bank of Thailand | Managing Director |
| • 2011 – 2014 | Airports of Thailand PCL | Director |

Number of companies currently holding the position of a director

- | | |
|--------------------------|--|
| • Listed Company (s) : 1 | |
| - Gunkul Engineering PCL | Director (Independent Director) / Member of the Audit Committee/ Chairman of the Risk Management Committee |

- | | |
|--------------------------|------|
| • Non-Listed Company (s) | None |
|--------------------------|------|

Share Holding Percentage as at 31 December 2021

- 900,039 shares, representing 0.0101 percent of the issued and paid-up capital

Relationship between Management

- None

¹⁾ Appointed as Member of the Audit Committee on December 14, 2020.



Mr. Kris Chantanotoke

- Director (Independent Director)

Date and month of appointment as Director

- 6th November 2019 (2 years 2 months)

Age 46 Years

Educational Qualifications

- Master of Business Administration, Assumption University
- Bachelor of Business Administration, Assumption University

History of Training Programs

- Certificate, Thailand Insurance Super Leadership Program, Class 1, OIC Advance Insurance Institute
- Certificate, OIC Advanced Insurance Institute, Class 6, Office of Insurance Commission
- Certificate, Top Executive Program in Commerce and Trade (TEPCoT 7), Commerce Academy
- Certificate, Capital Market Academy Leadership Program (CMA 15), Capital Market Academy
- Certificate, Corporate Governance Program for Entrepreneurs in the Capital Market, Thai Institute of Directors Association (IOD)
- Certificate, Director Certification Program (DCP), Thai Institute of Directors Association (IOD)
- Certificate, Financial Statements for Directors (FSD), Thai Institute of Directors Association (IOD)
- Certificate, Six Sigma Black Belt, General Electric Company

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

- **2019 – Present** Gunkul Engineering PCL Director (Independent Director)

Other Companies / Entities

- **2021 – Present** AIA Thailand Chief Executive Officer
- **2020 – Present** Mc Group PCL Independent Director / Risk Management Committee / Nomination and Remuneration Committee

- | | | |
|-------------------------|---------------------------------|---------------------------------|
| • 2015 – Present | Talis Asset Management Co.,Ltd. | Independent Director |
| • 2017 – 2020 | AIA Thailand | Chief Agency Officer |
| • 2016 – 2017 | Thai Life Insurance PCL | Senior Executive Vice President |
| • 2015 – 2015 | Thai Cardif Life Assurance PCL | Managing Director |
| • 2012 – 2015 | Krungsri Securities PCL | Executive Vice President |
| • 2010 – 2012 | Bank of Ayudhya PCL | Director – Authorized Signatory |

Number of companies currently holding the position of a director

- | | |
|-----------------------------------|---|
| • Listed Company (s) : 2 | |
| - Gunkul Engineering PCL | Director (Independent Director) |
| - Mc Group PCL | Independent Director/
Member of the Risk Management
Committee/Member of the
Nomination and Remuneration
Committee |
| • Non-Listed Company (s) : 1 | |
| - Talis Asset Management Co.,Ltd. | |

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Ms. Sopacha Dhumrongpiyawut

- Director (Authorized Director)
- Chairman of the Executive Committee
- Member the Risk Management Committee

Date and month of appointment as Director, Chairman of the Executive Committee and Member of the Risk Management Committee

- 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months)

Age 55 Years

Educational Qualifications

- Honorary Doctorate Degree in Philosophy Business Administration Program in 2018, Western University
- Bachelor of Nurse in 1989, Srinakharinwirot University

History of Training Programs

- Certificate, Rule of Law for Democracy (RLD), Class 7, College of the Constitutional Court
- Certificate, the National Defence Course, Class 60, National Defence College
- Certificate, Advanced Security Management Program (ASMP), Class 6/2015, The Association National Defence College of Thailand under the Royal Patronage of His Majesty the King
- Certificate, Top Executive Program, Class 18/2014, Capital Market Academy
- Certificate, Director Certification Program (DCP), Class 111/2008, Thai Institute of Director (IOD)
- Certificate, Director Accreditation Program (DAP), Class 70/2008, Thai Institute of Director (IOD)
- Certificate, Managing Finance for Business Owners by Peter Ho
- Certificate, Secrets to Doubling Your Sales, Productivity & Profits
- Effective Senior Manager Course
- Certificate, Role of Chairman Program, Class 21/2009, Thai Institute of Director (IOD)
- Anti-Corruption Training Course

Training in 2021

- New Gen Thai - Chinese Leadership Studies (NTCL), Class 4, Thai - Chinese Leadership Institute - Huachiew Chalermprakiet University (Studying)
- Climate Change Leaders Forum 2021, Class 1, Thailand Greenhouse Gas Management Organization (Public Organization), Ministry of Natural Resources and Environment (Studying)

Awards & Recognitions

Year	List
2021	Receive a Plaque of Honor: Sustainability Rising Star Award “2021 Asia Corporate Excellence & Sustainability Awards” (ACES) by MORS Group
2020	Received a Rating of “Excellent” (5 stars) in the Corporate Governance Report
2019	Received the Outstanding Brand Award from Mr. Chuan Leekpai, President of the National Assembly and former Prime Minister at the “2019 Asia CEO Summit & Award Ceremony”
2018	Received a Plaque for an Outstanding Cooperative Education Establishment in 2018 Certificate for Sponsoring a Charity Music Festival for the Underprivileged, the White Heart Project, Unity Campaign against AIDS
2017	Certificate of the 1st Sponsorship of the Asia International Music Contest ASEAN Distributor Meeting Award, 2017 High Sales Achievement Received an Anti-Corruption Certification Received a Rating of “Excellent” (5 stars) in the Corporate Governance Report
2016	The 2 nd Asia Pacific Entrepreneurship Award in 2016 (APEA) , Outstanding Entrepreneurs Award Outstanding Award Category “Best CEO Award” at the SET Awards 2016, The Stock Exchange of Thailand Rising Stars of Asia-Renewable Energy & Power Award

Year	List
2015	<p>Outstanding Establishment Award for Promotion of Skill Development from the Minister of Labor General Surasak Kanchanarat</p> <p>Outstanding Award Category “Company Performance Awards of the Year 2015” at the SET Awards 2015, The Stock Exchange of Thailand</p> <p>Outstanding Award Category “Best CEO Award” at the SET Awards 2015, The Stock Exchange of Thailand</p>
2014	<p>The Asia Pacific Entrepreneurship Award in 2014 (APEA) in the category of Outstanding Entrepreneurs Award</p> <p>Outstanding Award Category “Investor Relations Awards of the Year 2014” at the SET Awards 2014, the Stock Exchange of Thailand</p> <p>Plaque of Honor for those who have made contributions to the school’s education under the Dusit District Office</p>
2013	<p>CSR-DIW for Beginner Award in 2013 by the Department of Industrial Works, Ministry of Industry</p> <p>Plaque of Honor from H.E. Privy Councilor Plakorn Suwannarat on the occasion of being honored to be Quality Persons of the Year 2014 in the field of “Exemplary Persons in the Energy and Utilities Business Sector”, organized by the Foundation of Science and Technology Council of Thailand (FSTT)</p> <p>Outstanding Award Category “Investor Relations Awards of the Year 2013” at the SET Awards 2013, the Stock Exchange of Thailand</p>

Working Experience during the Past 5 Years

GUNKUL’s Group

2012 – Present	Gunkul Engineering PCL	Chairman of the Executive Committee / Member of the Risk Management Committee
2008 – Present	Gunkul Engineering PCL	Director
2012 – 2020	Gunkul Engineering PCL	Chief Executive Officer
2021 – Present	G.K. Hemp Group Company Limited	Director
2021 – Present	G.K. Smart Farming Company Limited	Director
2021 – Present	G.K. Bio Extraction Company Limited	Director
2021 – Present	Gunkul Wind Power 1 Company Limited	Director
2021 – Present	Gunkul Wind Power 2 Company Limited	Director
2021 – Present	Gunkul Wind Power 3 Company Limited	Director
2021 – Present	Gunkul Wind Power 4 Company Limited	Director
2021 – Present	Gunkul Wind Power 5 Company Limited	Director
2021 – Present	Gunkul Wind Power 8 Company Limited	Director
2021 – Present	Gunkul Wind Power 9 Company Limited	Director
2021 – Present	G.K. Real Estate (2564) Company Limited	Director

2021 – Present	Future Power Construction Company Limited	Director
2021 – Present	K.N.P. Supply Company Limited	Director
2020 – Present	GPD & TEECL Joint Venture Company Limited	Director
2020 – Present	Gunkul Engineering (Myanmar) Company Limited	Director
2019 – Present	Gunkul Infinite Group Company Limited	Director
2019 – Present	GKE and GPD Joint Venture Company Limited	Director
2018 – Present	Future Electrical Control Company Limited	Director
2018 – Present	Solar Energy Society Company Limited	Director
2017 – Present	Gunkul Solar Power Company Limited	Director
2015 – Present	Korat Wind Energy Company Limited	Director
2014 – Present	Gunkul Solar Community Company Limited	Director
2013 – Present	NK Power Sola Company Limited	Director
2013 – Present	Siam Gunkul Solar Energy Company Limited	Director
2013 – Present	WHA Gunkul Green Solar Roof 1 Company Limited	Director
2013 – Present	WHA Gunkul Green Solar Roof 3 Company Limited	Director
2013 – Present	WHA Gunkul Green Solar Roof 6 Company Limited	Director
2013 – Present	WHA Gunkul Green Solar Roof 17 Company Limited	Director
2013 – Present	Gunkul Power Development Company Limited	Director
2013 – Present	Gunkul Training Center Company Limited	Director
2013 – Present	Gunkul Solar Roof 1 Company Limited	Director
2013 – Present	Gunkul Solar Power 1 Company Limited	Director
2013 – Present	Gunkul Solar Power 2 Company Limited	Director
2010 – Present	G-Power Source Company Limited	Director
2008 – Present	G.K. Assembly Company Limited	Director
2000 – Present	G.K. Power Products Company Limited	Director

Other Companies / Entities

2020 – Present	Green Field Energy Company Limited	Director
2017 – Present	Gunkul Group Company Limited	Director
2017 – Present	Group of Great Miracle Asset	Director
2015 – Present	Happy Green 2558 Company Limited	Director
2002 – Present	Gunkul Trading and Agency Company Limited	Director

Number of companies currently holding the position of a director

Listed Company (s) : 1	
- Gunkul Engineering PCL	Director / Chairman of the Executive Committee/ Member of the Risk Management Committee
Non-Listed Company (s) : 53	

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- Spouse of Dr. Gunkul Dhumrongpiyawut



Dr. Somboon Aueatchasai

- Director (Authorized Director)
- Executive Director
- Secretary to the Board of Directors
- Chief Executive Officer (CEO)

Date and month of appointment as Director, Executive Director and Secretary to the Boards of Directors

- 9th June 2010 (11 Years 7 months) / 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months)

Age 52 Years

Educational Qualifications

- Doctor's Degree, Industrial Business Administration, King Mongkut's Institute of Technology Ladkrabang, 2015
- Master Degree in Managerial Accounting, Thammasat University, 1997
- Diploma in Auditing, Thammasat University, 1994
- Bachelor Degree in Accounting, Rajamangala University of Technology Phra Nakhon, 1992
- Certificate Program in International Tax Law, Class 1, Thai Bar Association, 2003

Other Qualifications

- Tax Auditor Registration No. 1, Department of Revenue, Ministry of Finance, 2017
- Accounting and Business Administration Specialist List of State Enterprise Directors 2019 (No. 2) No. 46

History of Training Programs

- Certificate, the National Defence Course, Class 63, National Defence College, National Defence Studies Institute
- Certificate, Senior Justice Executive Course, Class 24/2020, Judicial Training Institute
- Certificate, Thai - Chinese Leadership Studies (TCL), Class 2/2019, Huachiew Chalermprakiet University
- Certificate, Thailand Insurance Leadership Program, Class 8/2019, Office of Insurance Commission
- Certificate, Intermediate Certificate Courses - Good Governance for Medical Executives Class 6/2018 (IGM6), the Medical Council together with King Prajadhipok's Institute
- Certificate, Top Executive Program in Commerce and Trade, Class 10/2017 (TEPCoT 10), University of the Thai Chamber of Commerce
- Anti-Corruption Training Course
- Certificate, Top Executive Program, Class 23/2016, Capital Market Academy, The Stock Exchange of Thailand
- Certificate, Advanced Security Management Program (ASMP), Class 7/2015, The Association National Defense College of Thailand under the Royal Patronage of His Majesty the King
- Certificate, Capital Market Leader Program, Class 1/2014, The Securities and Exchange Commission
- Certificate, Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, Class 17/2013, King Prajadhipok's Institute

- Certificate, Public Economics Management for Executives, Class 10/2012, King Prajadhipok's Institute
- Certificate, Director Certification Program (DCP) Class 139/2011, Thai Institute of Director (IOD)
- Certificate, Director Accreditation Program (DAP) Class 84/2010, Thai Institute of Director (IOD)
- Certificate, Internal Auditing, Class 1, Chulalongkorn University and the Association of Internal Auditors of Thailand Year 2000

Training in 2021

- Certificate, Advanced Audit Committee Program (AACP), Class 42/2021, Thai Institute of Director (IOD)
- Certificate, Advanced Intellectual Property Law (IP Bar 2021), Central Intellectual Property and International Trade Court

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|-------------------------|--------------------------------------|-------------------------|
| • 2021 - Present | Gunkul Engineering PCL | Chief Executive Officer |
| • 2010 - Present | Gunkul Engineering PCL | Director |
| • 2012 - 2021 | Gunkul Engineering PCL | Managing Director |
| • 2021 - Present | Origin Gunkul Energy Company Limited | Director |
| • 2021 - Present | THCG Group Company Limited | Director |
| • 2021 - Present | Thai Stick Herb Company Limited | Director |
| • 2021 - Present | G.K. Smart Farming Company Limited | Director |
| • 2021 - Present | G.K. Hemp Group Company Limited | Director |
| • 2021 - Present | G.K. Bio Extraction Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 1 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 2 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 3 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 4 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 5 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 6 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 7 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 8 Company Limited | Director |

- **2021 – Present** Gunkul Wind Power 9 Company Limited Director
- **2021 – Present** Gunkul Grand Assets Company Limited Director
- **2021 – Present** G.K. Real Estate (2564) Company Limited Director
- **2021 – Present** K.N.P. Supply Company Limited Director
- **2020 – Present** Rangngern Solution Co., Ltd. Director
- **2020 – Present** Gunkul Engineering (Myanmar) Company Limited Director
- **2018 – Present** Future Electrical Control Company Limited Director
- **2018 – Present** Solar Energy Society Company Limited Director
- **2016 – Present** Gunkul Infinite Group Company Limited Director
- **2015 – Present** Outgrow D Company Limited Director
- **2015 – Present** Eco Thai Energy Company Limited Director
- **2015 – Present** Infinite Alternative Energy Company Limited Director
- **2015 – Present** GO Bioenergy Company Limited Director
- **2015 – Present** Korat Wind Energy Company Limited Director
- **2015 – Present** Gunkul Energy Solution and Lighting Company Limited Director
- **2014 – Present** Gunkul Solar Community Company Limited Director
- **2013 – Present** NK Power Sola Company Limited Director
- **2013 – Present** Gunkul Power Development Company Limited Director
- **2013 – Present** Gunkul Training Center Company Limited Director
- **2013 – Present** Gunkul Solar Roof 1 Company Limited Director
- **2012 – Present** Wind Energy Development Company Limited Director
- **2011 – Present** G-Power Source Company Limited Director

Other Companies / Entities

- **2021 – Present** Office of the National Village and Urban Community Fund Qualified Director according to the order of the National Village and Urban Community Fund No. 13/2021
- **2021 – Present** PCL Holding Company Limited Independent Director/ Audit Committee/Chairman of the Nomination and Remuneration Committee/Risk Management Committee/Corporate Governance Committee
- **2021 – Present** Office of the Consumer Protection Board Label Committee according to the order of the Committee Consumer Protection No.3/2021

- **2021 – Present** Office of the National Village and Urban Community Fund Qualified Director / Executive Subcommittee National Village and Urban Community Fund/Subcommittee on Information and Digital Technology / Subcommittee and Member of the Audit Committee according to the order of the National Village and Urban Community Fund No. 4/2021 and 5/2021
- **2020 – Present** Com7 Public Company Limited Independent Director/ Audit Committee and
- **2017 – Present** Federation of Accounting Professions Committee on Taxation Committee / Working group for Transfer Pricing Documentation Guideline
- **2016 – Present** Rajamangala University of Technology Phra Nakhon Qualified Director of the Faculty of Business Administration and a Special Instructor
- **2014 – 2021** Juvenile and Family Court, Prachuap Khiri Khan Province Lay Judge

Work Experience

- **2018 – 2020** Alumni Association of Rajamangala Institute of Technology Phra Nakhon President of the RMUTT Alumni Association
- **2017 – 2020** Tax Auditors Association of Thailand President of the Tax Auditors Association of Thailand
- **2017 – 2020** BDO Richfield Co., Ltd. Senior Auditor Assistant
- **2016 – 2018** National Legislative Assembly Committee Advisor to the Sub Committee on Alternative Energy Education, (1(8)/2016)
- **2015 – 2017** National Reform Steering Assembly Advisor to the Reform Steering Subcommittee Renewable energy and energy conservation
- **2015 – 2017** National Reform Steering Assembly (Mr. Kasidetthanatat Sekkhunthod) Specialist member of the Steering Council
- **2014 – 2015** National Reform Council (Mr. Kasidetthanatat Sekkhunthod) Former specialist member of the Reform Council

• 2014	Senator Mr. Surin Thitipunya	Former Specialist Member of the Senate
• 2004 – 2005	Thai Rung Union Car PCL.	Assist. General Manager Office of Managing Director
• 2000 – 2004	Summit Autoseats Industry Co., Ltd.	Assist. General Manager, Internal Audit
• 1997 – 2000	Siam University	Lecturer of the Faculty of Business Administration
• 1997 – 2000	Siam Accounting Office	Office Partners
• 1995 – 1997	Benjamas Co., Ltd.	Deputy Director of Treasury Department
• 1993 – 1995	Lenso Asia Public Co., Ltd.	Supervisor, Internal Audit
• 1991 – 1993	BDO Richifield Ltd.	Senior Audit Assistant

Special Honor

Year	List
2021	Companion (Fourth Class) of the Most Noble Order of the Crown of Thailand According to the announcement of the Government Gazette, Volume 138, Special Part 3B., Volume 14/16), page 12, dated May 1, 2021. Certification for individual who makes benefit to the university by Rajamangala University of Technology Phra Nakhon
2016	Outstanding Alumni by Rajamangala University of Technology Phra Nakhon
2014	Outstanding Alumni (Ph.D. level) by the College of Administration and Management King Mongkut's Institute of Technology Ladkrabang

Awards from Corporate Management

Year	List
2019	ASEAN Asset Class PLCs Award by ASEAN Capital Markets Forum (ACMF) and the Asian Development Bank (ADB)
2016	Award Category "Investor Relations Awards of the Year 2016" at the SET Awards 2016, the Stock Exchange of Thailand
2015	Awarded the Standard on Prevention and Solution to Drug Problems in an Establishment Department of Labor Protection and Welfare, Ministry of Labor Outstanding Establishment Award for Promotion of Skill Development by the Minister of Labor, Ministry of Labor

Year	List
2015	Outstanding Award Category "Company Performance Awards of the Year 2015" at the SET Award 2015, the Stock Exchange of Thailand
2014	Outstanding Award Category "Investor Relations Awards of the Year 2014" at the SET Awards 2014, the Stock Exchange of Thailand
2013	CSR-DW for Beginner Award 2013 Award by the Department of Industrial Works, Ministry of Industry Outstanding Award Category "Investor Relations Awards of the Year 2013" at the SET Awards 2013, the Stock Exchange of Thailand

Academic Works

1. **Tax Accounting" Book**
Compiled by Dr. Somboon Aueatchasai and Mr. Kittichai Thawornthamrit, 1999
2. **Tax Accounting" Book**
Compiled by Dr. Somboon Aueatchasai and Mr. Kittichai Thawornthamrit, 2001
3. **"ASEAN Biomass Energy a Thai Environmental Impact Analysis by use of a Structural Equation Model (SEM)**, Somboon Aueatchasai and Wanno Fongsuwan (June 23, 2014), Research Journal of Business Management, 8(4): 523-537, 2014 ISSN 1819-1932 /DOI: 10.3923/rjbm. 2014.523.537, <https://docsdrive.com/pdfs/academicjournals/rjbm/2014/523-537.pdf>
4. **Environmental impact factors on Thai Biomass Power Plant: A Structural Equation Model**, Somboon Aueatchasai and Wanno Fongsuwan (October 15, 2014), Research journal of Business Management, 9(1): 124-140, 2015 ISSN 1819-1932 /DOI :10.3923/rjbm. 2015.124.140,
5. **Analysis of Intellectual Property Law and Green Technology Development in Thailand:** Study the case of invention patents, trade secrets and copyrights of computer programs, "Advanced Justice Administration Course", Class 24, College of justice, Institute for Judicial Development, Office of the Court of Justice, B.E. 2563

Number of companies currently holding the position of a director

- Listed Company (s) : 2
 - Gunkul Engineering PCL
Director / Secretary to the Board of Directors / Executive Director/ Chief Executive Officer (CEO)
 - Com7 Public Company Limited
Member of the Audit Committee / Independent Director

- Non-Listed Company (s) 37

Share Holding Percentage as at 31 December 2021

- 33,600,000 shares, representing 0.3783 percent of the issued and paid-up capital
- 3,000,000 shares, representing 0.0338 percent of the issued and paid-up capital (spouse)

Relationship between Management

- None



Ms. Naruechon Dhumrongpiyawut

- Director (Authorized Director)
- Executive Director
- Chief Operating Officer, Strategic Investment and Sustainable Energy Business

Date and month of appointment as Director and Executive Director

- 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months)

Age 38 Years

Educational Qualifications

- Master of Business Administration, Boston University U.S.A.
- Master of Management, Harvard University U.S.A.
- Bachelor of Engineering, Chulalongkorn University

History of Training Programs

- Certificate, New Gen Thai - Chinese Leadership Studies Program (NTCL), Class 1/2019, Huachiew Chalermprakiet University
- Certificate, The Young Executive Program in Energy Literacy for a Sustainable Future Program (YTEA) Class 4, Thailand Energy Academy
- Certificate, Academy of Business Creativity Program (ABC), Class 5, Sripatum University
- Certificate, Executive Program in Industrial Business Development and Investment Program, Class 2, Institute of Business and Industrial Development
- Certificate, CMA-GMS International Program, Class 1, Capital Market Academy of the Stock Exchange of Thailand
- Certificate, Financial Advisor License Year 2013, Investment Banking Club of the Association of Thai Securities Companies
- Certificate, Director Accreditation Program (DAP), Class 70/2008, Thai Institute of Director (IOD)
- Anti-Corruption Training Course

Training in 2021

- Certificate, The Rule of Law for Democracy Program, Class 9, the Constitution Court of the Kingdom of Thailand

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|-------------------------|---|---|
| • 2021 - Present | Gunkul Engineering PCL | Chief Operating Officer, Strategic Investment and Sustainable Energy Business |
| • 2009 - Present | Gunkul Engineering PC | Director / Executive Director |
| • 2016 - 2021 | Gunkul Engineering PC | Assistant Managing Director, Business Development and Strategic Planning |
| • 2021 - Present | Gunkul Wind Power 6 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 7 Company Limited | Director |
| • 2021 - Present | Origin Gunkul Energy Company Limited | Director |
| • 2020 - Present | Gunkul B2B Company Limited | Director |
| • 2020 - Present | Singapore An Yang, Singapore | Director |
| • 2020 - Present | Singapore Yun Yang, Singapore | Director |
| • 2020 - Present | INT Energy, Singapore | Director |
| • 2020 - Present | Gunkul Vietnam Joint Stock Company | Director |
| • 2020 - Present | Tri Viet Tay Ninh Joint Stock Company | Director |
| • 2020 - Present | Bach Khoa A Chau Hoa Binh Joint Stock Company | Director |
| • 2020 - Present | Bach Khoa A Chau Tay Ninh Joint Stock Company | Director |
| • 2020 - Present | Doan Son Thuy Investment Joint Stock Company | Director |
| • 2020 - Present | Tan Chau Nang Luong Joint Stock Company | Director |
| • 2019 - Present | Gunkul Infinite Group Company Limited | Director |
| • 2019 - Present | Future Energy Corporation Company Limited | Director |

- **2018 – Present** Kenyir Gunkul Solar Sdn Bhd. Director
- **2018 - Present** Solar Energy Society Company Limited Director
- **2017 - Present** BMP Solar Company Limited Director
- **2015 - Present** Outgrow D Company Limited Director
- **2015 - Present** Eco Thai Energy Company Limited Director
- **2015 - Present** Infinite Alternative Energy Company Limited Director
- **2015 - Present** Rangngern Solution Company Limited Director
- **2015 - Present** GO Bioenergy Company Limited Director
- **2014 - Present** Gunkul Energy Solution and Lighting Company Limited Director
- **2014 - Present** Gunkul Solar Community Company Limited Director
- **2014 - Present** Greenovation Power Company Limited Director
- **2013 - Present** Gunkul International Investment (Singapore) Pte. Ltd. Director
- **2012 - Present** Wind Energy Development Company Limited Director

Other Companies / Entities

- **2021 – Present** Ngernturbo Company Limited Director/ Audit Committee / Nomination and Remuneration Committee
- **2020 – Present** Green Field Energy Company Limited Director
- **2017 - Present** Great Miracle Asset Group Director
- **2017 - Present** Gunkul Group Company Limited Director
- **2015 - Present** Happy Green 2558 Company Limited Director
- **2004 - Present** Noppakun Company Limited Director

Number of companies currently holding the position of a director

- Listed Company (s) 1
 - Gunkul Engineering PCL Director / Executive Director
- Non-Listed Company (s) 46

Share Holding Percentage as at 31 December 2020

- 431,193 shares, representing 0.0049 percent of the issued and paid-up capital

Relationship between Management

- Daughter of Dr. Gunkul Dhumrongpiyawut



Mrs. Areewan Chaloeindan

- Director (Authorized Director)
- Executive Director
- Chief Operating Officer, High Voltage Equipment Business

Date and month of appointment as Director and Executive Director

- 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months)

Age 52 Years

Educational Qualifications

- Master of Industrial Business Administration, King Mongkut's University of Technology North Bangkok
- Bachelor of Accounting, Dhurakij Bundit University

History of Training Programs

- Certificate, Budget Management for Senior Executives, Class 6/2019, The Bureau of the Budget
- Certificate, Leadership Succession Program (LSP), Class 9, Institute of Research & Development for Public Enterprises
- Certificate, Public Administration Economy for Executives Course, Class 15, King Prajadhipok's Institute
- Certificate, Implementation of Sufficiency Economy, Ministry of Industry, TIS 99
- Certificate, Superior Executive Program for Advanced Management Gen. 1 Rajamangala University of Technology Phra Nakhon
- Certificate, Pioneering Leadership Training Program, Canaan Farmers School, Korea
- Certificate, Director Accreditation Program (DAP), Class 70/2008, Thai Institute of Director (IOD)
- Effective Senior Manager Course
- Anti-Corruption Training Course

Training in 2021

- Fiscal Management Program, Advanced Government, Class 8/2021, Comptroller General's Department

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|-------------------------------------|--|
| • 2021 - Present | Gunkul Engineering PCL | Chief Operating Officer, High Voltage Equipment Business |
| • 2009 - Present | Gunkul Engineering PCL | Director / Executive Director |
| • 2019 - 2021 | Gunkul Engineering PCL | Assistant Managing Director, Production and Distribution of Electrical Equipment |
| • 2010 - 2019 | Gunkul Engineering PCL | Senior Vice President, Factory |
| • 2021 - Present | Gunkul Wind Power 6 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 7 Company Limited | Director |
| • 2021 - Present | K.N.P. Supply Company Limited | Director |
| • 2009 - Present | G.K. Power Products Company Limited | Director |
| • 2009 - Present | G.K. Assembly Company Limited | Director |

Number of companies currently holding the position of a director

- Listed Company (s) 1
 - Gunkul Engineering PCL Director / Executive Director
- Non-Listed Company (s) 5

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Chaloepon Sricharoen

- Director (Authorized Director)
- Executive Director
- Vice President, Sales and Marketing

Date and month of appointment as Director and Executive Director

- 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months)

Age 52 Years

Educational Qualifications

- Bachelor of Arts, Ramkhamhaeng University

History of Training Programs

- Certificate, Rule of Law for Democracy, Class 8, College of the Constitutional Court
- Certificate, Good Governance for Medical Executives(GME), Class 9, the Medical Council together with King Prajadhipok's Institute
- Basic legal and contract courses for using in work and daily life
- Certificate, Advanced Security Management Program (ASMP) Class 10/2019 The Association National Defence College
- Certificate, Leadership Succession Program (LPS), Class 8, The Institute of Research and Development for Public Enterprises (IRDPE)
- Certificate, Advanced Certificate Course in Public Administration and Law for Executives, Class15 King Prajadhipok's Institute
- Cautions for Directors to Prevent Legal Risks, Responsibility of Directors according to Civil and Criminal Law, SET and SEC
- Certificate, Advanced Security Management Program (ASMP), Class 10 The Association National Defense College
- Certificate, Public Economics Management for Executives, Class 12/2014, King Prajadhipok's Institute
- Certificate, Director Accreditation Program (DAP), Class 70/2008, Thai Institute of Director (IOD)
- Effective Senior Manager
- Anti-Corruption Training Course
- Certificate, Managing Finance for Business Owners by Peter Ho

Training in 2021

- Seminar on "The Royal Decree on Interest Rate Modification for the 1st time in 95 years"
- Seminar on "Know it before you make a mistake, the Computer Crime Act in the COVID-19 Era and IT Policy Update"
- Seminar on "Guidelines and Considerations on Common Problems in Construction Contractors"
- Seminar on "People adapt, World change, escape from disruptive with innovative organizations"

Working Experience during the Past 5 Years

GUNKUL's Group

• 2014 - Present	Gunkul Engineering PCL	Vice President, Sales and Marketing
• 2009 - Present	Gunkul Engineering PCL	Director / Executive Director
• 2021 - Present	G.K. Assembly Company Limited	Director
• 2021 - Present	G.K. Power Products Company Limited	Director
• 2010 - Present	K.N.P. Supply Company Limited	Director

Number of companies currently holding the position of a director

- Listed Company (s) 1
 - Gunkul Engineering PCL Director / Executive Director
- Non-Listed Company (s) 3

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- Brother of Ms. Sopacha Dhumrongpiyawut



Mr. Somchai Trairattanapirom

- Chairman of the Good Corporate Governance Committee (Independent Director) ¹⁾
- Member of the Risk Management Committee (Independent Director)

Date and month of appointment as Member of the Good Corporate Governance Committee and Member of Risk Management Committee

- 25th February 2013 (8 Years 10 months) / 22th June 2015 (6 Years 6 months)

Age 61 Years

Educational Qualifications

- Doctor's Degree, Faculty of Monetary Economics, Gobe University, Japan (Governing Japanese Scholarship)
- Master Degree, Faculty of Economics (International Finance and Banking), Thammasart University
- Bachelor Degree, Faculty of Economics (Finance, Banking, Marketing), Thammasart University

History of Training Programs

- Certificate, Digital Transformation Course, Institute of Research and Development for Public Enterprises (IRDP)
- Certificate, Advanced Certificate Course in Public Administration and Public Law (PorRorMor), Class 4
- Certificate, the Program on Management of Technology, the Association for Overseas Technical Scholarship (Scholarship AOTS), Japan
- Certificate, Director Certification Program (DCP), Class 118/2552, Thai Institute of Director (IOD)
- Certificate, Corporate Governance Public Sufficiency Management for Executive, Advanced Course, Class 1, the Office of the Public Sector Development Commission
- Certificate, Digital Marketing Course, Institute of Research and Development for Public Enterprises (IRDP)

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|------------------------|---|
| • 2020 – Present | Gunkul Engineering PCL | Chairman of the Good Corporate Governance Committee |
| • 2015 - Present | Gunkul Engineering PCL | Member of the Risk Management Committee |
| • 2013 - 2020 | Gunkul Engineering PCL | Member of the Good Corporate Governance Committee |

Other Companies / Entities

- | | | |
|------------------|--|--|
| • 2021 - Present | Institute of Research and Development for Public Enterprises (IRDP) | Expert in Evaluation Course Director, CEO-Leadership Succession Program (LSP) |
| • 2012 - Present | Thai Health Promotion Foundation | Sub-Committee, Appraisal of Good Corporate Governance |
| • 2013 - 2020 | Institute of Research and Development for Public Enterprises (IRDP) | Deputy Managing Director |
| • 2012 - 2013 | Enterprises State Enterprise Policy Office Ministry of Finance | Advisor, Performance Controlling along with Appraisal System in quality of State |
| • 2011 - 2012 | International Institute for Trade and Development (Public Organization) | Advisor, Competency Development in KPI and Appraisal Determination |
| • 2011 - 2012 | National Innovation Agency (Public Organization) | Advisor in Risk Management and Internal Audit |
| • 2011 - 2012 | Public Debt Management Office Ministry of Finance | Advisor, Follow-up and Project Appraisal - Development Policy Loan 2012, Area 4 North-East of Thailand |
| • 2010 - 2012 | The Institute for the Promotion of Teaching Science and Technology | Advisory, Risk Management and Internal Audit |
| • 2010 - 2012 | Technology Development Agency (Public Organization) | Advisory, Follow-up and Performance Appraisal of GISTDA Informatics and Space |
| • 2010 - 2011 | Office of The National Broadcasting and Telecommunications Commission (NBTC) | Team Leader, Performance Appraisal of the Nation Telecommunications Commission, 2012 – 2011 |

• 2010 - 2011	Petroleum Institute of Thailand (PTIP) Energy Policy and Planning office, Ministry of Energy	Advisory, Cost Analysis and NGV Price Determination
• 2009	Agricultural Research Development Agency (ARDA), Ministry of Public Health	Advisor, Competency Appraisal of Personal of Development Individual
• 2009 - 2012	Office of the Attorney General	Advisor, Project of Certificate Issuing and Annual Performance Appraisal for Governor
• 2008 - 2012	Comptroller General's Department (CGD)	Advisory, Performance Appraisal in Working Capital Budget
• 2008 - 2012	Ministry of Energy	Advisory, Performance Appraisal of Ministry of Energy
• 2008 - 2012	Tris Corporation Company Limited (TRIS)	Deputy Managing Director
• 2007 - 2012	The Stock Exchange of Thailand	Advisory, SET Award Project
• 2007 - 2011	Office of the National Anti-Corruption Commission	Subcommittee on Negotiating Agreements and Evaluation of the Annual Official Practice Certification
• 2007 - 2011	Office of the National Anti-Corruption Commission	Advisor to organize the Capacity Building Seminar
• 2007 - 2011	Office of the National Anti-Corruption Commission	Project Advisor to improve the assessme of efficiency and effectiveness
• 2003 - 2012	Office of the Public Sector Development Commission	Chief of the consulting team for the preparation of government official / provincial / public organization certification
• 2000 - 2012	The Institute for the Promotion of Teaching Science and Technology	Team Leader, Performance Evaluation Advisor
• 2000 - 2005	SEC and SET	Advisor to the Corporate Governance Rating Program
• 1999 - 2008	Tris Corporation Company Limited (TRIS)	Senior Vice President
• 1998 - 2020	State Enterprise Policy Office Ministry of Finance	Team Leader/Specialist/Advisor Performance Appraisal of State Enterprises

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- • None

¹⁾ Appointed as Chairman of the Good Corporate Governance Committee on December 14, 2020.



Pol.Maj.Gen. Visit Sukarasep

- Chairman of the Nomination and Remuneration Committee (Independent Director)

Date and month of appointment as Member of the Nomination and Remuneration Committee

- 20th February 2019 (2 years 10 months)

Age 66 Years

Educational Qualifications

- Bachelor Degree in Public Administration, Royal Police Cadet Academy

History of Training Programs

- Certificate, Management for High Rank Police Course, Class 28
- Certificate, Superintendent Course, Class 31
- Certificate, Nomination Committee Best Practice Guideline
- Certificate, Director Accreditation Program (DAP), Class 78/2009, Thai Institute of Director (IOD)

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

2019 - Present	Gunkul Engineering PCL	Chairman of the Nomination and Remuneration Committee
2012 - 2018	Gunkul Engineering PCL	Chairman of the Nomination and Remuneration Committee
2009 - 2018	Gunkul Engineering PCL	Member of the Audit Committee
2009 - 2018	Gunkul Engineering PCL	Director (Independent Director)

Other Companies / Entities

2014 - 2015	Chumphon Provincial Police Station	Commander
2013 - 2014	Ranong Provincial Police Station	Commander
2012 - 2013	Royal Thai Police	Commander Administrative and Civil Affair Division
2006 - 2012	Royal Thai Police	Deputy Commander Administrative and Civil Affair Division
2005 - 2006	Royal Thai Police	Superintendent Administrative and Civil Affair Division
2000 - 2005	Royal Thai Police	Superintendent (Disciplinary Development) Disciplinary Division
1998 - 2000	Royal Thai Police	Deputy Superintendent (Penalty Solicitor)
1992 - 1994	Nongyasai District Provincial Police Station, Suphanburi Province	Chief of Police

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Decha Chooligorn

- Member of the Nomination and Remuneration Committee (Independent Director)

Date and month of appointment as Member of the Nomination and Remuneration Committee

- 9th November 2012 (9 Years 2 months)

Age 59 Years

Educational Qualifications

- MBA Marketing and Finance, Case Western Reserve University, USA Year 1988
- Bachelor Degree of Economics, Thammasat University

History of Training Programs

- Certificate, Director Certification Program (DCP), Class 26/2003, Thai Institute of Director (IOD)
- Certificate, Secrets to Doubling Your Sales, Productivity & Profits Course
- Certificate, Key to Success in Organization Redesign Course
- Certificate, Effective Managers Program
- Certificate, Project Finance Course
- Certificate, Nomination Committee Best Practice Guideline Course

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|------------------------|---|
| • 2012 - Present | Gunkul Engineering PCL | Member of the Nomination and Remuneration Committee |
|------------------|------------------------|---|

Other Companies / Entities

- | | | |
|------------------|--|-----------------------------|
| • 2012 - Present | Diamond Security Guard Co., Ltd. | Director |
| • 2005 - Present | Integrated Management Consultant Co., Ltd. | Director/ Managing Director |
| • 2003 - 2005 | Thai Rung Union Car PCL | Assistant Managing Director |
| • 2001- 2003 | Advance Power Supply PCL | Deputy Managing Director |

Number of companies currently holding the position of a director

- | | |
|--------------------------|------|
| • Listed Company (s) | None |
| • Non-Listed Company (s) | 2 |

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Hathai Uthai

- Member of the Nomination and Remuneration Committee (Independent Director)

Date and month of appointment as Member of the Nomination and Remuneration Committee

- 12th November 2015 (6 Years 2 months)

Age 67 Years

Educational Qualifications

- Management of Public and Private Program, National Institute of Development Administration
- Bachelor of Engineering (Mechanical), Khonkaen University
- Bachelor of Laws, Thammasat University

History of Training Programs

- Certificate, Nomination Committee Best Practice Guideline Course

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|-------------------------|------------------------|---|
| • 2015 - Present | Gunkul Engineering PCL | Member of the Nomination and Remuneration Committee |
|-------------------------|------------------------|---|

Other Companies / Entities

- | | | |
|-------------------------|---|--|
| • 2021 – Present | Thai Industrial Standards Committee (TISC) | Advisory Committee |
| • 2021 – Present | Thailand Automotive Institute | Chairman |
| • 2021 – Present | Foundation for Industrial Development | Director |
| • 2021 – Present | Institute of Small and Medium Enterprises Development (ISMED) | Director |
| • 2020 – Present | The Foundation for Thailand Productivity Institute | Director |
| • 2019 - Present | Ministry of Industry | Advisor to the Permanent Secretary, Ministry of Industry |

- | | | |
|-------------------------|--|---|
| • 2019 - Present | Ministry of Industry | Audit and Evaluation Committee |
| • 2017 - Present | General Subcommittee, Ministry of Industry | Expertise in Administration and Management |
| • 2014 - 2015 | Thai Industrial Standards Institute | Secretary-General |
| • 2013 - 2014 | Ministry of Industry | Inspector-General |
| • 2012 - 2013 | Ministry of Industry | Deputy Director of the Office of Industrial Economics |
| • 2008 - 2012 | Ministry of Industry | Deputy Secretary General, Thai Industrial Standards Institute |

Number of companies currently holding the position of a director

- | | |
|--------------------------|------|
| • Listed Company (s) | None |
| • Non-Listed Company (s) | None |

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Pongtep Thithapand

- Member of the Good Corporate Governance Committee (Independent Director)

Date and month of appointment as Member of the Good Corporate Governance Committee

- 25th February 2013 (8 Years 10 months)

Age 63 Years

Educational Qualifications

- Master Degree of Public Administration, National Institute of Development Administration (NIDA)
- Bachelor Degree of Laws, Ramkhamhaeng University

History of Training Programs

- Certificate, Capital Market Academy Leadership Program 2017, Capital Market Academy
- Certificate, Senior Justice Executive Course, Class 21/2017
- Certificate, Senior Budget Administrator, Class 3/2016, Bureau of the Budget
- Certificate, "LEADERSHIP", RIPA International, London, England, 2012
- Certificate, Degree in N.D.C., Class 54/2011, National Defense College
- Certificate, Advanced Certificate Course in Public Administration and Public Law for Executives, Class 8/2009, King Prajadhipok's Institute
- Directors Certification Program (DCP), Class 125/2009, Thai Institute of Director (IOD)
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, Class 6/2008, King Prajadhipok's Institute
- MOF Executive Program, Ministry of Finance, 2005

Training in 2021

- None

Working Experience during the Past 5 Years

GUNKUL's Group

- **2013 - Present** Gunkul Engineering PCL Member of the Good Corporate Governance Committee

Other Companies / Entities

- | | | |
|-------------------------|--|--|
| • 2022 – Present | Sahacogen (Chonburi) Co., Ltd. | Director and Member of the Audit Committee |
| • 2015 - Present | DOD Biotech Public Co., Ltd. | Director and Member of the Audit Committee |
| • 2019 - 2020 | PTT Natural Gas Distribution Co., Ltd. | Director |
| • 2014 - 2017 | Totel Industrial Services Co., Ltd. | Director |
| • 2010 - 2015 | PTT LNG Co., Ltd. | Director |

Number of companies currently holding the position of a director

- Listed Company (s) 1
 - DOD Biotech Public Company Limited ¹⁾ Director and Member of the Audit Committee

- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None

¹⁾ Count only listed companies that have served as directors in 2021.



Dr. Phongsakorn Damnoen

- Chief Operating Officer, Energy and Cannabis Business

Age 44 Years

Educational Qualifications

- Ph.D. in Renewable Energy, Naresuan University
- Master Degree in Electrical Engineering, Hannover University, Germany
- Bachelor Degree (Eng.) in Telecommunication, Rajamangala University of Technology

History of Training Programs

- Certificate, Thai - Chinese Leadership Studies (TCL), Class 3/2019, Huachiew Chalermprakiet University
- Certificate, Top Executive Program in Commerce and Trade (TEPCoT). Class 12, University of the Thai Chamber of Commerce
- Certificate, Ultra Wealth (UW), Class 4, The Ultra Wealth Group Company Limited
- Certificate, Senior Executives in Industrial Business Development and Investment, Class 4/2017, Institute of Business and Industrial Development
- Certificate, Leadership Succession Program (LSP), Class 6/2016, Institute of Research and Development for Public Enterprises (IRDPP)
- Certificate, Director Certification Program (DCP), Class 149/2011, Thai Institute of Director (IOD)
- Anti-Corruption Training Course

Training in 2021

- Certificate, Environmental Governance for Executive Officer Program, Class 8, Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment in collaboration with Chulalongkorn University

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|--------------------------------------|---|
| • 2021 - Present | Gunkul Engineering PCL | Chief Operating Officer, Energy and Cannabis Business |
| • 2016 - 2020 | Gunkul Engineering PCL | Deputy Managing Director, Business Development & Strategic Planning |
| • 2021 - Present | Origin Gunkul Energy Company Limited | Director |
| • 2021 - Present | THCG Group Company Limited | Director |
| • 2021 - Present | Thai Stick Herb Company Limited | Director |
| • 2021 - Present | G.K. Smart Farming Company Limited | Director |
| • 2021 - Present | G.K. Hemp Group Company Limited | Director |
| • 2021 - Present | G.K. Bio Extraction Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 1 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 2 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 3 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 4 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 5 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 6 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 7 Company Limited | Director |
| • 2021 - Present | Gunkul Wind Power 8 Company Limited | Director |

• 2021 – Present	Gunkul Wind Power 9 Company Limited	Director
• 2021 – Present	Gunkul B2B Company Limited	Director
• 2020 – Present	Gunkul Vietnam Joint Stock Company	Director
• 2020 – Present	Tri Viet Tay Ninh Joint Stock Company	Director
• 2020 – Present	Bach Khoa A Chau Hoa Binh Joint Stock Company	Director
• 2020 – Present	Bach Khoa A Chau Tay Ninh Joint Stock Company	Director
• 2020 – Present	Doan Son Thuy Investment Joint Stock Company	Director
• 2020 – Present	Tan Chau Nang Luong Joint Stock Company	Director
• 2020 – Present	Gunkul Engineering (Myanmar) Company Limited	Director
• 2020 – Present	Gunkul Solar Power 2 Company Limited	Director
• 2020 – Present	Infinite Alternative Energy Company Limited	Director
• 2019 – Present	GKE & GPD Joint Venture Co., Ltd.	Director
• 2018 – Present	Solar Energy Society Co., Ltd.	Director
• 2018 – Present	Kenyir Gunkul Solar Sdn Bhd.	Director
• 2017 – Present	BMP Solar Co., Ltd.	Director
• 2017 – Present	Gunkul Solar Power Co., Ltd.	Director
• 2016 – Present	Gunkul Infinite Group Co., Ltd.	Director
• 2015 – Present	ECO Thai Energy Co., Ltd.	Director
• 2015 – Present	Rangngern Solution Co., Ltd.	Director
• 2015 – Present	GO Bio Energy Co., Ltd.	Director
• 2015 – Present	Gunkul Solar Power 1 Co., Ltd.	Director
• 2015 – Present	Bright Green Power Co., Ltd.	Director
• 2015 – Present	Korat Wind Energy Co., Ltd.	Director
• 2015 – Present	Outgrow D Co., Ltd.	Director
• 2014 – Present	Greenovation Power Co., Ltd.	Director
• 2013 – Present	Siam Gunkul Solar Energy Co., Ltd.	Director
• 2013 – Present	NK Power Sola Co., Ltd.	Director
• 2012 – Present	Wind Energy Development Co., Ltd.	Director
• 2009 – Present	Gunkul Chubu Powergen Co., Ltd.	Director

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) 43

Share Holding Percentage as at 31 December 2021

- 38,174,073 shares, representing 0.4298 percent of the issued and paid-up capital
- 336,000 shares, representing 0.0038 percent of the issued and paid-up capital (spouse)

Relationship between Management

- None



Mr. Chaisiri Wattanacharnnarong

- Chief Operating Officer, Engineering and Turnkey Business

Age 46 Years

Educational Qualifications

- Master Degree of Engineer, Construction Engineering and Management King Mongkut's University of Technology Thonburi
- Bachelor Degree of Engineer, Civil Engineering, Srinakharinwirot University
- Civil Engineering Professional License, Associate Engineering

History of Training Programs

- Certificate, Director Accreditation Program, Class 159/2019, Thai Institute of Directors (IOD)
- Certificate, Leadership Succession Program (LSP), Class 10, Institute of Research and Development for Public Enterprises
- Certificate, Public Administration and Law for Executives Program, Class 19, King Prajadhipok's Institute
- Certificate, the Metropolitan Development Training Course for Top Executive, Class 8/2020, Institute of Metropolitan Development, Navamindradhiraj University
- Certificate, Public Economics Management for Executives, Class 19/2020, King Prajadhipok's Institute

Training in 2021

- Seminar on "People adapt, World change, escape from disruptive with innovative organizations"

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|-------------------------------------|--|
| • 2021 - Present | Gunkul Engineering PCL | Chief Operating Officer, Engineering and Turnkey |
| • 2018 - 2021 | Gunkul Engineering PCL | Assistant Managing Director, Project Construction Management |
| • 2017 - 2018 | Gunkul Engineering PCL | Senior Vice President, Project Construction Management |
| • 2021 - Present | Gunkul Power Development Co., Ltd. | Director |
| • 2021 - Present | Future Power Construction Co., Ltd. | Director |
| • 2020 - Present | GPD & TEECL Joint Venture Co., Ltd. | Director |
| • 2013 - Present | Future Electrical Control Co., Ltd. | Director |

Number of companies currently holding the position of a director

- | | |
|--------------------------|------|
| • Listed Company (s) | None |
| • Non-Listed Company (s) | 4 |

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Thitipong Techaratanayuenyong

- Member of the Risk Management Committee
- Secretary to the Risk Management Committee
- Chief Financial Officer (CFO)
- Head of Investor Relations

Date and month of appointment as Member and Secretary to the Risk Management Committee

- 12th November 2014 (7 Years 2 months) / 12th November 2014 (7 Years 2 months)

Age 46 Years

Educational Qualifications

- Master Degree of Business Administration (MBA), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Bachelor Degree of Economics (Major in International Economics), Chulalongkorn University
- Bachelor Degree of Engineering (Major in Civil & Environmental Engineering), Chulalongkorn University

History of Training Programs

- Certificate, Public Economic Management for High Executives Program” by King Prajadhipok’s Institute, Class 18
- Certificate, Strategic CFO in Capital Markets Program by Stock Exchange of Thailand, Class 1
- Business Leader Program by Dr. Noel M. Tichy from University of Michigan (Ross School of Business)
- International Financial Reporting Standards (IFRS) No.9
- International Financial Reporting Standards (IFRS) No.15-16
- Good & Smart Team Management Program
- Bond Regulatory Updates 2018-19 by ThaiBMA
- Supervision Psychology and Job Coaching Course
- Global Business Leader Development Course
- Building Relationships and Team Leading Course
- Sustainable Teamwork Curriculum Course
- Anti-Corruption Training Course

Training in 2021

- TLCA CFO Professional Development Program (TLCA CFO CPD), Thai Listed Companies Association (8 Hours)
- Seminar on “Agricultural Accounting Standards” by KPMG Phoomchai
- Seminar on “People adapt, World change, escape from disruptive with innovative organizations”
- Seminar on “CFO as a Business Partner to CEO”, Federation of Accounting Professions under The Royal Patronage of His Majesty the King

Working Experience during the Past 5 Years

GUNKUL’s Group

- | | | |
|-------------------------|---------------------------------|---|
| • 2021 - Present | Gunkul Engineering PCL | Chief Financial Officer (CFO) /
Head of Investor Relations |
| • 2014 - Present | Gunkul Engineering PCL | Member of the Risk Management Committee/
Secretary to the Risk Management Committee |
| • 2020 – 2021 | Gunkul Engineering PCL | Senior Vice President, Finance & Corporate
Strategic Management |
| • 2014 - 2019 | Gunkul Engineering PCL | Senior Vice President, Financial Management
and Controlling Foreign Affairs /
Chief Financial Officer |
| • 2021 – Present | Gunkul Chubu Powergen Co., Ltd. | Director |

Other Companies / Entities

- | | | |
|----------------------|----------------------------|--|
| • 2008 - 2013 | Charoen Pokphand Foods PCL | Assistant Vice President,
Office of Chief Financial Officer |
|----------------------|----------------------------|--|

Number of companies currently holding the position of a director

- | | |
|--------------------------|------|
| • Listed Company (s) | None |
| • Non-Listed Company (s) | 1 |

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Theerapab Punyasakhon

- Chief Operating Officer, Business Support

Age 48 Years

Educational Qualifications

- LLM, 1999, University of Illinois at Urbana-Champaign
- LLB, 1995, Thammasat University
- Member of the Thai Bar Association
- Lawyer's license, Lawyers Council of Thailand

History of Training Programs

- Exclusive Talk with Singapore International Arbitration Centre Course (SIAC)
- Thailand HR Day 2020 Course (Online)

Training History

- Seminar on “Leadership Succession Program” (LSP), Class 12
- Seminar on “Construction Contract Management”
- Survey Seminar on “Secondary Law Draft Project under the Personal Data Protection Act B.E. 2562”
- Seminar on “People adapt, World change, escape from disruptive with innovative organizations”
- Seminar on “ A new dimension in securities analysis by focusing on sustainability through One-report ”

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|-----------------------------------|--|
| • 2021 - Present | Gunkul Engineering PCL | Chief Operating Officer, Business Support |
| • 2019 - 2021 | Gunkul Engineering PCL | Assistant Managing Director, Office of Managing Director |
| • 2021 - Present | Gunkul Grand Assets Co., Ltd. | Director |
| • 2021 - Present | G.K. Real Estate (2564) Co., Ltd. | Director |
| • 2021 - Present | Kenyir Gunkul Solar Sdn Bhd. | Director |
| • 2019 - Present | Gunkul Infinite Group Co., Ltd. | Director |

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) 4

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mrs. Somluk Kanuenghet

- Member of the Nomination and Remuneration Committee
- Secretary to the Nomination and Remuneration Committee
- Senior Vice President, Human Resources

Date and month of appointment as Member and Secretary to the Nomination and Remuneration Committee

- 10th August 2009 (12 Years 5 months) / 10th August 2009 (12 Years 5 months)

Age 56 Years

Educational Qualifications

- Bachelor Degree of Arts, Srinakharinwirot University

History of Training Programs

- TDPG 2.0 Practical Project of Personal Data Protection Course, Class 3
- Thailand HR Day 2020 Course (Physical)
- Fundamentals of Business Sustainability Course, Class 2
- Capital Market Research Forum Course No. 5/2019
- Business Management Program for Sustainable Development in 2019
- Sustainability Reporting Workshop : GRI Standards Course
- Business and Human Rights Course
- Employee Benefits Assessment Program in accordance with Accounting Standard No. 19
- Effective Senior Manager Course
- Performance Appraisal by Balance Scored Card Course
- Career Planning & Development & Succession Planning Course
- Salary Administration for Line Manager Course
- Effective Techniques for Job Analysis & Job Description Course
- Effective Techniques for Job Evaluation & Salary Survey Course
- Nomination Committee Best Practice Guideline Course
- Anti-Corruption Training Course

Training in 2021

- Seminar on “The 9 Essential Skill for People Management”
- Seminar on “Construction Contract Management”
- Seminar on “The Royal Decree on Interest Rate Modification for the 1st time in 95 years”
- Seminar on “Guidelines and considerations on common problems in construction work”
- Seminar on “What is the process for selecting directors according to CG principles?”
- Seminar on “A new dimension in securities analysis by focusing on sustainability through One-report”
- Seminar on “People adapt, World change, escape from disruptive with innovative organizations”
- Seminar on “One report, Environment disclosure requirement: Greenhouse Gas Reporting & Disclosure”

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|------------------|----------------------------------|--|
| • 2010 - Present | Gunkul Engineering PCL | Senior Vice President, Human Resources |
| • 2009 - Present | Gunkul Engineering PCL | Member of the Nomination and Remuneration Committee |
| • 2009 - Present | Gunkul Engineering PCL | Secretary to the Nomination and Remuneration Committee |
| • 2021 - Present | Gunkul Grand Assets Co., Ltd. | Director |
| • 2017 - Present | Gunkul Training Center Co., Ltd. | Director |
| • 2010 - Present | G.K. Power Product Co., Ltd. | Director |
| • 2010 - Present | G.K. Assembly Co., Ltd | Director |

Number of companies currently holding the position of a director

- | | |
|--------------------------|------|
| • Listed Company (s) | None |
| • Non-Listed Company (s) | 4 |

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mrs. Nattawan Wongchan

- Senior Vice President, Business Support (Finance, Information Technology)

Age 53 Years

Educational Qualifications

- Master Degree of Business Administration, Kasetsart University
- Bachelor Degree of Finance and Banking, Major in Finance Ramkhamhaeng University
- Diploma Program in Taxation, University of the Thai Chamber of Commerce

History of Training Programs

- Anti-Corruption Training Course

Training in 2021

- Seminar on “Guaranteed” an important thing to know
- Seminar on “People adapt, World change, escape from disruptive with innovative organizations”

Working Experience during the Past 5 Years

GUNKUL’s Group

- | | | |
|-------------------------|------------------------|--|
| • 2021 – Present | Gunkul Engineering PCL | Senior Vice President, Business Support, (Finance, Information Technology) |
| • 2016 – 2021 | Gunkul Engineering PCL | Senior Vice President, Business Support, (Finance, Information Technology, Property) |
| • 2014 - 2016 | Gunkul Engineering PCL | Assistant Vice President, Business Support |

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Ms. Suttirat Tangnorakul

- Senior Vice President, Accounting
- Accounting Supervisor

Age 48 Years

Educational Qualifications

- Master Degree of Business Administration, Major in Accounting, Ramkhamhaeng University
- Bachelor Degree of Business Administration, Major in Accounting, Ramkhamhaeng University

History of Training Programs

- The financial reporting standard no. 9, 13, 15, 16 and a conceptual framework for financial reports (new) Course
- Tax Law Update 2019 Course
- Follow up to the financial reporting standard no. 15 Course (Revenue from Contracts with Customers)
- Negotiate Like PRO Course
- Transfer Pricing 2019 Course, transfer pricing between related companies
- Tax Advisor Region 1 Course, Revenue Code, Gen. 5 (2018)
- Mini MBA I Taxation Course (Major in General Business), School of Tax
- Financial Model 1 - Fundamentals of Finance Course, Class 2
- Modern Accountants Program Class 13, Faculty of Commerce and Accountancy, Chulalongkorn University
- Specialist Tax Law Practice Course 2015
- Anti-Corruption Training Course
- Tax Advisor Project Course, Class 5

Training in 2021

- CFO's Orientation Course for New IPOs, Class 5
- Seminar on "Guaranteed" an important thing to know
- Seminar on "Prevent risks with construction project insurance and property insurance"
- Seminar on "C.A.R. & I.A.R : Constructor's All Risk Insurance and Industrial All Risk"
- Seminar on "The Royal Decree on Interest Rate Modification for the 1st time in 95 years"
- Seminar on "Accounting for Agricultural Activity" No. 41 (TAS 41)

- Seminar on "Update the Revenue Code, the Revenue Department, which has been promulgated in the year 2021"
- Seminar on "Update Accounting Standard Year 2021"
- Seminar on "People adapt, World change, escape from disruptive with innovative organizations"

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|-------------------------|----------------------------------|---|
| • 2021 – Present | Gunkul Engineering PCL | Senior Vice President, Accounting / Accounting Supervisor |
| • 2019 – 2021 | Gunkul Engineering PCL | Senior Vice President, Business Support (Accounting) |
| • 2016 – 2017 | Gunkul Engineering PCL | Assistant Vice President, Business Support (Accounting) |
| • 2017 – Present | Gunkul Training Center Co., Ltd. | Director |

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) 1

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Ms. Chantra Jongjamareeseethong

- Company Secretary
- Secretary to the Good Corporate Governance Committee
- Senior Vice President, Office of CEO

Date and month of appointment as Company Secretary and Secretary to the Good Corporate Governance Committee

- 10th August 2009 (12 Years 5 months) / 25th February 2013 (8 Years 10 months)

Age 58 Years

Educational Qualifications

- Master Degree of Business Administration, Major in Accounting, Ramkhamhaeng University
- Bachelor Degree of Business Administration, Major in Accounting, Siam University
- Bachelor Degree of Arts, Major in Linguistics, Thammasart University

History of Training Programs

- CG Coaching Course
- The difference that the Revenue Department often examines between PND 50 vs Phor Por, Clause 65 Twi, Clause 65 Tri Course
- Follow up to the financial reporting standard no. 15 (Revenue from Contracts with Customers)
- Leadership and Coaching Skills Course, Class 1
- Corporate Culture Program
- Driving Effective Cultural Course, Class 2
- Senior Executive Program and Organizational Change Course
- Negotiate Like PRO Course
- Withholding Tax and Update Tax Law 2019 Course
- Accounting for Financial Instruments Course
- The Updated Land and Buildings Tax Act Course
- Certificate, Company Secretary Program, Class 28/2008, Thai Institute of Director (IOD)
- Certificate, Effective Minute Taking (EMT), Class 12/2008, Thai Institute of Director (IOD)
- Certificate, Japanese Certificate Level 3
- Anti-Corruption Training Course

Training in 2021

- Seminar on “People adapt, World change, escape from disruptive with innovative organizations”
- Seminar on “Organizing a shareholders’ meeting under the epidemic situation of the coronavirus “
- Seminar on “Guidelines for preparing a stakeholder report and internal information policy”

- Seminar on “A new dimension in securities analysis by focusing on sustainability through One-report”
- Seminar on “Business and human rights in ONE REPORT”
- Seminar on “Renewable energy technology and lithium-ion batteries”
- Seminar on “Corporate Governance Report of Thai Listed Companies (CGR) 2022”

Working Experience during the Past 5 Years

GUNKUL’s Group

- | | | |
|-------------------------|------------------------|--|
| • 2016 - Present | Gunkul Engineering PCL | Senior Vice President, Office of CEO |
| • 2013 - Present | Gunkul Engineering PCL | Secretary to the Good Corporate Governance Committee |
| • 2009 - Present | Gunkul Engineering PCL | Company Secretary |

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None



Mr. Tanetsiri Farkmitr

- Secretary to the Audit Committee
- Vice President, Internal Audit
- Head of Internal Audit
- Acting Head of Compliance

Date and month of appointment as Secretary to the Audit Committee

- 20th October 2016 (5 Years 2 months)

Age 45 Years

Educational Qualifications

- Master Degree of Accounting, Thammasat University
- Bachelor Degree of Accounting, Thammasat University
- Certified Public Accountant, CPA (Thailand)

History of Training Programs

- The difference that the Revenue Department often examines between PND 50 vs Phor Por, Clause 65 Twi, Clause 65 Tri Course
- Auditor Challenges with AI and Block Chain Technology Course
- Leadership and Coaching Skills Course, Class 1
- Corporate Culture Program
- Driving Effective Cultural Course, Class 2
- Senior Executive Program and Organizational Change Course
- Preparation Course for IT Examination Course No. 2/2019
- Negotiate Like PRO Course
- Anti-Corruption Training Course

Training in 2021

- Seminar on "Accounting Standard No. 41, Agriculture"
- Seminar on "Thai Financial Reporting Standards 2021 and Accounting Standard No. 41, Agriculture"
- Seminar on "Withholding Tax Course"
- Seminar on "Update Tax Law Year 2021"
- Seminar on "People adapt, World change, escape from disruptive with innovative organizations"
- Seminar on "Armed with cybersecurity knowledge and skills for operators and the general public"
- Seminar on "Readiness check: How prepared are you for the new Transfer Pricing requirements?"
- Seminar on "Integrating human rights into risk management"

Working Experience during the Past 5 Years

GUNKUL's Group

- | | | |
|-------------------------|------------------------|---|
| • 2019 - Present | Gunkul Engineering PCL | Vice President, Internal Audit / Head of Internal Audit / Acting for Head of Compliance |
| • 2016 - Present | Gunkul Engineering PCL | Secretary to the Audit Committee |
| • 2016 - 2019 | Gunkul Engineering PCL | Assistant Vice Director, Internal Audit |

Other Companies / Entities

- | | | |
|----------------------|-------------------|--|
| • 2015 - 2016 | Tipco Asphalt PCL | Group Manager, Internal Audit, |
| • 2014 - 2015 | Banpu PCL | Manager, Technology and Information Systems Internal Audit |

Number of companies currently holding the position of a director

- Listed Company (s) None
- Non-Listed Company (s) None

Share Holding Percentage as at 31 December 2021

- None

Relationship between Management

- None

1.2 Details of Company Secretary

The Board of Directors Meeting No. 13/2008 on October 27, 2008, resolved to appoint Ms. Chantra Jongjamareeseethong to be a Company Secretary, effective since October 27, 2008 since such person has education, knowledge and experience as well as having a degree in accounting which fulfil the ability to perform Company Secretary duties. The Company Secretary's profile is included in Attachment 1.1. Moreover, to ensure compliance with applicable laws and good corporate governance principles, the Company specified the Company Secretary's qualifications, roles, and responsibilities in the Company Secretary Charter as follows:

Qualifications:

1. Having knowledge and understanding of the businesses of the Company and the Group.
2. Understanding the Company Secretary's roles and responsibilities.
3. Having knowledge and understanding of the laws, rules, and regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand as well as other relevant supervisory authorities.
4. Having knowledge and understanding of good corporate governance principles and practices.
5. Not attempting or seeking improper benefits for own sake or peers from the Company and the Group as well as maintaining the confidentiality and not disclosing information, and internal documents of the Company and the Group to outsiders.

Roles and Responsibilities

1. Coordinate and execute various activities related to the Board of Directors' meetings and the shareholders' meeting of the Company in accordance with the good corporate governance principles, rules, regulations and the Company's Articles of Association, including other applicable laws, as well as follow-up to ensure compliance with the resolutions of Board of Directors meetings and shareholders' meeting.
2. Prepare and maintain important documents, such as the director registered book, notices of Board of Directors meetings, minutes of Board of Directors meetings, notices of shareholders meetings, minutes of shareholders meetings, and the Company's annual registration statement/annual report (Form 56-1 One Report), directors and executive officers' Securities Holdings Reports, and Conflict of Interest Reports.
3. Oversea information disclosure in accordance with the regulations of the Stock Exchange of Thailand, the Securities and Exchange Commission, and other relevant supervisory authorities, as well as good corporate governance principles.
4. Report the changes in the securities holdings of directors or executives to the Board of Directors, on quarterly basis and retain a copy of such report.
5. Provide initial advice to the Board of Directors on laws and regulations related to good corporate governance, maintaining the Company's listed status on the Stock Exchange

of Thailand, and laws and regulations relating to the Company's business operations, together with following up to ensure proper and consistent compliance, including regularly update new rules and regulations which might affect the Company.

6. Communicate with shareholders and stakeholders to inform about the Company's news and respective rights of the shareholders and stakeholders.
7. Assure that the Company Secretary Department serves as the central repository for corporate records, which includes corporate registration documents, Memorandums of Association, Articles of Association, and shareholder registered book.
8. Coordinate to arrange the orientation, as well as providing advice and consultation to the newly appointed director of the Company.

9. Supervise the Board of Directors' activities and other activities as required by law or assigned by the Board of Directors, or as prescribed by the Thai Capital Market Supervisory Board.

Additionally, since the Company recognizes the value of good corporate governance principles, the Company has encouraged Ms. Chantra Jongjamareeseethong, the Company Secretary, to attend the Company Secretary Program Class 28/2008, the Effective Minute Taking (EMT) Class 12/2008 organized by the Thai Institute of Directors (IOD), and other courses to support the Board of Directors' duties and good corporate governance practices continuously.



Attachment 2

Details of Directors and Executives of the Company Holds Directorial or Executive Position at Subsidiaries, Associated/Joint Ventures, and Related Companies and Details of the Directors of Subsidiaries

1. Details of directors and executives of the Company holds directorial or executive position at subsidiaries, associated/joint ventures, and related companies

Company Name		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
		Dr. Gunkul Dhumrongpiyawut	Dr. Chongrak Rarueysong	Associate Professor Dr. Panarat Panmanee	Gen. Tarnchaiyan Srisuwan	Mr. Tarakorn Angpubate	Mr. Kris Chantanotoke	Ms. Sopacha Dhumrongpiyawut	Dr. Somboon Aueatchasai	Ms. Naruechon Dhumrongpiyawut	Mrs. Areewan Chaloeand	Mr. Chaloepon Sricharoen	Mr. Somchai Trairatanirom	Pol. Maj. Gen. Visit Sukarasep	Mr. Decha Chooligorn	Mr. Hathai Uthai	Mr. Phongthep Thitapan	Dr. Phongsakorn Damnoen	Mr. Chaisiri Wattanachannarong	Mr. Thitipong Techaratanayuenyong	Mr. Theerapab Punyasakhon	Mrs. Somluk Kanuenghet	Mrs. Nattawan Wongchan	Ms. Suttirat Tangnorakul	Ms. Chantira Jongjanareeseethong	Mr. Tanetsiri Farkmitr
Gunkul Engineering Public Company Limited		1) 2)	2) 3) 4) 5) 7)	2) 3) 5)	2) 3)	2) 3) 5) 6) 7)	2) 3)	2) 6) 7) 9) 10)	2) 8) 9) 10) 11)	2) 9) 10)	2) 9) 10)	2) 9) 10)	3) 6) 7)	3) 6) 7)	3) 7)	3) 7)	3) 7)	10)	10)	7) 10) 14) 15)	10)	7) 10) 14)	10)	10)	10) 12) 14)	10) 13)
Subsidiary Companies (Direct Subsidiaries and Indirect Subsidiaries)	1	G.K.Assembly Co., Ltd.						2)			2)	2)										2)				
	2	G.K.Power Products Co., Ltd.						2)			2)	2)										2)				
	3	K.N.P.Supply Co., Ltd.						2)	2)		2)	2)														
	4	Wind Energy Development Co., Ltd.							2)	2)								2)								
	5	Greenovation Power Co., Ltd.								2)								2)								
	6	Korat Wind Energy Co., Ltd.						2)	2)									2)								
	7	NK Power Solar Co., Ltd.						2)	2)									2)								
	8	Gunkul Solar Power 1 Co., Ltd.						2)										2)								
	9	Gunkul Solar Power 2 Co., Ltd.						2)										2)								
	10	Bright Green Power Co., Ltd.																2)								
	11	Siam Gunkul Solar Energy Co., Ltd.						2)										2)								
	12	Solar Energy Society Co., Ltd.						2)	2)	2)								2)								
	13	Gunkul Solar Roof 1 Co., Ltd.						2)	2)																	
	14	Gunkul Training Center Co., Ltd.						2)	2)													2)		2)		
	15	Gunkul Solar Community Co., Ltd.						2)	2)	2)																
	16	Gunkul Power Development Co., Ltd.						2)	2)										2)							

Company Name			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
			Dr. Gunkul Dhumrongpiyawut	Dr. Chongrak Rarueysong	Associate Professor Dr. Panarat Panmanee	Gen. Tarnchaiyan Srisuwan	Mr. Tarakorn Angpubate	Mr. Kris Chantanotoke	Ms. Sopacha Dhumrongpiyawut	Dr. Somboon Aueatchasai	Ms. Naruechon Dhumrongpiyawut	Mrs. Areewan Chaloeimdan	Mr. Chaloeimpon Sricharoen	Mr. Somchai Trairatanapirom	Pol. Maj. Gen. Visit Sukarasep	Mr. Decha Chooligorn	Mr. Hathai Uthai	Mr. Phongthep Thitapan	Dr. Phongsakorn Damnoen	Mr. Chaisiri Wattanachannarong	Mr. Thitipong Techaratanayuenyong	Mr. Theerapab Punyasakphon	Mrs. Somluk Kanuenghet	Mrs. Nattawan Wongchan	Ms. Suttirat Tangnorakul	Ms. Chantra Jongjanareeseethong	Mr. Tanetsiri Farkmitr
Gunkul Engineering Public Company Limited			1) 2)	2) 3) 4) 5) 7)	2) 3) 5)	2) 3)	2) 3) 5) 6) 7)	2) 3)	2) 6) 7) 9) 10)	2) 8) 9) 10) 11)	2) 9) 10)	2) 9) 10)	2) 9) 10)	3) 6) 7)	3) 6) 7)	3) 7)	3) 7)	3) 7)	10)	10)	7) 10) 14) 15)	10)	7) 10) 14)	10)	10)	10) 12) 14)	10) 13)
Subsidiary Companies (Direct Subsidiaries and Indirect Subsidiaries)	17	Gunkul Energy Solution and Lighting Co., Ltd.								2)	2)																
	18	Infinite Alternative Energy Co., Ltd.									2)	2)							2)								
	19	Rang Ngern Solution Co., Ltd.									2)	2)							2)								
	20	GO Bioenergy Co., Ltd.									2)	2)							2)								
	21	Outgrow D Co., Ltd. ^{(2) (3)}									2)	2)							2)								
	22	Eco Thai Energy Co., Ltd.									2)	2)							2)								
	23	Gunkul Infinite Group Co., Ltd.								2)	2)	2)							2)			2)					
	24	BMP Solar Co., Ltd.										2)							2)								
	25	Gunkul Solar Power Co., Ltd.								2)									2)								
	26	Future Electrical Control Co., Ltd.								2)	2)									2)							
	27	Joint Venture GKE & GPD Co., Ltd.								2)									2)								
	28	Future Energy Corporation Co., Ltd.										2)															
	29	GPD & TEECL Joint Venture Co., Ltd.								2)										2)							
	30	Gunkul B2B Co., Ltd.										2)							2)								
	31	Gunkul Wind Power 6 Co., Ltd.									2)	2)	2)						2)								
	32	Gunkul Wind Power 7 Co., Ltd.									2)	2)	2)						2)								
	33	G.K. Hemp Group Co., Ltd.								2)	2)								2)								
	34	G.K. Smart Farming Co., Ltd.								2)	2)								2)								
	35	G.K. Bio Extraction Co., Ltd.								2)	2)								2)								
	36	Gunkul Wind Power 1 Co., Ltd.								2)	2)								2)								
	37	Gunkul Wind Power 2 Co., Ltd.								2)	2)								2)								
	38	Gunkul Wind Power 3 Co., Ltd.								2)	2)								2)								
	39	Gunkul Wind Power 4 Co., Ltd.								2)	2)								2)								
	40	Gunkul Wind Power 5 Co., Ltd.								2)	2)								2)								
	41	G.K. Real Estate (2564) Co., Ltd.								2)	2)											2)					
	42	Future Power Construction Co., Ltd.								2)									2)								

[illegible]

[illegible]

Company Name			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
			Dr. Gunkul Dhumrongpiyawut	Dr. Chongrak Rarueysong	Associate Professor Dr. Panarat Panmanee	Gen. Tarnchaiyan Srisuwan	Mr. Tarakorn Angpubate	Mr. Kris Chantanotoke	Ms. Sopacha Dhumrongpiyawut	Dr. Somboon Aueatchasai	Ms. Naruechon Dhumrongpiyawut	Mrs. Areewan Chaloeindan	Mr. Chaloeimpon Sricharoen	Mr. Somchai Trairatanapirom	Pol. Maj. Gen. Visit Sukarasap	Mr. Decha Chooligorn	Mr. Hathai Uthai	Mr. Phongthep Thitapan	Dr. Phongsakorn Damnoen	Mr. Chaisiri Wattanachannarong	Mr. Thitipong Techaratanayuenyong	Mr. Theerapab Punyasakphon	Mrs. Somluk Kanuehghet	Mrs. Nattawan Wongchan	Ms. Suttirat Tangnorakul	Ms. Chantira Jongjameeethong	Mr. Tanetsiri Farkmitr
Gunkul Engineering Public Company Limited			1) 2)	2) 3) 4) 5) 7)	2) 3) 5)	2) 3)	2) 3) 5) 6) 7)	2) 3)	2) 6) 7) 9) 10)	2) 8) 9) 10) 11)	2) 9) 10)	2) 9) 10)	2) 9) 10)	3) 6) 7)	3) 6) 7)	3) 7)	3) 7)	3) 7)	10)	10)	7) 10) 14) 15)	10)	7) 10) 14)	10)	10)	10) 12) 14)	10) 13)
Related Companies	23	Green Field Energy Co., Ltd.	2)						2)		2)																
	24	Apple Cash Co., Ltd.		2)																							
	25	Hatari Wireless Co., Ltd.		2)																							
	26	PROEN Corp Public Co., Ltd.			2)																						
	27	Talis Asset Management Co., Ltd.						2) 3)																			
	28	Integrated Management Consultant Co., Ltd.														2)											
	29	Diamond Security Guard Co., Ltd.														2)											

Remark

- 1) Chairman of the Board of Directors 2) Director 3) Independent Director 4) Chairman of the Audit Committee 5) Audit Committee
6) Chairman of the Other Sub-Committee 7) Other Sub-Committee 8) Chief Executive Officer 9) Executive Committee 10) Executive
11) Secretary to the Board of Directors 12) Company Secretary 13) Secretary to the Audit Committee 14) Secretary to the Other Sub-Committee 15) Chief Financial Officer

⁽¹⁾ Registration of Liquidation in 2019

⁽²⁾ Registration of Liquidation in 2021

⁽³⁾ Registration of Liquidation in 2022

2. Details of the directors of subsidiaries*

Company Name			1	2	3	4	5	6	7	8	9	10	11	12	13
			Dr. Gunkul Dhumrongpiyawut	Dr. Chongrak Rarueysong	Associate Professor Dr. Panarat Panmanee	Gen. Tarnchaiyan Srisuwan	Mr. Tarakorn Angpubate	Mr. Kris Chantanotoke	Ms. Sopacha Dhumrongpiyawut	Dr. Somboon Aueatchasai	Ms. Naruechon Dhumrongpiyawut	Mrs. Areewan Chaloeindan	Mr. Chaloeimpon Sricharoen	Mr. Chaisiri Wattanacharnarong	Mr. Janpon Ngamaroonthote
	1	Future Electrical Control Co., Ltd.							1) 2)	2)				2)	
	2	Gunkul International (Mauritius)													2)

Remark

- 1) Chairman of the Board of Directors 2) Director

* Subsidiaries indicate subsidiary which earnings more than 10 percent of the total income in the consolidated profit and loss statement

Attachment 3

Details on the Head of Internal Audit and the Head of Compliance

The Audit Committee's meeting No. 4/2016, held on October 20, 2016, appointed Mr. Tanetsiri Farkmitr, Vice President of Internal Audit, to be Head of Internal Audit and Secretary to the Audit Committee. He has more than ten years of experience in internal auditing. He also obtained a Certified Public Accountant (CPA) in Thailand. Thus, he is qualified to perform such duties appropriately and adequately. Additionally, as the Company is in the process of recruitment Head of Compliance, Mr. Tanetsiri Farkmitr has been appointed to be Acting Head of Compliance, effective from August 11, 2021, onwards.

The following are the profile of the Head of Internal Auditor and Acting Head of Compliance.

Name-Last Name	: Mr. Tanetsiri Farkmitr
Age	: 45 years
Current Position	: Secretary to the Audit Committee Vice President of Internal Audit Head of Internal Audit and Acting Head of Compliance
Educational qualifications	: - Master Degree of Accounting, Faculty of Commerce and Accountancy, Thammasat University - Bachelor Degree of Accounting, Faculty of Commerce and Accountancy Thammasat University - Certified Public Accountant, CPA (Thailand)
Training/Seminars	: - The Differences that the Revenue Department often examines between P.N.D.50 vs. Por.Por.30, M.65 bis, M.65 tri - Auditor Challenges with AI and Block Chain Technologies - Leadership and Coaching Skills, Class 1 - Corporate Culture Program - Driving Effective Cultural Course, Class 2 - Senior Executive Program and Organizational Change Course - Anti-Corruption Training Course - Preparation Course for IT Examination No. 2/2019

Training in 2021

- Accounting Standard No. 41 on Agriculture
- Financial reporting standards for the year 2021 and accounting standards on agriculture
- Income tax withholding
- Update tax law year 2021
- Seminar "People adapt, change the world, escape from disruptive with innovative organizations"
- Seminar "Armed with knowledge and skills in cyber security for workers and the general public"
- Seminar "Readiness check: How prepared are you for the new Transfer Pricing requirements?"
- Seminar "Integrating human rights into risk management"

Working Experience:

Year	Position	Company
2021 - present	Acting Head of Compliance	Gunkul Engineering Public Company Limited
2019 - present	Assistant Vice President of Internal Audit	Gunkul Engineering Public Company Limited
2016 - present	Head of Internal Audit	Gunkul Engineering Public Company Limited
2016 - present	Secretary to the Audit Committee	Gunkul Engineering Public Company Limited
2016 - 2019	Assistant Vice Director, Internal Audit Division	Gunkul Engineering Public Company Limited
2015 - 2016	Group Manager, Internal Audit Department	Tipco Asphalt Public Company Limited
2014 - 2015	Manager, Technology, and Information Systems Internal Audit	Banpu Public Company Limited
2012 - 2014	Senior Inspector, Internal Audit Department	Banpu Public Company Limited
2007 - 2012	Manager, Internal Audit Division	Banpu Public Company Limited

In this regard, the appointment, removal, and transfer of the person holding the position of the Company's Head of the Internal Audit must be approved or has been endorsed by the Audit Committee.

Attachment 4

Business Asset

as of December 31, 2021. The Company and its subsidiaries have main fixed assets that used in business operations as follows:

List	Ownership Type	Net Value (Million baht)	Obligation
1. Gunkul Engineering Public Company Limited (“the Company”)			
1. Lands, Buildings and Structures, 7 Places			Rent a building from TCT Co., Ltd.
1.1 Head Office			
Location : Pearl Bangkok Building, 8 th Floor (whole floor), area size approx. 1,398.60 square meters, and room number 12A01, 12A floor, area size approx. 376 square meters, with a total area of 1,774.60 square meters. (To use as the location of the Company’s head office)	Lease	-	-None-
1.2 Office Branch			The said land and building are owned by Great Miracle Asset Co., Ltd.
Location : 1038-1046 Nakhon Chaisri Rd., Thanon Nakhon Chaisri Subdistrict, Dusit District, Bangkok			
- Land, area size approx. 0-3-04 rai or 304 square wa	Lease	-	-None-
- Head office building, area size approx. 2,210 square meters (To use as the location of the Company’s branch office)	Lease	-	-None-
1.3 Warehouse (Pichai)			The said land is owned by Great Miracle Asset 2 Co., Ltd.
Location : 113/1 Soi Mo Suporn, Thanon Nakhon Chaisri Subdistrict Dusit District, Bangkok			
- Land, area size approx. 1-1-58 rai or 558 square wa	Lease	-	-None-
- Building and structure, area size approx. 4,340 square meters (To store the Company’s products)	Lease	0.90	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
1.4 Warehouse (Ruamchit) Location : 479/3, 6,7,10 and 12 Ruamchit Rd., Thanon Nakhon Chaisri Subdistrict, Dusit District, Bangkok <ul style="list-style-type: none"> - Land, area size approx.1-1-60 rai or 560 square wa - Building and structure, area size approx. 1,920 square meters (To store the Company's products) 	Lease Lease	- -	The said land and building are owned by Great Miracle Asset 3 Co., Ltd. Mortgage land and building with financial institutions to guarantee credit facilities of Future Electrical Control Co., Ltd.
1.5 Factory building and warehouse (GKA) Location : 110/9-10 Moo 2, Maha Sawat Subdistrict, Bang Kruai District, Nonthaburi <ul style="list-style-type: none"> - Land, area size approx. 8-0-56 rai or 3,256 square wa - Building and structure, area size approx. 9,053.50 square meters (GUNKUL PROPERTY, 3,511 square meters) (To use as a factory and storage of GKA products) 	- Owner	- 0.98 (GUNKUL)	All land and some of the buildings are owned by G.K. Assembly Co., Ltd. and some buildings are owned by GUNKUL and KNP. -None- -None-
1.6 Document storage warehouse Location : Nakhon Chaisri Rd., Dusit District, Bangkok <ul style="list-style-type: none"> - Land, area size approx. 0-3-12 rai or 312 square wa and area size approx. 0-3-8.7 rai or 308.70 square wa 	Lease	-	The said land and building are owned by Great Miracle Asset 8 Co., Ltd.
1.7 Land 19-2-23 rai Location : Nong Kum Subdistrict, Bo Phloi District, Kanchanaburi Province <ul style="list-style-type: none"> - Land, area size approx. 19-2-23 square wa (To use as an area for the subsidiary's power plant business) 	Owner	3.14	-None-
2. Building improvements and utilities Location : 1038-1046 Nakhon Chaisi Rd., Thanon Nakhon Chaisi Subdistrict, Dusit District, Bangkok	Owner	-	-None-
3. Tools	Owner	2.92	-None-
4. Furnishings and office supplies	Owner	12.75	-None-
5. Vehicles	Owner	35.08	Under the leasing contract, a total of 8 vehicles

List	Ownership Type	Net Value (Million baht)	Obligation
2. G.K. Assembly Co., Ltd. (“Subsidiary”)			
1. Land and Structure, 2 Places			
1.1 Headquarter, factory and warehouse (GKA)			
Location : 110/9-10 Moo 2, Maha Sawat Subdistrict, Bang Kruai District, Nonthaburi			
- Land, area size approx. 8-0-56 rai or 3,256 square wa	Owner	83.21	-None-
- Office building and warehouse, Assembly building and plastic factory, etc., area size approx. 5,538 square meters.	Owner	14.05	-None-
- Factory building and warehouse, area size approx. 3,511 square meters (GUNKUL PROPERTY)	-	-	-None-
- Guardhouse, area size approx. 4.5 square meters (KNP PROPERTY)	-	-	-None-
1.2 Vacant land, 7-0-68 rai			The said land is owned by Great Miracle Asset 9 Co., Ltd.
Location : Plai Bang Rd, Maha Sawat District, Bang Kruai District, Nonthaburi Province			
- Land, area size approx. 7-0-68 rai (Area leased by GKA about 3,472 square meters) (to use as storage for GKA products)	Lease	-	-None-
2. Building improvements and utilities			
Location : 110/9-10 Moo 2, Maha Sawat Subdistrict, Bang Kruai District, Nonthaburi			
	Owner	14.22	-None-
3. Machinery and factory equipment			
Machinery equipment and tools	Owner	18.46	
4. Furnishings and office supplies			
	Owner	2.63	-None-
5. Vehicles			
	Owner	4.90	Under the leasing contract, a total of 1 vehicle

List	Ownership Type	Net Value (Million baht)	Obligation
3. G.K. Power Products Co., Ltd. (“Subsidiary”)			
1. Land and Structures, 2 Places			The said land and some of the structures are owned by Great Miracle Asset 7 Co., Ltd.
1.1 Headquarter, factory and warehouses			
Location : 9 Moo 2, Maha Sawat Subdistrict, Bang Kruai District, Nonthaburi			
- Land, area size approx. 300 square wa	Sublease	-	-None-
- Office building and warehouse, area size approx. 1,753 square meters Factory area about 750 square meters	Owner	5.14	-None-
- Warehouse building 525 square meters @ 96.00 baht (Saengaree)	Sublease	-	The said land and some of the structures are owned by Saengaree Estate Co., Ltd.
- Warehouse building 525 square meters @ 80.00 baht (Saengaree)	Lease		Under contract no. 49/1-6210-39
- Warehouse building 525 square meters @ 80.00 baht (Saengaree)	Lease		Under contract no. 49/2-6210-39
- Warehouse building 525 square meters @ 96.00 baht (Saengaree)	Lease		Under contract no. 49/3-6210-39
- Warehouse building 525 square meters @ 96.00 baht (Saengaree)	Lease		Under contract no. 49/4-6210-39
2. Machinery and factory equipment			
Machinery equipment and tools	Owner	18.98	-None-
3. Furnishings and office supplies	Owner	0.76	-None-
4. Vehicles	Owner	4.29	Under the leasing contract, a total of 1 vehicle
4. K.N.P. Supply Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Tools and equipment	-	-	-None-
3. Furnishings and office supplies	Owner	-	-None-
4. Vehicles	Owner	-	-None-
5. Wind Energy Development Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
1.2 Land for wind power generation business Location : Huai Bong Subdistrict, Dan Khun Thot District Nakhon Ratchasima Province - Land, area size approx. 2,106 rai 2 ngan 32.7 square wa	Owner	386.60	The aforementioned land, buildings, machinery and equipment are owned by Wind Energy Development Co., Ltd. and mortgaged with financial institutions to guarantee credit facilities of Wind Energy Development Co., Ltd.
2. Building, building improvement and utilities	Owner	31.55	
3. Tools, machinery and equipment	Owner	3,178.74	
4. Furnishings and office supplies	Owner	0.14	
5. Vehicles	Owner	2.21	
6. Work under construction	Owner	-	
6. NK Power Solar Co., Ltd. ("Subsidiary")			
1. Head Office			To use as an office in business
1.1 Office Building Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
1.2 Land and buildings, using for the business of generating electricity from solar energy Location : Nong Kum Subdistrict, Bo Phloi District, Kanchanaburi - Land, area size approx. 19 rai 2 ngan 23.0 square wa - Structure	Lease Owner	- 10.40	Such land is owned by Gunkul Engineering Public Company Limited
2. Tools, machinery and equipment	Owner	33.78	-None-
3. Furnishings and office supplies	Owner	-	-None-
4. Vehicles	-	-	-None-
7. Greenovation Power Co., Ltd. ("Subsidiary")			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building Location : 1038 Nakhon Chaisri Rd, Thanon Nakhon Chaisri Subdistrict, Dusit District, Bangkok	-	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
1.2 Land for using in wind power generation business Location : Huai Bong Subdistrict, Dan Khun Thot District Nakhon Ratchasima Province - Land, area size approx. 1,255 rai 2 ngan 50.3 square wa	Owner	258.12	The aforementioned land and buildings, machinery and equipment are owned by Greenovation Power Co., Ltd. and mortgaged with financial institutions to guarantee credit facilities of Greenovation Power Co., Ltd.
2. Building, building improvement and utilities	-	98.28	-None-
3. Tools, machinery and equipment	Owner	4,005.25	-None-
4. Furnishings and office supplies	Owner	0.01	-None-
5. Vehicles	Owner	-	-None-
6. Work under construction	Owner	-	-None-
8. Korat Wind Energy Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building Location : 1038 Nakhon Chaisri Rd, Thanon Nakhon Chaisri Subdistrict, Dusit District, Bangkok	-	-	-None-
1.2 Land for using in wind power generation business Location : Huai Bong Subdistrict, Dan Khun Thot District Nakhon Ratchasima Province - Land	Lease	-	The aforementioned land and buildings are owned by Korat Wind Energy Co., Ltd. and mortgaged with financial institutions to guarantee credit facilities of Korat Wind Energy Co., Ltd.
2. Building, building improvement and utilities	Owner	84.72	-None-
3. Tools, machinery and equipment	Owner	2,679.99	-None-
4. Furnishings and office supplies	Owner	0.04	-None-
5. Vehicles	Owner	-	-None-
6. Work under construction	Owner	-	-None-
9. Gunkul Solar Power 2 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
1.2 Land for solar power generation business Location : Surasak Subdistrict, Si Racha District, Nonthaburi Province			
- Land and buildings	Lease	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Tools, machinery and equipment	Owner	25.21	-None-
4. Work under construction	Owner	-	-None-
10. Siam Gunkul Solar Energy Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
1.2 Land for solar power generation business Location : Vibhavadi Rangsit Rd, Sanambin Subdistrict, Don Mueang District, Bangkok			
- Land and buildings	Lease	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Tools, machinery and equipment	Owner	25.26	-None-
11. Solar Energy Society Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
1.2 Land for solar power generation business Location : Pracharat 1 Rd, Wong Sawang Subdistrict, Bang Sue District, Bangkok			
- Land and buildings	Lease	-	-None-
2. Building, building improvement and utilities	Owner	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
3. Tools, machinery and equipment	Owner	20.50	-None-
4. Work under construction	Owner	1,075.86	-None-
12. Gunkul Solar Roof 1 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
1.2 Land for solar power generation business			
Location : 113/1 Pichai Rd, Nakhon Chaisri Subdistrict, Dusit District, Bangkok			
Location : Bang Kruai-Sai Noi Rd, Maha Sawat Subdistrict, Bang Kruai District, Nonthaburi Province			
- Land and buildings	Lease	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Tools, machinery and equipment	Owner	13.57	-None-
13. Gunkul Power Development Co., Ltd. (“Subsidiary”)			
1. Head Office			Rent a building from TCT Co., Ltd.
Location : 1177 Pearl Bangkok Building, 6 th Floor Area size approx. 116 square meters (to use as a location Company’s Office)	Lease	-	-None-
2. Tools, machinery and equipment	Owner	4.78	-None-
3. Furnishings and office supplies	Owner	1.85	-None-
4. Vehicles	Lease	0.40	Under the leasing contract, a total of 1 vehicle
14. Gunkul Solar Community Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Tools, machinery and equipment	Owner	0.56	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
3. Furnishings and office supplies	Owner	0.02	
4. Vehicles	Lease	1.27	Under the leasing contract, a total of 1 vehicle
15. Gunkul Energy Solution and Lighting Co., Ltd. (“Subsidiary”), changed its name to Gunkul Utility and Energy Co., Ltd.			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement	Owner	1.26	-None-
3. Tools, machinery and equipment	Owner	4.76	-None-
4. Furnishings and office supplies	Owner	0.13	-None-
16. Rangngern Solution Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
1.2 Land for solar power generation business			The aforementioned land, buildings, machinery and equipment are owned by Rangngern Solution Co., Ltd. and mortgaged with financial institutions to guarantee credit facilities of Rangngern Solution Co., Ltd.
Location : Kanchanaburi, Phetchaburi, Phrae, Lampang, Phetchaburi, Prachuap Khiri Khan - Land and buildings	Owner	300.31	
2. Building, building improvement and utilities	Owner	447.02	-None-
3. Tools, machinery and equipment	Owner	3,256.27	-None-
4. Furnishings and office supplies	Owner	0.07	-None-
5. work under construction	Owner	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
17. Future Electrical Control Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, Room 12A01, 12A Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Machinery and equipment	Owner	0.91	-None-
3. Furnishings and office supplies	Owner	1.71	-None-
4. Vehicles	Owner	11.06	Under the leasing contract, a total of 14 vehicles
18. Future Energy Corporation Co., Ltd. (“Subsidiary”)			
1. Head Office			2-storey building area, using as an office for business operations
1.1 Office Building			
Location : 956/1 Nakhon Chaisri Rd., Thanon Nakhon Chaisri Subdistrict, Dusit District, Bangkok	-	-	-None-
2. Machinery and equipment	Owner	-	-None-
3. Furnishings and office supplies	Owner	0.02	-None-
4. Vehicles	Owner	-	-None-
19. Gunkul B2B Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, Room 12A01, 12A Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	Owner	0.30	-None-
3. Machinery and equipment	Owner	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
20. G.K. Real Estate (2564) Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
21. Tri Viet Tay Ninh Joint Stock Company (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	Owner	147.86	-None-
3. Machinery and equipment	Owner	696.44	-None-
22. Bach Khoa A Chau Tay Ninh Joint Stock Company (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	Owner	154.80	-None-
3. Machinery and equipment	Owner	703.58	-None-
23. Tan Chau Energy Joint Stock Company (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	Owner	106.23	-None-
3. Machinery and equipment	Owner	1,051.04	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
24. Doan Son Thuy Investment Joint Stock Company (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	Owner	475.01	-None-
3. Machinery and equipment	Owner	645.19	-None-
25. Gunkul Wind Power 1 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-
4. Work under construction	Owner	1.10	-None-
26. Gunkul Wind Power 2 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-
27. Gunkul Wind Power 3 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-
4. Furnishings and office supplies	Owner	0.01	-None-
28. Gunkul Wind Power 4 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-
4. Work under construction	Owner	1.02	-None-
29. Gunkul Wind Power 5 Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-
4. Work under construction	Owner	1.01	-None-
30. G.K. Hemp Group Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
31. G.K. Smart Farming Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	Owner	1.77	-None-
4. Furnishings and office supplies	Owner	0.03	-None-
5. Work under construction	Owner	93.72	-None-
32. G.K. Bio Extraction Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	-	-	-None-
3. Machinery and equipment	-	-	-None-
4. Furnishings and office supplies	Owner	0.07	-None-
5. Work under construction	Owner	43.49	-None-
33. Gunkul Training Center Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Furnishings and office supplies	Owner	-	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
34. Gunkul Infinite Group Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Work under construction	Owner	21.44	-None-
35. Eco Thai Energy Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
2. Building, building improvement and utilities	Owner	58.27	-None-
3. Machinery and equipment	Owner	149.01	-None-
4. Furnishings and office supplies	Owner	0.02	-None-
36. BMP Solar Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-
1.2 Land for solar power generation business			The aforementioned land, buildings, machinery and equipment are owned by BMP Solar Co., Ltd. The parent company and its holders have mortgages as collateral for credits that the parent company receives from financial institutions.
Location : Sa Kaeo province			
- Land and buildings	Owner	35.00	
2. Building, building improvement and utilities	Owner	16.97	-None-
3. Machinery and equipment	Owner	415.60	-None-
4. Furnishings and office supplies	Owner	0.02	-None-

List	Ownership Type	Net Value (Million baht)	Obligation
37. Gunkul Grand Asset Co., Ltd. (“Subsidiary”)			
1. Head Office			Commercial building area, using as an office for business operations
1.1 Office Building			
Location : 1177 Pearl Bangkok Building, 8 th Floor, Phaholyothin Rd., Phayathai Subdistrict, Phayathai District, Bangkok	-	-	-None-

Trademark

Gunkul Engineering Public Company Limited owns the “GUNKUL” trademark for fuse products. The trademark has been registered with the Trademark Office, Department of Intellectual Property since July 20, 2006, and for the products of electric switch fuse set, road light control set, safety belt set and Street light lamp set has registered a trademark with the Trademark Office, Department of Intellectual Property since May 27, 2010. Also, the “GTOPWELD” trademark for electrical connection equipment products since October 12, 2010.

G.K.Assembly Co., Ltd. is the owner of the “GK” trademark for prefabricated metal products for electrical and telephone installation, which has been registered with the Trademark Office, Department of Intellectual Property since July 9, 2004 and also owns the “ZIMTAP”, “ZIMLUG” trademark for electrical connectors products, “PIGMAN” trademark for lightning protection products. These trademarks have been registered with the Trademark Office, Department of Intellectual Property since June 15, 2010, June 17, 2010 and June 18, 2010, respectively.

G.K. Power Products Co., Ltd. is the owner of the “GKP” trademark for electrical distribution or control equipment products which has been registered with the Trademark Office, Department of Intellectual Property since October 14, 2010.

Important Agreements as of December 31, 2021

1) Land and Building Lease Agreement

Contract	Parties	Period	Details
1. Gunkul Engineering Public Company Limited			
1.1 Head Office Building Lease Agreement	T.C.T. Co., Ltd.	3 Years February 1, 2018 to January 31, 2021 3 Years February 1, 2021 to January 31, 2024	<p><u>Leased Property</u> Head office building</p> <p><u>Rental Rate (Formerly)</u> The rental rate is fixed at 851,808 baht per month, with a service contract of 567,872 baht per month.</p> <p><u>Rental Rate (New)</u> The rental rate is fixed at 696,502.80 baht per month, with a service contract of 464,335.20 baht per month.</p> <p><u>Agreement Renewal</u> Notify in writing at least 180 days prior to the expiration of the rental period.</p> <p><u>Termination of Agreement</u> Notify in writing at least 30 days in advance.</p>
1.2 Agreement to use the building which is the location of the factory of G.K. Assembly Co., Ltd.	G.K. Assembly Co., Ltd.	Starting from January 1, 2018 onwards	<p><u>Leased Property</u> Factory building for production</p> <p><u>Rental Rate</u> -None-</p> <p><u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period.</p> <p><u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.</p>

Contract	Parties	Period	Details
1.3 Land, Building and Structure Lease Agreement	Great Miracle Asset Co., Ltd.	January 1, 2021 to December 31, 2023	<p><u>Leased Property</u> Land and buildings for the Company's branch office</p> <p><u>Rental Rate</u> The rental rate is fixed at 260,300 baht per month. (January 1, 2021 to December 31, 2023)</p> <p><u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.</p>
1.4 Land Lease Agreement	Great Miracle Asset 2 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<p><u>Leased Property</u> Land for storing company products</p> <p><u>Rental Rate</u> The rental rate is fixed at 184,500 baht per month. (January 1, 2021 to December 31, 2023)</p> <p><u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.</p>
1.5 Land, Building and Structure Lease Agreement	Great Miracle Asset 3 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<p><u>Leased Property</u> Land and buildings for storing company products</p> <p><u>Rental Rate</u> The rental rate is fixed at 164,560 baht per month. (January 1, 2021 to December 31, 2023)</p> <p><u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.</p>
1.6 Land, Building and Structure Lease Agreement	Great Miracle Asset 8 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<p><u>Leased Property</u> Land and buildings for storing company documents</p> <p><u>Rental Rate</u> The rental rate is fixed at 91,700 baht per month.</p> <p><u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.</p>



Contract	Parties	Period	Details
1.7 The lease agreement of the factory roof of building for the installation of solar panels	Gunkul Solar Roof 1 Co., Ltd.	3 Years Start September 3, 2014 by extending the agreement for 3 years each	<u>Leased Property</u> For installing solar panels on the roof <u>Rental Rate</u> The rental rate is fixed at 1,800 baht per month.
2. G.K. Assembly Co., Ltd.			
2.1 Factory Building Sublease Agreement	G.K. Power Products Co., Ltd.	3 Years January 4, 2021 to December 31, 2023	<u>Leased Property</u> Factory Building, Plastic Department of G.K. Power Products Co., Ltd. <u>Rental Rate</u> The rental rate is fixed at 83,000 baht per month. (January 1, 2018 to February 28, 2018) The rental rate is fixed at 91,800 baht per month. (March 1, 2018 to December 31, 2020) The rental rate is fixed at 60,000 baht per month. (January 4, 2021 to December 31, 2023) <u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period. <u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.

Contract	Parties	Period	Details
2.2 Land Lease Agreement for Storage of Goods	Great Miracle Asset 9 Co., Ltd.	3 Years January 4, 2021 to December 31, 2023	<p><u>Leased Property</u> Vacant land for storage</p> <p><u>Rental Rate</u> The rental rate is fixed at 63,600 baht per month. (January 1, 2018 to February 28, 2018) The rental rate is fixed at 70,000 baht per month. (March 1, 2018 to December 31, 2020) The rental rate is fixed at 70,000 baht per month. (January 4, 2021 to December 31, 2023)</p> <p><u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period.</p> <p><u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.</p>
2.3 The lease agreement of the factory roof of building for the installation of solar panels	Gunkul Solar Roof 1 Co., Ltd.	3 Years (Start September 2, 2014 by extending the agreement for 3 years each)	<p><u>Leased Property</u> For installing solar panels on the roof</p> <p><u>Rental Rate</u> The rental rate is fixed at 10,368 baht per month.</p>
3. G.K. Power Products Co., Ltd.			
3.1 Land and Building Sublease Agreement, which is the location of the head office, factory and warehouse	Great Miracle Asset 7 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<p><u>Leased Property</u> Land, Test Building and Warehouse</p> <p><u>Rental Rate</u> The rental rate is fixed at 51,000 baht per month. (January 1, 2018 to February 28, 2018) The rental rate is fixed at 56,300 baht per month. (March 1, 2018 to December 31, 2020) The rental rate is fixed at 56,300 baht per month. (January 1, 2021 to December 31, 2023)</p> <p><u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period.</p> <p><u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.</p>

Contract	Parties	Period	Details
3.2 Factory Building Lease Agreement	Gunkul Energy Solution and Lighting Co., Ltd.	3 Years October 1, 2019 to December 31, 2022	<p><u>Leased Property</u> Factory building for producing and selling LED lighting</p> <p><u>Rental Rate</u> The rental rate is fixed at 66,150 baht per month. (October 1, 2019 to December 31, 2022)</p> <p><u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period.</p> <p><u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.</p>
4. NK Power Sola Co., Ltd.			
4.1 Land lease agreement for power plant business	Gunkul Engineering Public Co., Ltd.	26 Years June 12, 2023 to June 11, 2039	<p><u>Leased Property</u> Land for the business of generating electricity from solar power plants</p> <p><u>Rental Rate</u> Rental Rate 176,010.00 baht per year, by increasing rental rate 10% every 4 years</p> <p><u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.</p>
5. Gunkul Energy Solution and Lighting Co., Ltd.			
5.1 Factory Building Lease Agreement	G.K. Power Products Co., Ltd.	3 Years 3 Months October 1, 2019 to December 31, 2022	<p><u>Leased Property</u> Factory building for producing and selling LED</p> <p><u>Rental Rate</u> The rental rate is fixed at 66,150 baht per month. (October 1, 2019 to December 31, 2022)</p> <p><u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement 30 days in advance.</p>



Contract		Parties	Period	Details
6. Gunkul Power Development Co., Ltd.				
6.1	Head Office Building Lease Agreement	T.C.T. Co., Ltd.	3 Years February 1, 2020 to January 31, 2023	<u>Leased Property</u> The building which is a Head Office Location <u>Rental Rate</u> The rental rate is fixed at 62,640 baht per month, with a service contract of 41,760 baht per month. <u>Agreement Renewal</u> Notify in writing at least 180 days prior to the expiration of the rental period. <u>Termination of Agreement</u> Notify in writing at least 30 days in advance.
6.2	Factory Building Lease Agreement	G.K. Power Products Co., Ltd.	2 Years 1 Month December 1, 2021 to December 31, 2023	<u>Leased Property</u> Buildings and structures for using in the Company's business <u>Rental Rate</u> The rental rate is fixed at 17,700 baht per month. (December 1, 2021 to December 31, 2023) <u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement 30 days in advance.
6.3	Land, Building and Structure Lease Agreement	Great Miracle Asset 3 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<u>Leased Property</u> Land and structure for storing company products <u>Rental Rate</u> The rental rate is fixed at 19,360 baht per month. (January 1, 2021 to February 28, 2023) <u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.
6.4	Land, Building and Structure Lease Agreement	Great Miracle Asset 4 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<u>Leased Property</u> Land and structure for storing company products <u>Rental Rate</u> The rental rate is fixed at 19,360 baht per month. (January 1, 2021 to February 28, 2023) <u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.



Contract		Parties	Period	Details
7. Future Electrical Control Co., Ltd.				
7.1	Head Office Building Lease Agreement	T.C.T. Co., Ltd.	3 Years February 1, 2021 to January 31, 2024	<u>Leased Property</u> The building which is a Head Office Location <u>Rental Rate</u> The rental rate is fixed at 180,480 baht per month, with a service contract of 120,320 baht per month. <u>Agreement Renewal</u> Notify in writing at least 180 days prior to the expiration of the rental period. <u>Termination of Agreement</u> Notify in writing at least 30 days in advance.
7.2	Land, Building and Structure Lease Agreement	Great Miracle Asset 3 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<u>Leased Property</u> Land and structure for storing company products <u>Rental Rate</u> The rental rate is fixed at 9,680 baht per month. <u>Termination of Agreement</u> If the lessee breaches any of the lease agreements, the lessor has the right to terminate the agreement.
7.3	Land, Building and Structure Lease Agreement	Great Miracle Asset 4 Co., Ltd.	3 Years January 1, 2021 to December 31, 2023	<u>Leased Property</u> Warehouse area (Ratchaneekorn) <u>Rental Rate</u> The rental rate is fixed at 30,400 baht per month. <u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period. <u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.



Contract		Parties	Period	Details
8. Gunkul B2B Co., Ltd.				
8.1	Building Lease Agreement for Storage of Goods	Gunkul Engineering Public Co., Ltd.	3 Years May 1, 2021 to December 31, 2022	<p><u>Leased Property</u> Warehouse area (Ratchaneekorn)</p> <p><u>Rental Rate</u> The rental rate is fixed at 19,663 baht per month. (May 1, 2021 to May 31, 2021) The rental rate is fixed at 16,854 baht per month. (June 1, 2021 to June 30, 2021) The rental rate is fixed at 39,326 baht per month. (July 1, 2021 to July 31, 2021) The rental rate is fixed at 42,135 baht per month. (August 1, 2021 to December 31, 2022)</p> <p><u>Agreement Renewal</u> Notify in writing at least 30 days prior to the expiration of the rental period.</p> <p><u>Termination of Agreement</u> Notify in writing at least 30 days in advance, which a rent must be paid in the amount of 1 month since the date the lessor acknowledges the intent to terminate the agreement.</p>

2) Power Purchase Agreement from EGAT of the Subsidiaries

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Wind Energy Development Co., Ltd.	EGAT	1	50.0 MW	Nakhon Ratchasima	2016	on schedule
2	Greenovation Power Co., Ltd.	EGAT	1	67.5 MW	Nakhon Ratchasima	2018	on schedule
3	Korat Wind Energy Co., Ltd.	EGAT	1	50.0 MW	Nakhon Ratchasima	2018	on schedule

EGAT: Electricity Generating Authority of Thailand

MW: Megawatt

Details of Power Purchase Agreement (PPA)

Agreement Details	:	The EGAT and 3 subsidiaries of the Company have agreed to trade electricity at a voltage of 115 kV, according to the conditions of the regulations for the purchase of electricity from the electricity supplier for the production of electricity from renewable energy, with the purchase point as detailed above.
Trading Conditions	:	The power producer must sell electricity to the EGAT within the date specified in the agreement. (The date set for selling electricity to the EGAT)
Agreement Period	:	5 years from the date of signing the agreement and continuously for 5 years each time. The party that wishing to renew the contract shall give written notice to the other party at least 30 days prior to the expiration of the agreement.
Termination of the Agreement	:	If the counterparty fails to comply with one of the agreements, the other party shall notify the other party to take corrective action. If no corrective action is taken, the other party has the right to terminate the agreement.

3) Power Purchase Agreement from PEA of the Subsidiaries

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Wind Energy Development Co., Ltd.	PEA	2	10.0 MW	Nakhon Ratchasima	2016	on schedule
2	Rangngern Solution Co.,Ltd.	PEA	11	87.0 MW	Kanchanaburi, Phetchaburi, Prachuap Khiri Khan, Lampang, Phrae	2015 2016	on schedule on schedule
3	NK Power Sola Co., Ltd.	PEA	1	1.0 MW	Kanchanaburi	2013	on schedule
4	Gunkul Solar Power 2 Co., Ltd.	PEA	1	538.56 kW	Chonburi	2013	on schedule

PEA: Provincial Electricity Authority MW: Megawatt kW: Kilowatt

Details of Power Purchase Agreement (PPA)

- Agreement Details** : The PEA and 4 subsidiaries of the Company have agreed to trade electricity at a voltage level of 22,000 kV, according to the conditions of the regulations for purchasing electricity from very small power producers for electricity generation from renewable energy with the purchase point as detailed above.
- Trading Conditions** : The power producer must sell electricity to the PEA within the date specified in the agreement. (The date set for selling electricity to the PEA)
- Agreement Period** : 5 years from the date of signing the agreement and automatically continue for 5 years each time, and will be effective until the agreement is terminated.
- Termination of the Agreement** :
1. The Power Producer submits a written letter to the PEA by expressing an intention to terminate the purchase of electricity by termination of the agreement.
 2. If the counterparty fails to comply with one of the agreements, the other party shall notify the other party to take corrective action. If no corrective action is taken, the other party has the right to terminate the agreement.

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Eco Thai Energy Co., Ltd.	PEA	1	5.0 MW	Samut Sakhon	2016	on schedule
2	BMP Solar Co., Ltd.	PEA	1	8.0 MW	Sa Kaeo	2016	on schedule
3	Gunkul Infinite Group Co., Ltd.	PEA	2	0.8748 kW	Pathum Thani, Samut Prakan	2020	on schedule

PEA: Provincial Electricity Authority MW: Megawatt kW: Kilowatt

Details of Power Purchase Agreement (PPA)

- Agreement Details** : The PEA and 3 subsidiaries of the Company have agreed to trade electricity at a voltage level of 22 kV, according to the conditions of the regulations for purchasing electricity from very small power producers for electricity generation from renewable energy with the purchase point as detailed above.
- Trading Conditions** : The power producer must sell electricity to the PEA within the date specified in the agreement. (The date set for selling electricity to the PEA)
- Agreement Period** : 25 years from the date of signing the agreement for Eco Thai Energy Co., Ltd. and BMP Solar Co., Ltd. As for Gunkul Infinite Group Co., Ltd. starting from the date of the purchase of electricity and ending on the same day as the land sublease and building lease agreements.
- Termination of the Agreement** :
1. When the power purchaser receives a written notice of termination from the Power Producer.
 2. When one party terminates the contract due to the other party fails to comply with any of the agreements.

4) Power Purchase Agreement from PEA of the Associated Companies

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Gunkul Chubu Powergen Co., Ltd.	PEA	6	24.4 MW	Phetchabun Nakhon Nayok Phichit	2011 2013	on schedule
2	G-Power Source Co., Ltd.	PEA	4	26.0 MW	Nakhon Sawan Chainat Phetchabun	2012 2013	on schedule

PEA: Provincial Electricity Authority

MW: Megawatt

Details of Power Purchase Agreement (PPA)

- Agreement Details** : The PEA and 2 subsidiaries of the Company have agreed to trade electricity at a voltage level of 22,000 volts, according to the conditions of the regulations for purchasing electricity from very small power producers for electricity generation from renewable energy with the purchase point as detailed above.
- Trading Conditions** : The power producer must sell electricity to the PEA within the date specified in the agreement. (The date set for selling electricity to the PEA)
- Agreement Period** : 5 years from the date of signing the agreement and automatically continue for 5 years each time, and will be effectives until the agreement is terminated.
- Termination of the Agreement** :
1. The Power Producer submits a written letter to the PEA by expressing an intention to terminate the purchase of electricity by termination of the agreement.
2. If the counterparty fails to comply with one of the agreements, the other party shall notify the other party to take corrective action. If no corrective action is taken, the other party has the right to terminate the agreement.

5) Power Purchase Agreement from MEA of the Subsidiaries

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Solar Energy Society Co., Ltd.	MEA	1	499.2 kW	Bangkok	2013	on schedule
2	Siam Gunkul Solar Energy Co., Ltd.	MEA	1	873.6 kW	Bangkok	2013	on schedule
3	Gunkul Solar Roof 1 Co., Ltd.	MEA	2	264.32 kW	Bangkok	2013	on schedule
4	Gunkul Solar Roof 2 Co., Ltd.	MEA	1	538.56 kW	Chonburi	2014	on schedule

MEA: Metropolitan Electricity Authority kW: Kilowatt

Details of Power Purchase Agreement (PPA)

- Agreement Details** : The MEA has agreed to purchase electricity at a voltage level of 24 kV with Solar Energy Society Co., Ltd. Siam Gunkul Solar Energy Co., Ltd. and Gunkul Solar Roof 1 Co., Ltd. As for Gunkul Solar Roof 2 Co., Ltd. at a voltage level of 22 kV according to the conditions of the regulations for the purchase of electricity from very small power producers for generating electricity from renewable energy with the point of purchase as detailed above.
- Trading Conditions** : The power producer must sell electricity to the MEA within the date specified in the agreement. (The date set for selling electricity to the MEA)
- Agreement Period** : 5 years from the date of signing the agreement and automatically continue for 5 years each time, and will be effective until the agreement is terminated.
- Termination of the Agreement** :
1. The Power Producer submits a written letter to the MEA by expressing an intention to terminate the purchase of electricity by termination of the agreement.
2. If the counterparty fails to comply with one of the agreements, the other party shall notify the other party to take corrective action. If no corrective action is taken, the other party has the right to terminate the agreement.

6) Power Purchase Agreement from MEA of the Associated Companies

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	WHA Gunkul Green Solar Roof 1 Co., Ltd.	MEA	1	636.48 kW	Samut Prakan	2013	on schedule
2	WHA Gunkul Green Solar Roof 3 Co., Ltd.	MEA	1	832.32 kW	Samut Prakan	2013	on schedule
3	WHA Gunkul Green Solar Roof 6 Co., Ltd.	MEA	1	832.32 kW	Samut Prakan	2013	on schedule
4	WHA Gunkul Green Solar Roof 17 Co., Ltd.	MEA	1	997.56 kW	Ayutthaya	2013	on schedule

MEA: Metropolitan Electricity Authority

kW: Kilowatt

Details of Power Purchase Agreement (PPA)

- Agreement Details** : The MEA and 4 Associated Company have agreed to trade electricity at a voltage level of 24 kV, according to the conditions of the regulations for the purchase of electricity from very small power producers for generating electricity from renewable energy with the point of purchase as detailed above.
- Trading Conditions** : The power producer must sell electricity to the MEA within the date specified in the agreement. (The date set for selling electricity to the MEA)
- Agreement Period** : 5 years from the date of signing the agreement and automatically continue for 5 years each time, and will be effective until the agreement is terminated.
- Termination of the Agreement** :
1. The Power Producer submits a written letter to the MEA by expressing an intention to terminate the purchase of electricity by termination of the agreement.
2. If the counterparty fails to comply with one of the agreements, the other party shall notify the other party to take corrective action. If no corrective action is taken, the other party has the right to terminate the agreement.

7) Power purchase agreement from the subsidiaries' overseas electricity authority

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Sendai Okura GD Daiichi Godo Kaisha, Japan	Tohoku	1	31.75 MW	Miyagi, Japan	ปี 2561	on schedule
2	Kimitsu Mega Solar Godo Kaisha, Japan	TEPCO	1	33.5 MW	Chiba, Japan	ปี 2562	on schedule
3	Tri Viet Tay Ninh Joint Stock Company, Vietnam	EVN	1	30.0 MW	Tay Ninh, Vietnam	ปี 2562	on schedule
4	Bach Khoa A Chau Tay Ninh Joint Stock Company, Vietnam	EVN	1	30.0 MW	Tay Ninh, Vietnam	ปี 2562	on schedule
5	Tan Chau Energy Joint Stock Company, Vietnam	EVN	1	50.0 MW	Tay Ninh, Vietnam	ปี 2563	on schedule
6	Doan Son Thuy Investment Joint Stock Company, Vietnam	EVN	1	50.0 MW	Tay Ninh, Vietnam	ปี 2563	on schedule

Tohoku: Tohoku Electric Power Co., Inc. in Japan

MW: Megawatt

TEPCO: TEPCO Energy Partner Co., Inc. in Japan

EVN: Vietnam Electricity Group

Details of Power Purchase Agreement (PPA)

Agreement Details	:	Tohoku Electric Power Co., Inc. and Sendai Okura GD Daiichi Godo Kaisha, including TEPCO Energy Partner Co., Inc. and Kimitsu Mega Solar Godo Kaisha have agreed to trade electricity at a voltage of 66 kV, according to the conditions of the regulations for the purchase of electricity from the electricity supplier for the production of electricity from renewable energy, with the purchase point as detailed above. Vietnam Electricity Group and 4 subsidiaries of the Company have agreed to trade electricity at a voltage level of 110 kV, according to the conditions of the regulations for the purchase of electricity from the electricity supplier for the production of electricity from renewable energy, with the purchase point as detailed above.
Trading Conditions	:	The electricity supplier is required to sell electricity to the overseas electricity authority within the date specified in the contract.
Agreement Period	:	20 years from the date of commencement of the sale of electricity.
Termination of the Agreement	:	20 years after the start of electricity sales

8) Power purchase agreement from private agency of subsidiaries

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
1	Solar Energy Society Co., Ltd.	Z. Kuroda (Thailand) Co., Ltd.	1	594 kW	Ayutthaya	2020	on schedule
2	Solar Energy Society Co., Ltd.	CPF (Thailand) PCL	26	22,969.01 kW	Bangkok, Prachinburi, Saraburi, Nakhon Nayok, Nakhon Ratchasima, Chachoengsao, Samut Sakhon, Phra Nakhon Si Ayutthaya, Chonburi, Songkhla, Samut Sakhon, Rayong, Chumphon, Khon Kaen, Ratchaburi, Lamphun	2020 2021 2022	- Year 2020 - 2021, 13 projects, total size of 11,868.78 MW: on scheduled - -Year 2022, 13 projects, total size of 11,100.23 MW: in progress
3	Solar Energy Society Co., Ltd.	Home Product Center PCL	18	8,286.3 kW	Bangkok, Pathum Thani, Saraburi, Chachoengsao, Ratchaburi, Prachin Buri, Nakhon Ratchasima, Phetchabun, Roi Et, Sakon Nakhon, Phuket, Chanthaburi, Loei, Chaiyaphum, Phitsanulok, Chiang Rai, Prachuap Khiri Khan, Kanchanaburi	2020 2021	on schedule
4	Solar Energy Society Co., Ltd.	Golden Farm Korat PCL	1	362.88 kW	Nakhon Ratchasima	2020	on schedule
5	Solar Energy Society Co., Ltd.	Murata Electronics (Thailand) Co., Ltd.	2	4,450.84 kW	Lamphun	2020 2021	on schedule
6	Solar Energy Society Co., Ltd.	Biodegradable Packag- ing for Environment PCL	1	998.76 kW	Chai Nat	2021	on schedule

No.	Subsidiaries	Party	Quantity (Project)	Total Size of Electricity Distribution	Project Located	Deadline for distributing electricity into the system	Operation
7	Solar Energy Society Co., Ltd.	Huachiew Chalermprakiet University	1	829.44 kW	Samut Prakan	2022	in progress
8	Solar Energy Society Co., Ltd.	C.J. Express Group Co., Ltd.	3	96.0 kW	Nakhon Pathom, Ratchaburi, Samut Sakhon	2021	on schedule
9	Solar Energy Society Co., Ltd.	Robinson Department Store PCL	1	999.58 kW	Phetchaburi	2017	on schedule
10	Solar Energy Society Co., Ltd.	Asia Golden Rice Co., Ltd.	1	1,506.6 kW	Chachoengsao	2022	in progress
11	Solar Energy Society Co., Ltd.	MMP Corporation Co., Ltd.	1	1,863.08 kW	Nakhon Ratchasima	2022	in progress
12	Solar Energy Society Co., Ltd.	Vatthanavej Co., Ltd.	1	482.4 kW	Chanthaburi	2020	on schedule

kW: Kilowatt

Details of Power Purchase Agreement (PPA)

Agreement Details	: For Z. Kuroda (Thailand) Co., Ltd., the agreement term is 10 years from the date of supplying electricity into the system and will be effective until the agreement is terminated. For CPF (Thailand) PCL, Home Product Center PCL, Golden Farm Korat PCL, Murata Electronics (Thailand) Co., Ltd., Biodegradable Packaging for Environment PCL, Huachiew Chalermprakiet University and C.J. Express Group Co., Ltd., the agreement term is 15 years from the date of supplying electricity into the system and will be effective until the agreement is terminated. For Robinson Department Store PCL, Asia Golden Rice Co., Ltd., MMP Corporation Co., Ltd., the agreement term is 20 years from the date of supplying electricity into the system and will be effective until the agreement is terminated. For Vatthanavej Co., Ltd., the agreement term is 24 years from the date of supplying electricity into the system and will be effective until the agreement is terminated.
Termination of the Agreement	: 1. The Power Producer submits a written letter to the MEA by expressing an intention to terminate the purchase of electricity by termination of the agreement. 2. If the counterparty fails to comply with one of the agreements, the other party shall notify the other party to take corrective action. If no corrective action is taken, the other party has the right to terminate the agreement.

Attachment 5

Corporate Governance Policy and Guidelines and Business Ethic

Corporate Governance Policy and Guidelines and Business Ethics as well as the charter and other policies that has been disclosed on the Company website are the following items:



Charter

(<https://www.gunkul.com/en/corporate-governance/charters>)

- Board of Directors Charter
- Audit Committee Charter
- Risk Management Committee Charter
- Nomination and Remuneration Committee Charter
- Good Corporate Governance Committee Charter
- Executive Committee Charter
- Company Secretary Charter
- Internal Audit Charter

Policies

(<https://www.gunkul.com/en/corporate-governance/policy-and-procedures>)

- Good Corporate Governance Policy
- Business Ethics Policy
- Anti-Corruption and Whistle Blowing Policy
- Role, Authority, Duty and Responsibility of the Chairman and Chief Executive Officer Policy
- Transaction measures with the Related and Non-Related Parties Policy
- Enterprise Risk Management Policy
- Nomination and Appointment of Directors and Executives Policy
- Determination on the Remuneration of All Committees Policy

- Succession Plan and Talent Management Policy
- Investor Relations Ethics Policy
- Dividend Policy
- Remuneration and Welfare for Executives and Employees Policy
- Human Rights Policy
- Tax Management Policy
- Sustainable Development Policy
- Procurement Policy
- Environment and Climate Change Management Policy
- Supplier Code of Conduct

Others

- Thai Private Sector Collective Action Against Corruption (CAC)
(<https://www.gunkul.com/en/corporate-governance/member-of-thai-private-sector-collective-action-against-corruption>)
- Privacy Notice
(<https://www.gunkul.com/en/personal-data-protection/privacy-notice>)

The Company regularly reviews the policies and charters as least once a year.

Attachment 6

Report of the Audit Committee

The Audit Committee consists of independent directors who are qualified and knowledgeable, competent and experienced in accounting, finance, legal, management and energy business. The qualifications of those independent directors are in accordance with the requirements of the Securities and Exchange Commission and the Stock Exchange of Thailand. The Audit Committee has 3 members namely, Dr. Chongrak Rarueysong as the Chairman of the Audit Committee, Assoc.Prof. Dr. Panarat Panmanee and Mr. Tarakorn Angpubate as Members of the Audit Committee.

The Audit Committee has performed their duties and responsibilities that assigned by the Board of Directors in full compliance with the Audit Committee Charter (Details are available on the Company's website at <https://www.gunkul.com/storage/download/cg/2021/2021-gunkul-charter-audit-th.pdf> as well as in accordance with the requirements and best practices for the Audit Committee as specified by the Stock Exchange of Thailand. The Audit Committee also reported the performance to the Board of Directors on a regular basis.

In the year 2021, the Audit Committee held 5 meetings which were attended by all members of the Audit Committee. In addition, the financial and accounting management, Auditor and Head of Internal Audit as well as other executives were invited to attend the meetings in order to provide information, acquire comments and recommendations which were benefit to the Company's operation. Moreover, the Audit Committee arranged a meeting between the Audit Committee and the Auditor in an absence of the management. The results of each meeting were presented to the Board of Directors of the Company. During past year, the Audit Committee carried out important activities, which could be summarized as follows;

1. Reviewed the financial statements, the Audit Committee reviewed the Quarterly and Yearly Financial Statements, as well as related financial reports by cooperating with the Certified Public Accountant and the Company's management on material issues, adjustments of material accounting items, accounting estimation that affect financial information and financial reports, Key Audit Matters (KAM). The Audit Committee also reviewed the independency of the Auditor to ensure that the financial report of the Company had been prepared in accordance with the accounting standards, with adequate information disclosure, completely and reliable, complies with applicable laws and regulations, before the financial statements were submitted to the Board of Directors or shareholders for approval.



- 2. Reviewed the adequacy and appropriateness of the internal control system,** the Audit Committee reviewed the adequacy, appropriateness and effectiveness of the internal control system of the Company and its subsidiaries by appraised from the reports of the Company's internal audit and the Auditor. This included the evaluation of the internal control system in accordance with the guidelines set forth by the Securities and Exchange Commission. The Audit Committee was of the view that the Company has an appropriate and adequate internal control system and reasonably assure that the Company has sufficient and effective internal control system.
- 3. Supervised of internal audit,** the Audit Committee supervised the Internal Audit Department to have independence as specified in the Internal Audit charter, in order to ensure that the internal audit practices have efficiency and effectiveness, accurate and comply with the rules and regulations of the Securities and Exchange Commission and international standards. The Audit Committee reviewed the suitability and endorsed the annual internal audit plan by incorporated a risk-based approach, considered and reviewed the internal audit report of the Internal Audit Department, together with providing comments and recommendations for the internal control improvement. Furthermore, the Audit Committee reviewed the annual internal audit plan to ensure that the audit plan was adjusted to be applicable with changing situations effectively and efficiently.
- 4. Reviewed the risk management,** the Audit Committee reviewed the risk management procedure in order to ensure that the risk management procedure was appropriate and effective, resulting in reduction of the associated risks to an acceptable level. Since the Company has given priority to develop the risk management procedure, the Board of Directors also appointed the Risk Management Committee to establish the risk management framework and policies to be effectively implemented throughout the Company and its subsidiaries in accordance with the Company's goals.

- 5. Reviewed related party or transactions that may have conflicts of interest,** the Audit Committee has given great importance to the consideration of related party transactions and transactions that may have conflicts of interest in accordance with the laws and regulations of the Stock Exchange of Thailand on a quarterly basis by assigning the Internal Audit Department to monitor and review the preliminary accuracy and forward to the Auditor to review such transactions annually. The Audit Committee was of the opinion that the considered connected transactions were conducted in a fair manner and at an arm's length basis and performed in accordance with normal trade conditions, reasonable, and was of the greatest benefit to the Company, without beneficial to any party. Moreover, the related party transactions were disclosed following the process guideline and relevant law and regulations.
- 6. Ensured the compliance with the Securities and Exchange Act,** the Audit Committee reviewed the operations and directed the Company to perform various transactions in accordance with the Securities and Exchange Act, notifications and regulations of the Stock Exchange of Thailand as well as other specific laws that relating to the Company's business. In addition, the Audit Committee urged the Company to follow up on the laws which under hearing process and may have an impact on the Company in order to prepare before the announcement. The Audit Committee also approved the establishment of the Compliance Unit under the Internal Audit Department to supervise and monitor operations in accordance with all relevant laws, in order to comply with the principles of good corporate governance.
- 7. Encouraged good corporate governance and considered complaints about fraud or corruption,** the Audit Committee emphasized the Company's operations to adhere with good corporate governance practice, the system for receiving complaints, including providing channels for employees, shareholders and stakeholders to be able to conveniently contact the Audit Committee directly in order to be able to make the complaints, illegal or business ethical misconduct, or inquiries in financial reports or internal control systems to the Audit Committee, via email, website, postal and whistleblower box as well as having measures to protect the informant and to be treated as confidential.

- 8. Considered, proposed the appointment and determined the remuneration of the Auditor of the Company,** the Audit Committee considered the qualification of the Auditors by taking into account the independency, business knowledge including audit fees. Hence, the Audit Committee proposed the Board of Directors to consider appointing an Auditor approved by the SEC, namely Mr. Waiyawut Kosamarnchaiyakij ,Certified Public Accountant No. 6333 and/or Mr. Natthaphong Tantichattanont, Certified Public Accountant No. 8829, and/or Ms. Sophit Prompol, Certified Public Accountant No. 10042 from KPMG Phoomchai Audit Co., Ltd. to be the auditor of the Company and its subsidiaries for the year 2022 , in order to propose to the 2022 Annual General Meeting of Shareholders

In conclusion, the Audit Committee was of the opinion that the Company provided accurate, complete and reliable financial reports, with an adequate internal control system and good corporate governance practices that complying with the Securities and Exchange Act, notifications and regulations of the Stock Exchange of Thailand and other relevant laws. The information on related party transactions or transactions that may have conflicts of interest were fully disclosed.



Dr. Chongrak Rarueysong
Chairman of the Audit Committee
February 23, 2022

Attachment 7

Sustainability Report

Details of the Sustainability Report is disclosed in the Company's Website.
(<https://www.gunkul.com/en/investor-relations/download/annual-report>)





Building Sustainable Growth

Sustainability Report
2021



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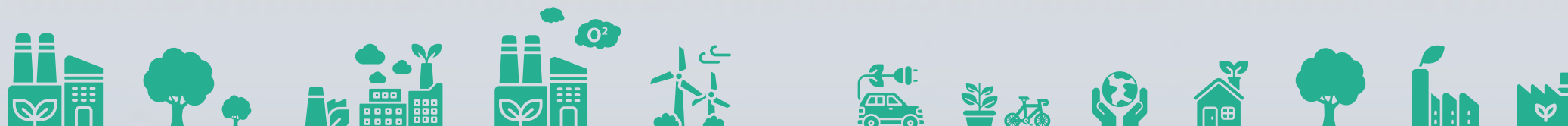
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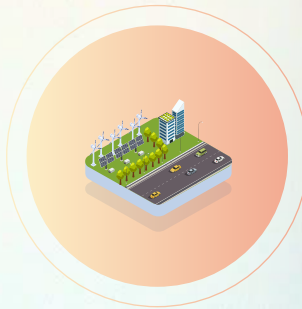
Message from the Chief Executive Officer



We care Business



We care People



We care Social

Over 40 years in operating the business, Gunkul Engineering Public Company Limited (the “Company”) is determined to develop its business to continuously grow under the framework of driving the organization towards sustainability. The Company conducts its business responsibly according to the policy framework “We care” which focuses on creating added value in 3 dimensions namely economy, society and environment under good corporate governance.

The Company aims to be a leader in integrated energy business covering renewable energy, electrical equipment, and power system, with cutting-edge technology and innovation for sustainable infrastructure development, and to be a global player in cannabis business with desire to improve quality of life and good wellness under the covenant **“not only the energy, we care”**



Economic

In 2021, the revenue from normal operation of the group of company can continue to grow for the seventh year in a row which created a stable value for shareholders, and the Company continues to set a business growth target for a period of 3 years in the value at not less than 20 percent per year.

Social

Promote the development of knowledge about renewable energy to educational institutions, organizations and communities surrounding the power plants and take part in improving the quality of life of the community in various projects such as supporting medical equipment to hospitals, supporting PPE kits, supporting budgets to support the spread of COVID-19, and etc.

Environmental

The business of generating electricity from renewable energy plays an important role in controlling climate change and greenhouse gas emissions by helping to reduce carbon dioxide emissions. Currently, the Company has 642 megawatts of renewable energy capacity with a plan to expand to 1,000 megawatts in 2023, which supports the Company's intention to achieve its emissions goals to zero net carbon dioxide according to government policy.

Employees

In the situation of the epidemic, the Company prioritizes the health and safety of employees. To reduce the chances of the spread of COVID-19, the Company organizes group of employees to work from home and facilitated with technology equipment to support work from home, arranged for employees to get vaccinations, get insurance for COVID-19, and distributed Gunkul Care Bags to employees, etc.

The year of 2021 is a year of having significant organizational restructuring so that it can support the changing dynamics of the energy business and related businesses, and to be in accordance with the vision and mission to have continual sustainable business operation by grouping businesses as follows:

- Renewable Energy Business Group
- Engineering and Turnkey Business Group
- High Voltage Equipment Business Group
- Ecosystem Business Platform & Innovation Business Group
- Cannabis Business Group

For hemp and cannabis, the relaxation of the Category 5 of narcotics law has created a significant opportunity for the Company to expand the business to the development of products containing CBD extracted from hemp flowers which can be utilized in the treatment of patients and used as an ingredient in beverage and cosmetic products. Also, the as well as the rising tendency in taking care of one's health of Thai people is an important condition that drives the Company into this business.

The restructuring of the Company's business will create the New S-Curve, which is an important mission that must be done to deliver as expected. The key strategy for the year 2022, the Company will focus on creating growth by collaborating with business partners and promoting each other, such as Origin Property Public Company Limited, Jay Mart Public Company Limited, and SCB 10X Company Limited by Siam Commercial Bank Public Company Limited, etc.

The Company realizes about the operation of business on the basis of good corporate governance with the concept of sustainable business development, promote the efficiency of the management, transparent, verifiable by taking into account all stakeholders and responsibility to the environment, society and community, which will develop to enable the Company to achieve its goals of creating economic value and growing with Thai society sustainably. The Company recognizes the importance of the United Nations Sustainable Development Goals (SDGs) 17 goals. The Company focuses on seven goals: SDG4 quality education, SDG7 affordable and clean energy, SDG8 decent work and economic growth, SDG9 industry, Innovation and infrastructure, SDG12 responsible consumption and production, SDG13 climate action, and SDG16 peace, justice and strong institution.

On behalf of the Board of Directors, management, and employees of Gunkul Engineering Public Company Limited, we would like to thank our shareholders, customers, business partners, financial institution, government agency, state enterprise and all stakeholders who play an important role in building success and pride for the Company including always giving confidence and trust. The Company will adhere to the principles of good governance and good corporate governance in conducting business with responsibility to the economy, society, and environment like this for all time.

(Dr. Somboon Aueatchasai)

Chief Executive Officer

Business Overview

Vision

To be a leader in integrated energy business covering renewable energy, electrical equipment, and power system, with cutting-edge technology and innovation for sustainable infrastructure development, and to be a global player in cannabis business with desire to improve quality of life and good wellness.



Corporate Culture

We GROWTH together

- G Goal**
Determination to achieve goals
- R Reliability**
To be reliable and professional at work
- O Ownership**
Caring and unity
- W Wisdom Learning**
Learning constantly causing intelligence and adaptation
- T Technology and Innovation**
Exposure to technology and extending innovation
- H Honesty and Governance**
Honest, transparent and dedicated to the responsibilities

Business Overview

Gunkul Engineering Public Company Limited (the “Company”) engages over all features of renewable energy, including equipment and electrical systems, and has progressed into the cannabis business by using modern technology and innovation to improve people’s quality of life, health, and sustainable growth infrastructure.

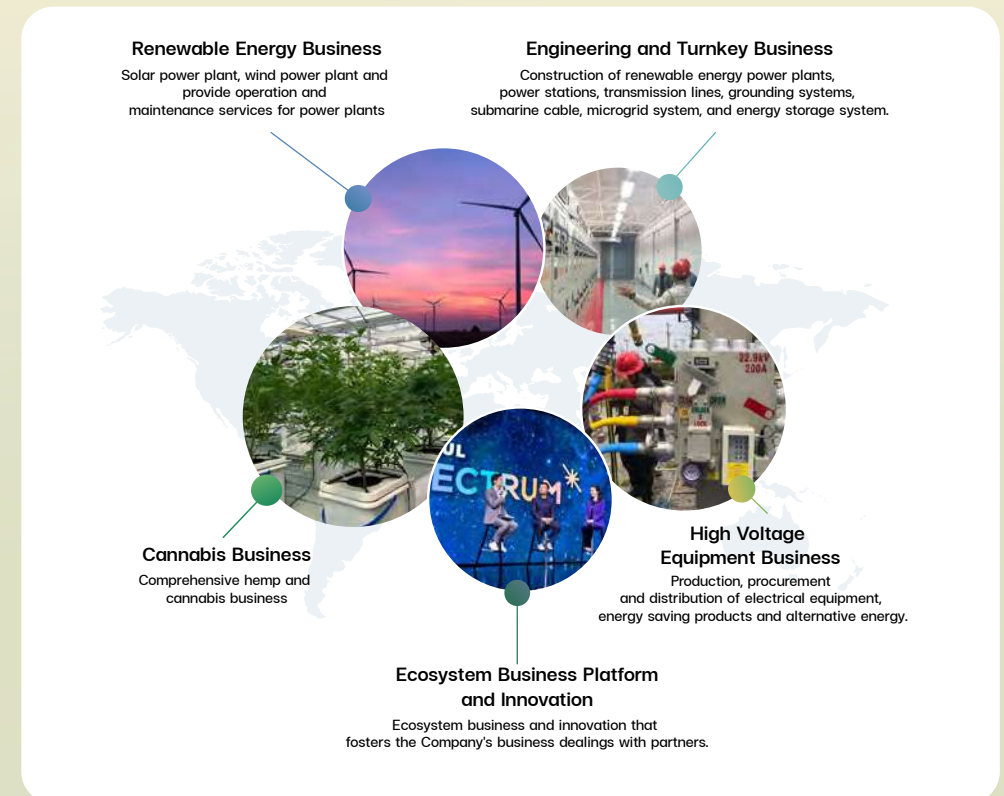
The Company was established in 1982 from the business of importing and distributing equipment for electrical systems and other related equipment to various public and private agencies. Afterwards, the Company had expanded the business of equipment for the electrical system fully covering production, procurement and distribution as well as starting to expand into other businesses, such as engineering, procurement, construction (EPC) services for electric station, electric system and renewable energy power plant and the maintenance of power plants of both public and private agencies. The Company was foreseeing the trend of increasing demand for electricity from renewable energy. Therefore, the Company had expanded its business scope into renewable energy business. The Company’s first solar power plant project started the commercial operation in 2011. The Company focused on expanding its energy business based on sustainable business practices that focus on the environment, society, and stakeholders, under the good corporate governance principles and in line with the power generation development plan and the renewable and alternative energy development plan. Due to the global trend of moving towards a Net Zero Carbon society, the Company aims to improve both quality, standards, and safety to become one of the leaders in renewable energy, innovation and energy digital platform.

Throughout the Company’s 40-year history, the Company was transformed to a public company limited in 2009 and its securities were listed for trading on the Stock Exchange of Thailand (SET) on October 19, 2010 under the name GUNKUL, resulting in the Company’s significant growth. In addition, with a strong financial position experience and expertise of the Company and collaboration with leading partners, the Company never stop to seek business opportunities to increase operational potential and increase business value for stable and sustainable returns. The Company has continuously expanded its business to cover the needs of consumers. For the renewable energy business, it has been extended to wind power plants. Investments have been expanded to foreign countries such as Japan, Malaysia and Vietnam and expanding the customer base to the private sector (Private PPA). In addition, digital disruption is an important factors driving the company to develop innovations and a comprehensive digital energy platform in order to make a difference in the development of the country’s infrastructure and energy sustainability. Recently, in 2021, the Company began expanding its business into the hemp and cannabis business which is a business opportunity from new economic crops to create added value and prepare for the New S-Curve of the business by using the Company’s former potential.

The Company plans to operate a comprehensive hemp and cannabis business for the health of Thai people which is fundamental to life. The Company plans to grow hemp in the greenhouse system for the highest level of quality control which is expected to be able to produce and gradually recognize income from 2022 onwards.

In this regard, the Company commits to conduct business along with maintaining the balance of economy, society and environment driving the organization towards sustainable development (<https://www.gunkul.com/storage/download/cg/2022/20220321-gunkul-sustainability-development-en.pdf>) and have a goal of operating so that all stakeholders can access and understand energy consumption providing an understanding that energy is tangible and able to utilize energy to its fullest potential

with the concept of “not only the energy, we care” which operates 5 main business groups as follows:



Awards and Achievements



The Company was selected, for the first time, by the SET, as one of Thailand Sustainability Investment (THSI) for the year 2021 since the SET established this Sustainable Investment list in 2015. The Company is considered as a listed company that commits to operating in a sustainable manner, with environmental and social responsibility concern, and in compliance with corporate governance principles (Environmental, Social and Governance: ESG).



The Company was assessed by Thai Institute of Directors Association (IOD) for Corporate Governance Report of Thai Listed Companies

CGR of the year 2021 as a listed company with an Excellent CG Scoring of 95 points and a score of “Excellent” in every category for the 5th year consecutively. The average score of each category are as follows:

Comparison of Corporate Governance Scorecard for the past 3 years (percent)				
Category	2019	2020	2021	
1. Rights of Shareholders	93	100	100	
2. Equitable Treatment of Shareholders	98	95	95	
3. Role of Stakeholders	94	94	94	
4. Disclosure and Transparency	97	99	99	
5. Responsibilities of the Board	91	93	93	
Average Score	94	95	95	



Gunkul Engineering Public Company Limited, Gunkul Power Development Co., Ltd., Future Electrical Control Co., Ltd., G.K. Assembly Co., Ltd. and G.K. Power Products Co., Ltd., totaling 5 companies, **received Thailand Labor Management Excellence Award 2021 from the Department of Labor Protection and Welfare, Ministry of Labor,** as an outstanding business operation in labor relations and labor welfare.



The Company received Sustainability Disclosure Award for the year 2021

from Thaipat Institute.



Ms. Sopacha Dhumrongpiyawut, Chairman of the Executive Committee, **received the Sustainability Rising Star Award 2021 from the Asia Corporate Excellence and Sustainability Award (ACES),**

organized by MORS Group, a large organization in Asia that promotes and assists various organizations for sustainable development.



Ms. Naruechon Dhumrongpiyawut, Chief Operating Officer, Strategic Investment and Sustainable Energy Business

received an award for outstanding female executives in the private sector (Large enterprises) for the year 2021

from the Department of Labor Protection and Welfare, Ministry of Labor, under the concept of “Women’s workers join forces to overcome the crisis, driving the sustainable Thai economy”.



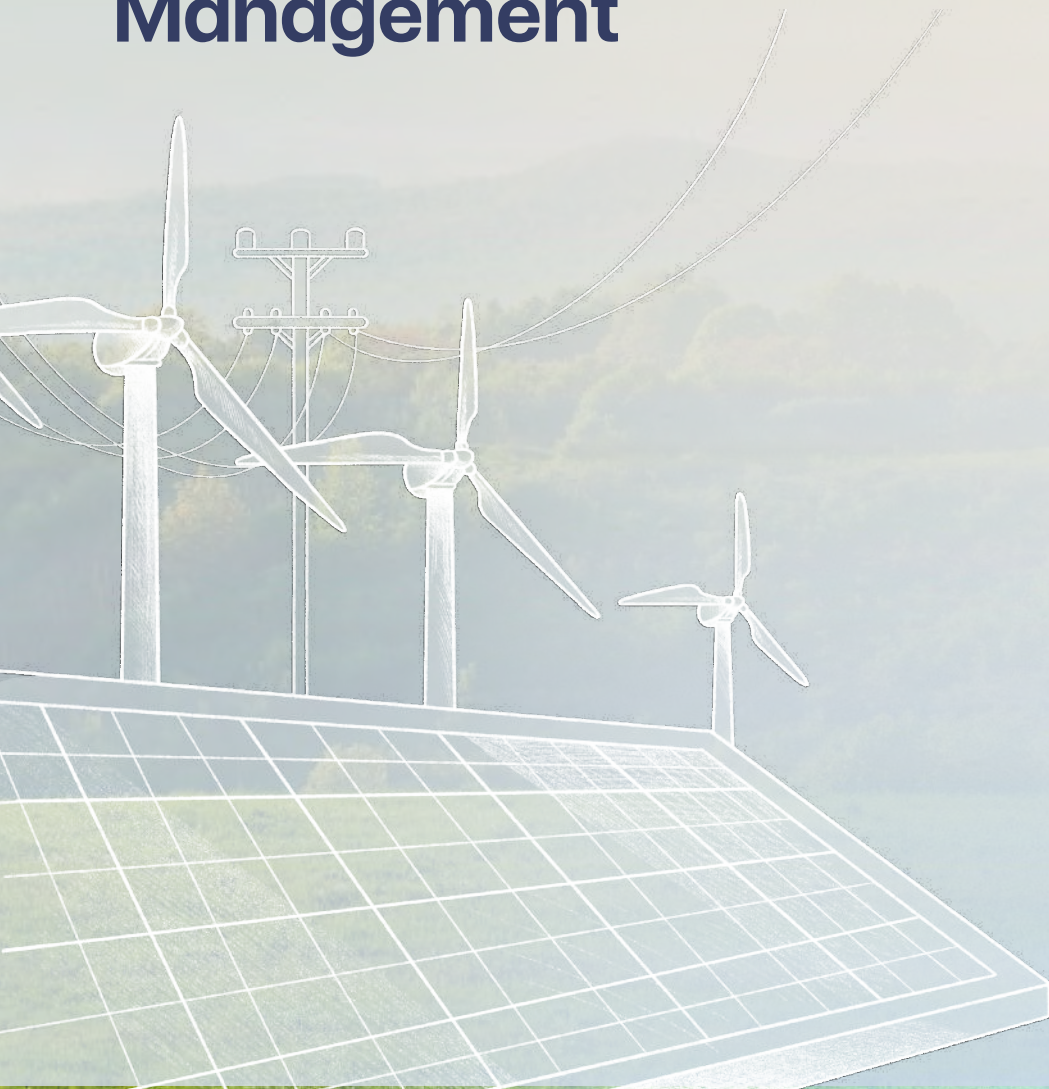
Part 1

Sustainability Management

Sustainable Development Policy 08

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Sustainability Organization Chart 14





Sustainable Development Policy

The Company believes that sustainable development, participation and growth together with all stakeholders is the way to create long-term value for the organization. In 2021, the Company has established a sustainable development policy and communicated it to all employees throughout the organization and disclosed to the public on the Company's website and uses as a framework for Company's business operation in accordance with the principles of good corporate governance management, response to all groups of stakeholders, as well as to raise awareness of the impact on society and the environment. The Company aims to be a leader in renewable energy business, equipment and integrated power systems with modern technology and innovation to develop infrastructure to be strong and sustainable, as well as a leader in the hemp and cannabis business internationally to enhance the quality of life and good health under the concept **"not only the energy, we care"**. The Company reviews sustainability management strategies annually as follows:



[Sustainable Development Policy](#)



We care Business

Develop a full-service business that responds to stakeholders with great value

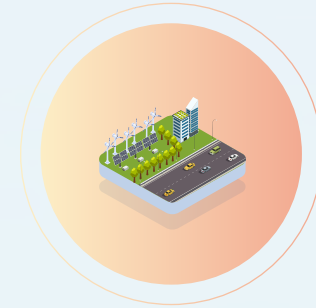
The Company develop a full-service business that responds to stakeholders with great value while also conducting business responsibly in accordance with the principles of good corporate governance. The Company never stops developing technology and creating innovations to improve operations, and deliver the best products and services to consumers with quality, standards, safety and environmental friendliness. This is to build confidence for stakeholders and to ensure the country's future power generation from renewable energy.



We care People

Develop people to be competent at work, talented, good interpersonal skill and excellent leadership

The Company develop people to be competent at work, talented, good interpersonal skill and excellent leadership. We believe that people are important resources of the organization. People are crucial mechanism in driving businesses to achieve sustainable success. As a result, we concentrate on human resource development through a work system that emphasizes participation, fostering a culture of teamwork and unity, and promoting skills and learning throughout the working period. We encourage employees to have the skills and competencies to work in all areas, as well as to foster a working culture within the organization by adhering to the principles of good governance and equitability according to human rights, safety, and health in order to lead the organization to excellence.



We care Social

Create opportunities for a harmonious society and environment for sustainable communities

The Company create opportunities for a harmonious society and environment for sustainable communities by strengthening community coexistence and providing mutual assistance as **"Good neighbors"** with an emphasis on natural resource management for utmost benefits, including developing technology and innovations to preserve society and environment to mitigate the Company's potential impact. The Company also prioritizes the sharing of experiences among individuals, organizations, communities, and stakeholders as well as access to electricity and renewable energy because it believes that electricity and energy are essential resources to which everyone should have equal access.

The Company has communicated and disseminated its sustainable development policy to all employees throughout the organization. This is to establish a culture of long-term accountability among executives and staff at all levels, so that they are aware of their roles, obligations, and responsibilities in implementing the policy. The COVID-19 pandemic is a crucial test in strategic planning, development, and keeping up with technology, as well as providing a basis for sustainable development for the community and society in all of the Company's activities. This is done in order to provide stakeholders with long-term, sustainable value.

Sustainability Management Goals and Strategies

The Company has established goals and strategies for sustainable development based on international guidelines, including Sustainable Development Goals (SDGs), organizational quality measurement standards (International Organization for Standardization: ISO). The Company monitors and reports results in accordance with the Global Reporting Initiative Standards (GRI Standards), which encompass economic, social and environmental issues as well as good corporate governance. This is to ensure consistent operations in all business groups of the Company as follows:

We care Business

Develop a full-service business that responds to stakeholders with great value



- Develop, improve, procure a complete range of electrical system products.
- Build on capital strength by expanding the energy business both domestically and internationally.
- Procure cutting-edge energy technology and innovation in respond to the use of renewable energy thoroughly and efficiently.
- Focus on expanding the construction business, both the electrical system and related equipment, including the above ground and subterranean transmission lines, and getting more underwater-cable work to generate income for sustainable growth.
- Commitment to using technology and innovation to provide products and services that meet requirements and develop a sustainable quality of life.
- Procure modern technology systems to enhance organizational management efficiency to meet the new normal style of working to ensure that the business can operate stably without any effect.
- Expand business and strive to seek opportunities to add business value for stable and sustainable returns.

We care People

Develop people to be competent at work, talented, good interpersonal skill and excellent leadership



- Create an appropriate **“GROWTH”** culture model that supports the strategy of the department and organization.
- Enhance supervisors’ skill to play a key role in driving and fostering appropriate behavior for subordinates so that they are **“competent at work, themselves, people, and team management”**.
- Develop personnel’s collective behavior to adapt to a new organizational culture of teamwork and lead the organization to excellence.
- Improve the human resource management system to facilitate the creation of good behavior for personnel.
- Support the personnel to achieve career advancement.
- Adjust the way of work in unusual setting or circumstance to ensure the Company’s personnel to work from anywhere safely and efficiently.

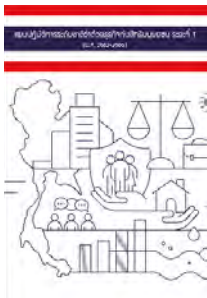
We care Social

Create opportunities for a harmonious society and environment for sustainable communities.



- Develop renewable energy power plants to become a source of community and societal learning.
- Create employee involvement in community networks in order to promote and maintain local culture, as well as supporting various community activities in order to establish a strong society and balanced coexistence.
- Create a network with educational institutions as a learning resource and career development for students so that they can apply their skills, knowledge and abilities to effectively pursue their career in the future.
- Promote the creation of a career in the communities surrounding the Company’s renewable energy power plant area to improve the quality of life in the community by hiring personnel from the area and promote the creation of other careers.
- Balancing business growth with environmentally friendly alternative energy innovations and implementing environmental management in a sustainable and effective manner.
- Commit to government involvement and strictly adherence to the regulations, and guidelines, particularly in unusual situations such as the spread of COVID-19.
- Support the reduction of the country’s greenhouse gas emissions.
- Support access to electricity and renewable energy, which is one of the fundamental rights to which everyone should have equal access.

Guidelines and Cooperation at the National and International Level



National Action Plan on Business and Human Rights

This action plan was developed within the framework of the United Nations Guiding Principles on Business and Human Rights (UNGPs), which emphasizes the three pillars of protection, respect and remedies. It essentially consists of 4 main issues that need to be urgently addressed, namely 1) labor 2) community, land, natural resources, and the environment; 3) human rights defense; and 4) international investment, and multinational corporations.



The Global Reporting Initiative (GRI)

An independent organization founded by the United Nations Office for Environment Programs (UNEP) and the Ceres network which jointly developed a sustainability reporting framework that discloses information in the materiality analysis of the business and the ability to respond to the interests of stakeholders with the same reporting standards and precise indicators



Quality Management System Standard (ISO 9001:2015)

A management system for quality assurance that controls the work process. The mistake can be checked and corrected, as well as guidance for preventing errors. It also includes understanding the organization and its context, as well as the needs and expectations of stakeholders in order to conduct a risk assessment, able to prioritize risks and develop an action plan to mitigate them, which is one of the foundations that will enable the organization to pursue sustainable development.



Occupational Health and Safety Management System Standards (TIS18001 and BS OHSAS18001)

It was designed to reduce and control the hazards of employees and their stakeholders, while also increasing the efficiency of business operations to ensure safety and cultivating a culture of corporate responsibility towards employees and society.



Environmental Management System Standards (ISO14001:2015)

An international standard for corporate environmental management systems. It is internationally recognized operational standard that the Company recommends the adoption as a guideline for operations and environmental management in the operation of both solar and wind power plants. This is to reduce the Company's environmental effect including to promote activities to conserve the environment within the organization.



Industrial Product Standard (ISO/IEC 17025: 2007)

A laboratory evaluation standard coverings from sample preparation to test analysis proficiency, record keeping, and reporting, as well as document management, corrective and preventive actions, location and environment, tools, uncertainty estimation, traceable evidence, sampling and etc. This is to provide the laboratory with a competitive advantage, increase customers/consumers trust, increase efficiency in terms of quality and academic competency of the laboratory and personnel.



The Enterprise Emissions and Mitigation Verification Standard (ISO 14064-1)

A comprehensive standard that covers the requirements for the design, development, management, reporting and verification of emissions and emissions reductions of greenhouse gas of organization.



Thailand Sustainability Investment (THSI),

The companies in THSI list must have at least 50% scores on sustainability assessments in each dimension, namely economic, social and environmental, or be listed company that has been selected as a member of the Dow Jones Sustainability Indices (DJSI) and meets certain criteria, including the quality assessment of the Corporate Governance Report of Thai Listed Companies (CGR), operational result on net profit and shareholders' equity, and governance on issues related to the qualification of listed companies and non-ESG impact, with the Sustainable Investment Working Group which is made up of experts in corporate governance and sustainability, and transparently selected by capital market agency.

United Nations' Sustainable Development Goals (SDGs)

The Company recognizes its obligation to drive the business in accordance with the United Nations' Sustainable Development Goals (SDGs), which is a key organization that initiate sustainable business development. The Company is committed to operating business in accordance with 10 international principles covering human rights, labor standards, environment protection and anti-corruption. The Company has defined sustainable development goals that are aligned with business strategies, as well as creating balance in terms of economy, society and environment and reacting to the organization's and stakeholders' goals in a balanced manner. The Company has currently achieved a total of 7 sustainable development targets, the details of which can be summarized as follows:

Create an equal and inclusive education. Promote lifelong learning for everyone.



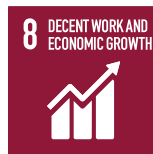
The Company recognizes the importance of education. As a result, through the annual scholarship sponsorship, employees and their families will be able to obtain equal access to education. Furthermore, educational networks covering multiple educational institutions have been established in order to collaboratively enhance students' vocational skills by giving internship opportunities to support real-world experience that can be used to develop, refine, and utilize in sustainable future job. This increases the number of young people and adults with essential skills, including technical and professional skills, for employment and having a good job. (4.4)

Providing modern, sustainable, stable, and affordable energy for everyone.



The Company operates business related to clean energy. In order to achieve the Company's visions of making sustainable energy more efficient and accessible to all, the Company is dedicated to investing in Company development according to Company's visions. (7.1) To increase the share of renewable energy consumption (7.3), new technologies are continually being invented (7.2)

Promote consistent, inclusive and sustainable economic growth, and decent employment.



The Company focuses on economic growth to meet stakeholder expectations. Therefore, it is committed to being an employer that respects human rights and is responsible for all stakeholders, whether to support the employment of employees or people with disabilities in the areas surrounding the business to create a career for the community, selection of law-abiding contractors, the prohibition of child labor, and the promotion of a safe and equitable working environment. (8.5, 8.7, 8.8)



Develop an infrastructure that is ready for change. Promote a sustainable and thorough industrialization and support innovation

The Company engages in clean energy and technology-related activities, as well as numerous energy advancements. Its goal is to invest in and assist the development of environmentally friendly technology to improve sustainability in a variety of industries, including the creation of clean energy infrastructure. It also aids educational institutions in the creation of long-term innovation. (9.4, 9.5)



Certify the consumption plan and sustainable production

The Company engages in clean energy business, including solar and wind energy, in order to maintain its operation under sustainable consumption and optimize resource utilization. (12.2)



Implement urgent measures to combat climate change and its consequences.

The Company realizes the significance of global warming, which causing rapid climate change. As a result, it aspires to provide a Greenhouse Gas Inventory Report, which complies the organization's greenhouse gas emissions, both directly and indirectly. The results would be used and planned to manage the organization's reduction of greenhouse gas emissions as announced by Thailand at the COP26 meeting (13.2, 13.3).



Promote a peaceful and fair society with no prejudice in order to achieve sustainable development

The Company realizes the importance of promoting a peaceful society and sustainable development. The Company's operations will be based on transparency, accountability, and participation in the Private Sector Collective Action against Corruption (CAC) network, and the Company will also encourage suppliers to join the network so that they can do business with the Company in a transparent manner (16.5, 16.6, 16.7)

Sustainability Organization Chart

The Company has established a working group for corporate development toward sustainability in order to ensure the efficiency of work processes and achievement of sustainable business goals. The working group would consider risks, opportunities, and challenges, as well as the expectations of all stakeholders, in order to establish the organization's strategy and direction and to promote the balance potential of the community, society and environment. Sustainability organization chart is as follows:

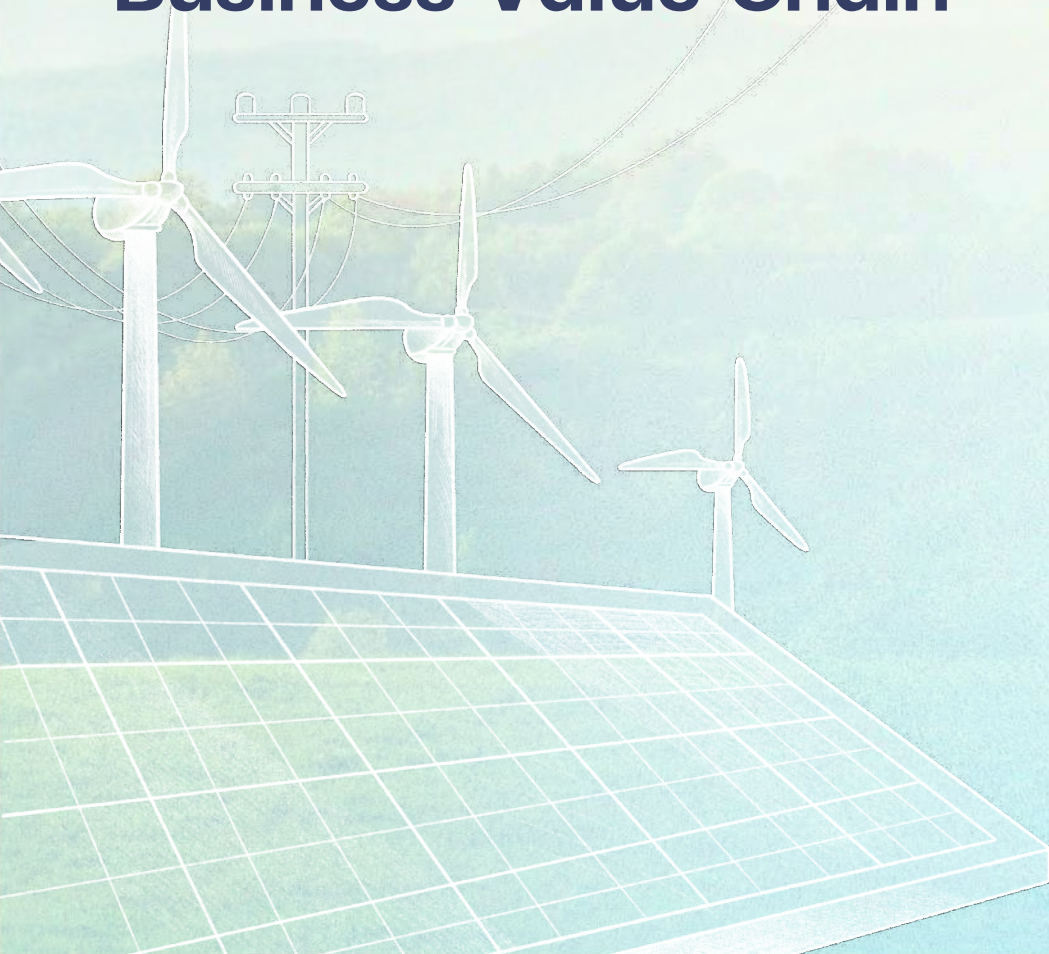




Part 2

Management of Impacts on Stakeholders in the Business Value Chain

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The Business Value Chain

The Company is committed to be integrated renewable energy, equipment, electrical, and hemp and cannabis business operator, using modern technology and innovation to develop infrastructure that is strong and sustainable, enhancing the quality of life and good health by involving all stakeholders from upstream to downstream.

The Company recognizes that stakeholders in the business value chain contribute to the long-term value of the company by ensuring efficient business operations and reducing potential risks. Building good relationships with stakeholders is one of the most important aspects of running a sustainable business. Stakeholders include employees, business partners, customers, competitors, creditors, shareholders, and investors, as well as the community, society, and environment, the public sector, the media, and other organizations.



Analysis of Stakeholders within the Business Value Chain



Employees

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Fair remuneration and additional welfare beyond those required by law. Receive equal and fair treatment in accordance with human rights principles without discrimination. Opportunities to develop skills and abilities as well as to promote career advancement and working stability. Have a pleasant working environment and a workplace that is healthy and safe. Employees and the organization have a positive relationship and mutual support. 	<p>Target:</p> <ul style="list-style-type: none"> The number of participants in the corporate engagement survey was higher than the previous year. Employee turnover is lower or the same as the previous year. Employees make progress and enjoy stability in their job. Zero accident rate at work. <p>Indicators:</p> <ul style="list-style-type: none"> Number of participants taking the corporate engagement survey. Employee turnover rate compared to the previous year. Number of executives and employees who have been promoted. The rate of accidents and injuries to the extent of missing work (LTIFR) <p>Communication channel:</p> <ul style="list-style-type: none"> Channels for receiving complaints suggestions including employee opinion surveys Corporate Engagement Survey Publicize news and activities through the computer network used within the organization, online and offline communication channels Form 56-1 One Report 	<ul style="list-style-type: none"> Establish HR Committee. Establish a welfare committee. Training Needs Survey, as well as procuring/ providing training courses to develop skills and ability to work in a career. Increase multiple and easily accessible channels for comments and suggestions. Treat employees fairly and equally without discrimination based on human rights principles. Establish concrete and measurable performance evaluation criteria. Develop/improve the appropriate welfare management model. Promote and build corporate engagement with employees through various activities and projects. Employee opinion survey on corporate engagement. Prepare personal data protection policy (Personal Data Protection Act; PDPA). Improve and develop safety and occupational health practices to raise operational standards. 	



Business Partners

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Fair and transparent procurement and bidding. Fulfillment of contractual terms and conditions (products, services, quality, delivery and full payment on time). Long-term business relationship management. Sustainable growth and progress together with the Company. Transfer and exchange knowledge, experience and technology. Respecting each other's rights and non-infringement of Intellectual Property. Social and environmentally responsible procurement. 	<p>Target:</p> <ul style="list-style-type: none"> The procurement process is faster than the previous year. There are 100 percent of key suppliers who agree to the Supplier Code of Conduct. <p>Indicators:</p> <ul style="list-style-type: none"> The duration of the procurement process compared to the previous year. Number of key suppliers who agree with the Supplier Code of Conduct. <p>Communication channel:</p> <ul style="list-style-type: none"> Supplier Assessment Form. Business meetings or seminars. Channels for receiving feedback, including complaints, suggestions, and opinions. Form 56-1 One Report 	<ul style="list-style-type: none"> Meeting/consulting to achieve according to mutual agreements and goals. Provide academic knowledge by specialists for partners. Visit business partners, ready to listen to opinions and suggestions. Treat business partners with equality and fairness. Adhering to the terms of the contract and business ethics. Create a clear, concrete understanding of the work process and with the same standard Having control measures and maintain business secrets. Effective Supply Chain Management to prevent and reduce risks that impact both social and environmental. Conducting Supplier Code of Conduct and officially promulgated within the organization, and communicate to business partners. Conducting an assessment of key trading partners and assessing supplier risk annually to prepare a relationship development plan with partners. Prepare personal data protection policy (Personal Data Protection Act; PDPA). 	



Customers

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Products and services with quality and safety standards Delivery of products and services under specified conditions and times. Providing pre-sales services such as methods or procedures for using the product including after-sales services such as proper consultation and assistance Compliance with the terms and conditions of the contract 	<p>Target:</p> <ul style="list-style-type: none"> The results of the survey of customer satisfaction with products and services are higher than previous year. Complaints about goods and services are resolved promptly. <p>Indicators:</p> <ul style="list-style-type: none"> The results of the survey of customer satisfaction with products and services compared to the previous year The number of complaints and the period of time taken to correct the goods and services according to the complaint <p>Communication channel:</p> <ul style="list-style-type: none"> Channels for receiving feedback including complaints, suggestions, and opinions on the use of goods and services Visits, meetings, trainings/seminars Form 56-1 One Report 	<ul style="list-style-type: none"> Provide high-quality, safety, and observable products and services. Set the price of goods and services at a price that is appropriate with the quality. Set up a quality assurance system throughout the supply chain from the raw material to the customer's hand. Inspect and control the production of goods and services to meet international standards. Continuously research and develop products with suitable and modern technology and innovation. Strictly abide by the agreements given to the customers. Provide services to clients both before and after sales, as well as a public relations channel and contacting enquiries for varied information that is easily accessible. Increasing channels for receiving feedback, including complaints, suggestions and opinions on using products and services. Use technology and innovation in the production of goods and services to be a product for social and environmental development. Evaluate the survey of customer satisfaction with products and services in order to present the result, and suggestions for how to improve and develop on a regular basis. Prepare personal data protection policy (Personal Data Protection Act; PDPA). 	<div> <div> 3 GOOD HEALTH AND WELL BEING </div> <div> 7 AFFORDABLE AND CLEAN ENERGY </div> </div>



Competitors

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Conduct business with transparency, honesty, and ethical competition with fairness and comply by law Not infringing on copyright or intellectual property rights 	<p>Target:</p> <ul style="list-style-type: none"> No complaints about copyright infringement issues. <p>Indicators:</p> <ul style="list-style-type: none"> Number of complaints about copyright infringement issues <p>Communication channel:</p> <ul style="list-style-type: none"> Business seminars Website Form 56-1 One Report 	<ul style="list-style-type: none"> Treat competitors fairly, ethical consideration and comply by law. 	



Creditors

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Pay the debt as specified. Compliance with conditions and contractual agreements. Manage risk in a secure manner to ensure business continuity. 	<p>Target:</p> <ul style="list-style-type: none"> Comply with conditions and contractual agreements. <p>Indicators:</p> <ul style="list-style-type: none"> Compliance with conditions and contractual agreements <p>Communication channel:</p> <ul style="list-style-type: none"> Meeting to mutually clarify terms and conditions. Website Form 56-1 One Report 	<ul style="list-style-type: none"> Talk, discuss or meeting to achieve mutual conclusion on the terms and conditions. Exchange knowledge on risk management for business continuity and knowledge integration. 	



Shareholders and Investors

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Return on investment (dividend and share price differential) from good and sustainable operations. Good corporate governance and risk management. The operation of the business is successful according to the objectives. Receiving equal and fair treatment. Disclosure of the Company's information based on facts, correctness, completeness, transparency and timely decision making. 	<p>Target:</p> <ul style="list-style-type: none"> The satisfaction survey result for investor activities ranges from good to very good. <p>Indicators:</p> <ul style="list-style-type: none"> The results of the satisfaction survey for investor activities. <p>Communication channel:</p> <ul style="list-style-type: none"> Annual meeting or announcement of business plans and business intentions. Website Form 56-1 One Report 	<ul style="list-style-type: none"> Operate the business under the principles of good corporate governance and follow the annual business plan. Disclosure of business results and operations through Form 56-1 One Report. Disclosure of business and operating information to the public such as websites 	




Community, Society and Environment

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Business operation that are responsible and friendly to society, environment and biodiversity. Impacts on communities, the environment, and community safety are all managed. Participation in community's development in economic and social aspects. Employ persons with impairment and persons from nearby community. Non-violation of human rights. Production process that is social and environment friendly. The most efficient use of resources in company operations. Having role in community development and environmental conservation. 	<p>Target:</p> <ul style="list-style-type: none"> The community's assessment result for Company's business and operating place is ranged from good to very good. The number of complaints from communities and society each year is 0%. Greenhouse gas emissions are reduced compared to the previous year. 100% wastewater treatment from the production process is treated before being reused or released. The amount of electric power consumption has decreased compared to the previous year. There is more waste management from production in comparison to the previous year. <p>Indicators:</p> <ul style="list-style-type: none"> The results of commitment assessment for businesses and place of operation. Number of complaints from communities and society. Carbon Dioxide Equivalent Tons. Amount of treated water. Electricity cost per number of employees. Amount of waste disposal from production. <p>Communication channel:</p> <ul style="list-style-type: none"> Channels for receiving feedback including complaints, suggestions, and opinions. Assessing level of engagement with business and place of operation. Website Form 56-1 One Report 	<ul style="list-style-type: none"> Establish Company's sustainability development working group and sub-working groups. Publicize the information and understanding of business processes, technology, and innovation, as well as other knowledge that is valuable to society through the website, activity organizing, and other channels. Arrange a channel for receiving feedback, including complaints, suggestions and comments. Arrange an assessment of the surrounding community's engagement to business and place of operation. Arrange for community impact assessments before and after conducting business operations with environmental responsibility and biodiversity. Develop technology and innovation to improve environmentally friendly production processes. Promote an environmentally responsible operating culture throughout the organization. Electricity usage campaign to turn off the air conditioner and electrical appliances when they are not in use. 	



Public Sector

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none">• Compliance with relevant laws and regulations.• Anti-Benefit and Corruption Claims.• Payment of taxes and fees in full in timely manner.• Cooperation and support in various fields.	<p>Target:</p> <ul style="list-style-type: none">• Being approved by government agencies to carry out the requested action on an ongoing basis. <p>Indicators:</p> <ul style="list-style-type: none">• The number of projects that have been approved by government agencies as requested. <p>Communication channel:</p> <ul style="list-style-type: none">• Visits, meetings, trainings/seminars.• Verification and verification of standards.• Website.• Form 56-1 One Report.	<ul style="list-style-type: none">• Operate business under good corporate governance and in accordance with relevant laws and regulations.• Join the anti-corruption network.• Carry out tax matters according to relevant laws and regulations.• Cooperate and support activities and operations at the national level.	



Media and Other Organizations

Expectations	Goals, indicators, and communication channels	Responding to Stakeholders Expectations	Sustainable Development Goals (SDGs)
<ul style="list-style-type: none"> Receive accurate, fast and up-to-date information, neutral and beneficial to society. Operate business with responsibility to economy, society and environment. Having concrete policies and measures to manage impacts arising from business operations. The business is in harmony with society and the environment in a sustainable way. 	<p>Target:</p> <ul style="list-style-type: none"> The news presented internally in an accurate, timely, and timely manner. The number of cases or claims each year is 0%. <p>Indicators:</p> <ul style="list-style-type: none"> Amount of news presented within the Company with accuracy, speed, and timeliness. Number of cases or complaints each year. <p>Communication channel:</p> <ul style="list-style-type: none"> Annual General Meeting of Shareholders or announcement of business plan and intentions and activities on listed companies meeting with investors (Opportunity Day). Channels for receiving feedback including complaints, suggestions and comments. Website. Form 56-1 One Report. 	<ul style="list-style-type: none"> Submit actual and neutral operational information regularly after completion of operation. Establish a working group for organizational development toward sustainability, as well as sub-working groups, to deliver information that is helpful to society or the general public. Commitment to conducting business with social and environmental responsibility. Publicize the information and understanding of business processes, technology, and innovation, as well as other knowledge that is valuable to society through the website, activity organizing, and other channels. 	

Analysis of Key Materiality Business Issues



Implement a process of identifying key internal and external issues that effect business in different levels in planning the organization's development toward sustainability by considering stakeholders' expectations to enable the organization to identify important issues of all group of stakeholders and able to analyze the impact, risks, and likelihood of such risks, which can be divided into 3 main points:

- We care Business: Economic issues
- We care Social: Social and environmental issues
- We care People: Employee issues

Prioritize key point that can be identified by comparing with the important concerns that affect the Company's business operations in accordance with indicators from the Global Reporting Initiative (GRI) framework and prepare table of key point analysis (Materiality Matrix):

Vertical Axis: Consider prioritization from issues that may affect stakeholders

Horizontal Axis: Consider prioritization from issues that may affect the Company

The Company has checked the completeness of the important issues and proposed to the Good Corporate Governance Committee and the Board of Directors for approval, as well as preparing a sustainability action plan and an organizational risk management plan, which have been approved by Executive Management, with the Chief Executive Officer serving as the Chairman of the meeting.

The Company has followed up on operational results that are consistent with all 15 key issues. The results have been reported by the Board of Directors and disclosed such the information to the public in various channels such as the Form 56-1 One Report, website, shareholders' meeting, and other channels which comply by all regulations.

Table of Key Materiality Analysis (Materiality Matrix)



Key Issues of Sustainability Summary



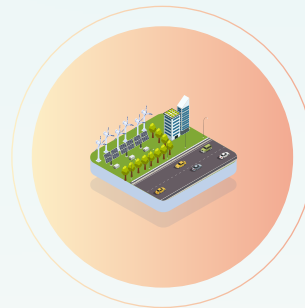
We care Business

1. Good corporate governance and business ethics
2. Risk management in times of crisis or unusual conditions
3. Sustainable supply chain management
4. Technology development and innovation



We care People

5. Occupational safety and health
6. Labor Administration and Human Rights
7. Knowledge and skill development of personnel
8. Remuneration and employee retention
9. Building stakeholder engagement with the organization



We care Social

10. Waste management from production processes
11. Communities and society relationship development
12. Biodiversity Management
13. Climate Change Management
14. Water Management
15. Energy Management



Part 3

Sustainability Objectives and Performance

Corporate Governance

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Corporate Governance

The Company has an intention to operate its business with efficiency while adhering to good corporate governance principles. By striving to conduct business with fairness, transparency and accountability under the responsibility to all groups of stakeholders, the Company has established a “[good corporate governance policy](#)” as a guideline for directors, executives, and employees, including related persons to follow in order to operate the business sustainably in the long term.



[Good Corporate Governance Policy](#)



Anti-fraud and corruption



Anti-Corruption and Whistleblowing Policy

The Company values and adheres to ethics, transparency, and good corporate governance in all aspects of its business operations, including anti-corruption efforts. The Company has established a policy on anti-fraud and corruption, as well as on whistleblowing and written complaints, to serve as a guideline for directors, executives, employees, and all other stakeholders. Additionally, the Company joined the Private Sector Collective Action Against Corruption (CAC)

project on August 18, 2017 and was renewed for the second time in 2020, reflecting the readiness and efficiency of the Company in anti-fraud and corruption. This demonstrates the Company's readiness and effectiveness in combating fraud and corruption. An audit system, a policy, a risk assessment, and controls measures to combat fraud and corruption, as well as channels for complaints and whistleblowing about corruption and fraud are available. Additionally, the Company has used communication and public relations to raise awareness and understanding, and instilling corporate culture and values against fraud and corruption in directors, executives, and employees, as well as communicating the policy's essence to stakeholders.



CAC Certified



Number of employees who accepted the anti-corruption policy

100%



Anti-corruption knowledge test score results

97%



Number of new employees who took the orientation course on anti-fraud and corruption

100%



Review anti-corruption and whistleblowing policy for the year 2021



Review employees' understanding and guidelines for anti-corruption policies, guidelines for receiving gifts, assets or any other benefits during the festive season



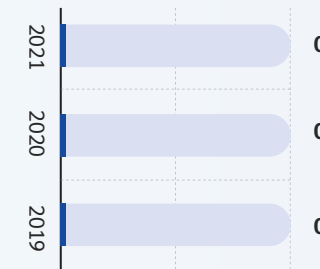
Declaration of intention against corruption to business partners. Invite them to join the Private Sector Collective Action Against Corruption through various channels, such as customer business ethics brochures, Company's website

Number of complaints in year 2021

0 case



Number of past complaints (cases)



No complaints for the
5th
year continually.

Operational Goals

Target for 2022

- Executives and employees have implemented an anti-corruption policy across the organization's work processes.
- Support an understanding of anti-corruption and whistleblowing policy to foreign groups more.
- Encourage employees to participate in public or private sector projects or activities to demonstrate the Company's commitment to anti-corruption compliance.
- **Build corporate culture as an Anti-Corruption organization**
to ensure stakeholders that the Company operates with utmost transparency.
- **Promote partners and stakeholders**
Encourage partners and other stakeholders to become members of the anti-corruption network and the Private Sector Collective Action Against Corruption (CAC).

Inviting suppliers to join the anti-corruption network

The Company has invited suppliers to join an Anti-fraud network. There were 42 Critical Supplier Tier 1 accepted and participated in the evaluation of the performance in accordance with business ethics, accounting for 100%.

Strategies for preventing and combating fraud and corruption within the organization

1. Communicate with the Company's employees regarding the anti-corruption and whistleblowing policy and review the policy on a regular basis by administering an annual test to assess policy knowledge and comprehension.
2. The information technology program for managing the approval of a transaction (Electronic Document) has been used in a hierarchical order during the approval process. It will be precise in tracking approval outcomes and easily verifiable.
3. Risk Based Audit.

Complaint Channel and/or report fraud and corruption clues

The Company has provided channels for complaints and whistleblowing in the event of any doubt or observations of wrongdoing/ violation of good practice in the following matters;

1. Dishonest acts that are directly or indirectly related to the organization, such as seeing individuals in the organization bribing or accepting bribes from officials of state enterprises or private entities.
2. Abuse of procedures in accordance with the Company's rules and regulations, which make it suspected that it may be a channel of corruption.
3. Actions that cause the Company to lose benefit or affect the reputation of the Company.
4. Acts that are unethical, illegal, and immoral.
5. Violation of compliance according to the principles and practices of the good corporate governance policy.
6. Receiving operational unfairness.

Complaint Channel and/or Report Corruption Clues



01
Contact the Audit Committee:
audit_committee@gunkul.com



02
Website : www.gunkul.com
In the topic.
"Whistleblowing Form"

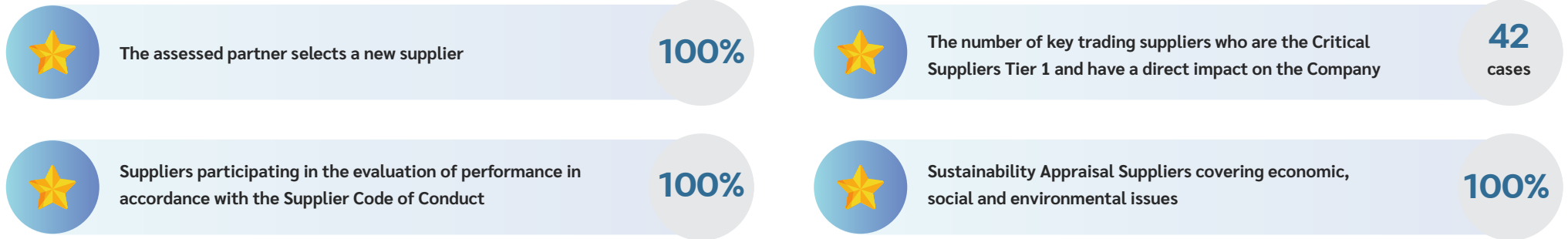


03
**Sealed postage
To Chairman of the Audit Committee**
Gunkul Engineering Public Company Limited
1177 Pearl Bangkok Building, 8th Floor,
Phaholyothin Road, Phayathai Subdistrict,
Phayathai District, Bangkok 10400



04
**Whistleblowing and Corruption
Complaint Box within the company**
(Open the box by the Audit Committee
and/or the Secretary to the Audit
Committee)

Supply Chain Management



To focus on sustainable selection of quality products and services, managing the supply chain to be efficient and most effective is therefore a strategy in procurement that the Company has given priority. This must create a worthwhile aspect of both budget expenditures and worthwhile in sustainable resource allocation, trading supplier risk management, promoting anti-corruption and whistleblowing policy, supporting the principles of good governance, human rights, overseeing the employment of local workers, and creating understanding of business suppliers to participate and be aware of safety, occupational health, society and environment are the guidelines that the Company operates continuously. This includes encourage suppliers to operate within a sustainable supply chain. Since 2015, the Sustainability Supplier Assessment has been conducted to evaluate suppliers prior to trading or contracting, and criteria for evaluating and selecting suppliers who disclose their Carbon Footprint for Product has been established to be effective in 2022 onward.



Society and Environment



Occupational Health
and Safety



Human Rights



Business Ethics

Supplier Code of Conduct: SCC

The Company has developed a Supplier Code of Conduct for its suppliers. The purpose is to encourage suppliers of the Company and the group companies to conduct business ethically, respect individual rights and liberties, and treat employees fairly in accordance with human rights principles, with an emphasis on the environment, occupational health and safety, and social responsibility. The following is detail of related topics:

1. Business Ethics

- Corporate Governance
- Equitable and fair treatment
- Intellectual Property
- Disclosure and Confidentiality
- Delivery and quality of the product or service
- Legal compliance

2 Human Rights and Labor

- Non-discrimination
- Labor Protection
- Non-Forced Labor
- Paying wages and benefits including a fair working period
- Legally utilize of Labor

3) Occupational Health and Safety

- Safety and working environment
- Personal protective equipment
- Preparedness for Emergency

4) Social Responsibility

- Inviting suppliers to join the anti-corruption network



Supplier Code of Conduct

Sustainability Action Guidelines for Suppliers

Since 2015, the Company has conducted a sustainability assessment of its suppliers and used it as a guide to evaluate suppliers continuously to ensure the sustainability of the company's procurement process. The Company will evaluate risk factors relating to good governance, environment, and society, beginning with the selection of new suppliers, supplier screening prior to trading, supplier performance evaluation, and continuous follow-up for supplier development in order to improve supply chain management efficiency and support business growth. In 2021, the Company assessed all suppliers on their sustainability by conducting supplier visits to develop positive relationships with two suppliers in accordance with the established goals. Additionally, the Company established a goal in 2022 to evaluate and select suppliers who promote the disclosure of the carbon footprint of their products (Carbon Footprint for Product) for at least 2 percent of all suppliers on the Vendor Data List (VDL). Additionally, the Company established a Green Procurement project to promote environmentally friendly product procurement and set a target of 2 percent of total office supply procurement for the year 2022.



Critical Supplier Assessment

The Company has classified its critical suppliers to enable efficient and systematic analysis and formulation of procurement strategies, using the following criteria for grouping suppliers according to the size of the ordered value:

Criteria for classification of supplier	Supplier group	Assessment method
Order value from THB 10 million or more	Major suppliers (Critical Supplier Tier 1)	1) Supplier Evaluation Form 2) On-Site Audit
Order value from THB 5-10 million	Secondary suppliers (Non-Critical Supplier Tier 1)	1) Supplier Evaluation Form 2) Supplier Self-Assessment
Order value less than THB 5 million	Other suppliers	1) Supplier Evaluation Form

In 2021, the Company had 42 Critical Supplier Tier 1 who participated in the supplier sustainability assessment and business ethics assessment, which is 100%.

Supplier Group	Quantity (Income)	Value (Million Baht)	Assessment Method	Sustainability Assessment Form	Suppliers Code of Conduct Assessment Form
Critical Supplier Tier 1	42	2,408	1) Supplier Evaluation 2) On-site Audit	Answer the assessment by 100 percent	Answer the assessment by 100 percent
Non-Critical Supplier Tier 1	600	419	1. Supplier Evaluation	Do not submit an assessment	Do not submit an assessment
Total	642	2,827			

Evaluation of New Suppliers

In 2021, there were 17 new suppliers that were in line with sustainability, economic, social and environmental policy. Their total ordered value was THB 7 million, therefore, the Company classified these new supplies in other group as the procurement amount does not exceed THB 5 million.

Payment for Goods and Services

The Company manages the risk of billing customers by establishing a policy of paying suppliers for goods and services within 30 days to manage the Company's liquidity, taking into account the stability or financial stability of suppliers.

Determination for Hiring Subcontractor

The Company stipulates the sustainability conditions in all contracts with suppliers to prevent violation or conduct that is against business ethic practices, environment, and human rights.

Performance Assessment or Efficiency Assessment for Suppliers

The Company conducts a supplier assessment annually after delivery of its products or services under 4 topics: 1) quality of products and services 2) price 3) complete delivery timeliness 3) after-sales service.

The score and assessment result of the year 2021 were:

Scoring Criteria	Score (percentage)	Number (cases)
A = Very Good	More than 80	107
B = Good	70-79	13
C = Fair	60-69	0
D = Need to improve	50-59	0
F = Cut from Approve Supplier List (ASL)	Lower 50	0
Not yet due	-	116
Total		236

In 2022, the Company plans to update the Supplier Assessment Form to be more efficient and covers economic, social and environmental assessments. It is divided into 4 topics:

- 1) Quality of products and services
- 2) Complete delivery on time
- 3) Coordination and service efficiency
- 4) Social and Environmental Responsibility

The following model will be used to evaluate suppliers' performance in 2022.

Annual Supplier Assessment	Assessment During Operation	Operational Area Assessment
Supplier Self-Assessment with form covering ESG.	Safety, Occupational Health and Environment	Evaluate the production processes of suppliers with low annual assessment results.
Supplier performance audit covering performance efficiency, product quality and sustainability.	Social responsibility and environmental care.	Jointly find solution for problem and planning for joint potential development.

The Company has established the following guidelines for dealing with suppliers that may have an impact on the organization:

Level	Impact on organization	Guidelines
A	Low	Notify the supplier of the evaluation results and require maintain of operating standard while adhering to the Company's code of conduct.
B	Moderate	Notify the supplier of the evaluation results and inform the subject of the improvements the supplier desires.
C	High	Notify the supplier of the evaluation results on the issue that needs to be corrected or improved and request the improvement be completed within 30 days. The supplier must notify the result of the correction or improvement back to the Company to re-evaluate. If the 2nd assessment is still fail, the revision period is extended to 60 days. If within 60 days the improvement is still not possible, the supplier will be canceled from the Approved Supplier List.
D-F	Very high	Notify the supplier of the evaluation result and request the improvement to be completed within 30 days. The Company will conduct evaluation by using On Site Audit as a criteria. If the supplier fails to improve after evaluation will be canceled from the Approved Supplier List

Supplier's Risk Management

The Company sets a supplier risk assessment to prioritize risks that could affect the organization's business operations based on the risk assessment criteria established by the Company that covers economic, social, and environmental sustainability. The likelihood of a risk occurring and the severity of the resulting impact are defined as follows:

Level	Risk	Chance of Risk	Severity of Impact
5	very high	Once a month at a time	More than THB 1 million
4	high	Once every 1-6 months, not exceeding 5 times	THB 500,000-1,000,000
3	moderate	Once a year	THB 100,000 – 499,999
2	low	Once every 2-4 years	THB 50,000 – 99,999
1	very low	Once every 5 years	Not more than THB 50,000

The guidelines for managing and controlling supplier risks (in the order of importance) for the year 2022.

Risk Factors	Management and Control Guidelines
Economic	
Status and financial stability of suppliers	1. Collateral 2. Check the past financial statements
High turnover suppliers	1. Verify compliance with contracts and delivery of work 2. Set periodic payment terms according to the progress of the work. 3. Work collateral
Social	
Child labor, illegal foreign workers and human rights violations.	1. Determine the criteria for evaluating the supplier's qualifications 2. Field visits for business
Occupational Safety and Health	1. Assess safety risks before working. 2. Provide necessary safety equipment.
Environmental	
Environmental care and waste management	1. Check the business license (Ror. Ngor. 4) according to the type authorized by the Department of Industrial Works. 2. Specify and monitor the conditions in the employment contract.

Strengthening Relationships with Suppliers

The Company is committed to develop positive relationships with suppliers through various training programs, seminars, and activities that communicate the organization's business practices as well as various policies and practices that suppliers should be aware of, including a visit to a supplier's factory to exchange knowledge and planning to modify DB cabinets, the production and delivery of Auto Reclose products for CPF projects for final delivery completion to customers.



Tax Management

The Company operates and manages taxes transparently and with an understanding of its tax obligations and responsibilities in order to foster trust among all stakeholders. At the moment, the Company has updated its measures and procedures to ensure they are current and accepted globally and in the same direction, as well as to ensure that accounting personnel and related employees have a working knowledge and understanding of the requirements and principles of practice governing the preparation of financial reports and tax planning.

This is to ensure that accounting personnel and related persons are able to perform and operate properly in accordance with the organization's activities, which assists in paying taxes accurately and completely in accordance with the law, avoiding fines and surcharges, and reducing errors in tax calculations. This is the rigorous plan to prevent the tax problems that may arise in the future. The Company provides training courses for related employees to know how to deal with personal income tax and corporate income tax, and apply to businesses effectively, as they have been trained every year.


[Tax Management Policy](#)


Tax Management

The Company abides by and complies with laws and regulations. The Company will use prudence and transparency in the event that the tax law does not have a clear guideline, along with a focus on tax risk management, including tax consequences arising from changes in tax policy or government tax administration guidelines, supporting written tax risk management policies and procedures and a detailed risk assessment of all tax-related activities which covers legal compliance risks, operational risk and financial reporting risks of independent external auditors.

Tax Transparency

The Company has transparent reporting on tax performance to the government and complies with all tax mission disclosure requirements. It also supports new policies that require companies to disclose information publicly on tax benefits, including reports on actions that support the country's overall economic development.

The Company is committed to being a business organization that is a good corporate citizen, by creating excellence in tax governance, tax responsibility and tax transparency to build trust with society and all stakeholders.

Compliance with Employees' Code of Conduct

Employees must abide by the rules and strictly abide by the Company's operating regulation to prevent the risk that will have an impact on the tax that may cause damage to the Company. The Company provides regular communication and training to develop knowledge in order to ensure compliance with the rules, regulations, and regulations; as well as, to ensure the correct compliance with the code of conducts.

Actual Tax Rate Table (Effective Tax Rate)

Information	Unit	2019	2020	2021
Net Profit Before Income Tax	Million Baht	893,653.78	2,247,223,814	2,199,865,646
Income Tax Expenses	Million Baht	-	50,072,144	12,458,498
Corporate Income Tax Rate	Percentage	20	20	20



Environment

The Company is committed to manage and reduce the environmental impacts relating to the business operations in order to increase the capability of sustainable business operations from upstream to downstream. The Company has established operating guidelines to manage environmental quality and biodiversity, supported investments to develop, improve, and seek ways to use resources and energy, as well as the management of the reduction of waste and greenhouse gas emissions as for responsible to climate change, the Company has developed a sustainable development policy which is disclosed on the Company's website.






Environmental Responsibility






The Company has established an environmental and climate change management policy to show the intention to take responsibility for the environment as well as to serve as a guideline for executives and employees at all levels of the Company. In addition, the Company also gives importance to business operations along with continual environmental stewardship by expanding investment in renewable energy both solar energy and wind energy contribute to reduce pollution caused by the use of fossil fuels in electricity generation which is air pollution. Air pollution is the main cause of small dust (PM 2.5) and is one of the causes of global warming phenomenon. In addition, the factory producing electrical equipment and equipment for renewable energy. Also, the Company gives importance to the environment by operating the production according to international standards including Environmental Management System Standard (ISO 14001:2015), Organization Quantification and Reporting of Greenhouse Gases Standard (ISO 14064-1) and the Occupational Health and Safety Management System Standards (TIS18001 and BS OHSAS18001)



Environmental and climate change
management policy

by establishing the preventive and amendments measures to reduce environmental impacts with details as follows:

Environment	Impact Level	Preventive and Corrective Measures to Reduce the Impact
 Air Quality	Low level	<ul style="list-style-type: none"> Spray water sprinkle on the spot that cause dust to spread in the air. Prohibit the burning of solid waste or others in the project area. Increase green areas surrounding the project to prevent the spreading of dust in the air. Take care and maintenance of engines, machines or tools that burn fuel and generate exhaust or dust to always be in a good condition.
 Climate Management and Greenhouse Gas Emissions	Low level	<ul style="list-style-type: none"> Provide an assessment of greenhouse gas emissions from activities within the organization and verified by a certification authority that meets international standards. Operate a project or activity that use solid waste to the maximum benefit according to the 3R principle to reduces the amount of solid waste and reduces greenhouse gas emissions. To have a proper disposal of industrial waste according to relevant regulations and laws.
 Water Quality	Low level	<ul style="list-style-type: none"> Provide toilets thar are hygienic and in sufficient number for the workers. Arrange a retention pond to collect rainwater runoff around the construction area. Reuse the water in the retention pond, such as spraying the road at the entrance to the project.

Environment	Impact Level	Preventive and Corrective Measures to Reduce the Impact	
 Drainage System	Low level	<ul style="list-style-type: none"> To have a sludge trap before draining water to outside of the project. Regularly clean the channels around the project. The rainwater that falls around the project area needs to quickly be drained into the channels around the project as well as collecting rainwater as raw water for the use within the project or to delay water before going outside the project. Regularly check the drainage system, water channels around the project and sludge trap system. 	
 Sound	Intermediate level	For solar power plants <ul style="list-style-type: none"> Prohibit carrying out any activities that cause noise outside the working hours (8:00 a.m. - 5:00 p.m.). Avoid using a machine for maintenance that has a source of high noise. Taking care and maintenance of tools and machines to always be in a good condition. Provide noise pollution protection equipment such as ear plugs for employees and operators to wear while working. Provide a rotation of workers working in areas with high noise sources according to the law. 	For wind power plants <ul style="list-style-type: none"> Check and maintain machine at the time specified in the specifications of the equipment to prevent noise caused by the machine. Prepare a Noise Contour Map after the project has operated by applying the results of the study in sound environmental management. Implement the measures of the wind power plant.
 Electricity Management	Low level	<ul style="list-style-type: none"> Undertake projects or activities to reduce energy consumption within the power plant, such as turning off the power and unplugging electrical appliances every time after finishing or then there is no work. Having a campaign and awareness among employees about energy saving. 	
 Non-Hazardous Waste Management	Low level	<ul style="list-style-type: none"> Provide three types of waste bin, namely general waste, recyclable waste, and hazardous wastes which shall be stored in containers that clearly indicates the type of waste and have a tight lid. General solid waste that can be recycled is to be collected for further recycling. Hazardous waste must be collected separately in an enclosed storage facility and when there is a large enough quantity, it shall be delivered to a company or agency authorized to provide legal hazardous waste disposal services to get rid of it next. 	
 Waste from production processes Management	Low level	<ul style="list-style-type: none"> Train on how to store and collect defective solar panel. Provide an enclosed and safe room to store damaged solar panels and send them to waste disposal companies for proper disposal according to the standard. 	

Energy Management

The Company is committed to conserve energy to achieve a serious and sustainable result and to have an appropriate planning and strategy policies for operations by having serious and continuous operations throughout the organization. Also, appointing responsible persons and assigning responsibilities to monitor the performance and measurement by using guidelines and indicators according to international standards. Lastly, developing technology and innovations to increase energy management capabilities to support sustainable growth in the future.

Energy Management Strategy

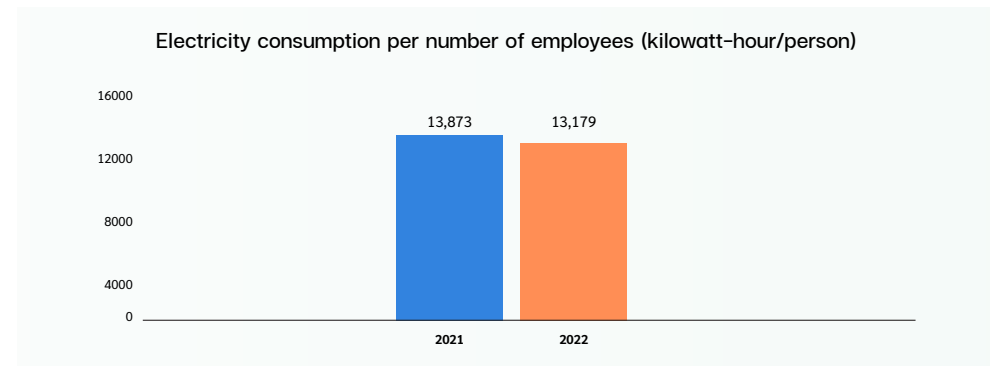
- Carry out activities or projects to encourage organizations to use energy for maximum benefit and reduce energy consumption within the organization, such as campaigning to turn off air conditioners and electrical appliances when they are not in use.
- Install solar power generation systems in business establishments, factories, and renewable energy power plant branches by using alternative energy to replace the main energy including installing solar electric lamps to illuminate the night, which is energy conserving and to reduce carbon dioxide and greenhouse gas emissions.

Performance

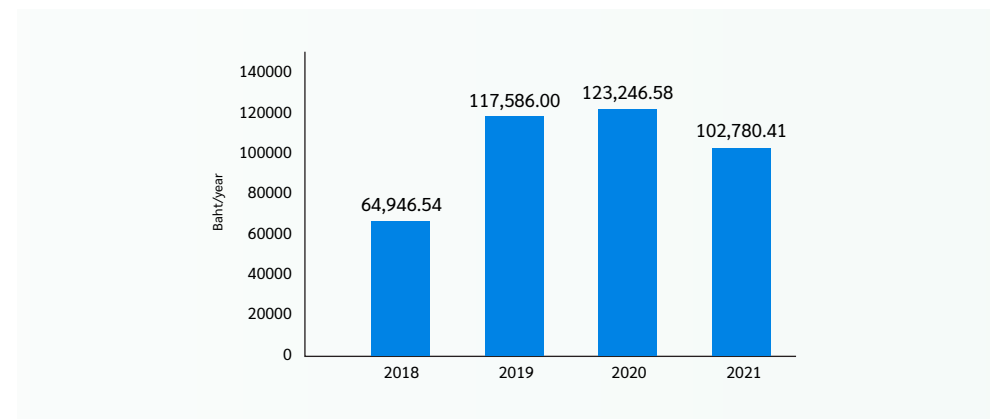
The company has performed in energy management to be in accordance with the Organization Quantification and Reporting of Greenhouse Gases Standard (ISO 14064-1) of the Company and the group. The Company is officially certified by an accredited third-party organization to international standards. The scope of data collection operations are as follows:

No.	Company	Code
1	Gunkul Engineering Public Company Limited	GUNKUL
2	Wind Energy Development Company Limited	WED
3	Greenovation Power Company Limited	GNP
4	Korat Wind Energy Company Limited	KWE
5	NK Power Sola Company Limited	NKP
6	Solar Energy Society Company Limited	SES
7	Gunkul Solar Roof 1 Company Limited	GSR-1
8	Rang Ngern Solution Company Limited	RNS
9	ECO Thai Energy Company Limited	ECO
10	BMP Solar Company Limited	BMPS
11	Gunkul Solar Power 2 Company Limited	GSP

In 2021, the Company has a total electricity consumption of 2,788,537 kilowatt-hours (kWh), having electricity consumption per 1 employee at a total of 13,873 kilowatt-hours (kWh), divided into 3 groups as follows: 1) Electricity use at the head office 2) Electricity use of the Solar Energy Business Group and 3) Electricity use of the Wind Energy Business Group. However, the Company has started collecting data and has been officially certified by external agencies for the first year. Therefore, the data of 2021 will be used as the base year to compare the energy management in the following year. The Company aims to reduce the use of electricity from outside by 5% in 2022.



The Company has managed energy and reduced the use of electricity from outside by installing solar panels on the roof of the factory (Solar Rooftop) and starting to distribute electricity for use within the factory since 2018, which can reduce electricity costs by THB 408,559.53. In 2021, the Company can reduce expenses from reduce the amount of electricity purchased from outside by a total of THB 102,780.41. The Company has a goal in 2022 to use clean energy from the Company's solar panels and reduce costs from purchasing electricity from outside by at least 5% compared to the year 2021.



Scope of information : G.K. Assembly Co., Ltd. and G.K. Power Products Co., Ltd.

Water Management

Water is a natural resource that is essential to life, economic development and is a fundamental resource in the development of the country's expansion of agriculture, industry, tourism, and services; including an increase in the population and climate change has affected the water resources and quality of water resources. Therefore, the management of water resources within the organization is important and must provide a complete and efficient water management process in the production process, so that organizations can use water resources to the maximum benefit along with sustainable conservation and restoration.

Water Management Strategy

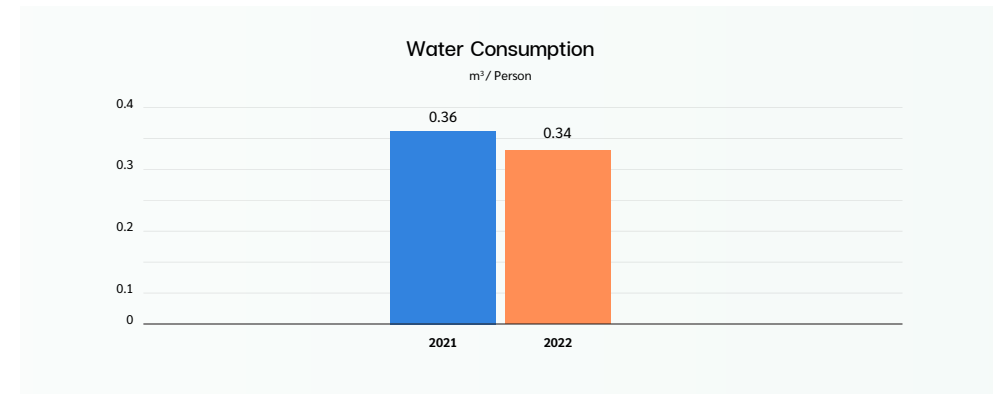
- Carry out activities or a project to campaign for the organization to make the most of water resources and reduce water use and recycle water within the organization.
- Having regular inspection and control of water quality from the production process before wastewater is discharged from the factory according to the plans set for each year.
- Promote culture as well as creating knowledge and understanding of water management within the organization. Apply technology and innovation to improve quality in order to be able to use resources in the most cost-effective manner.

Performance

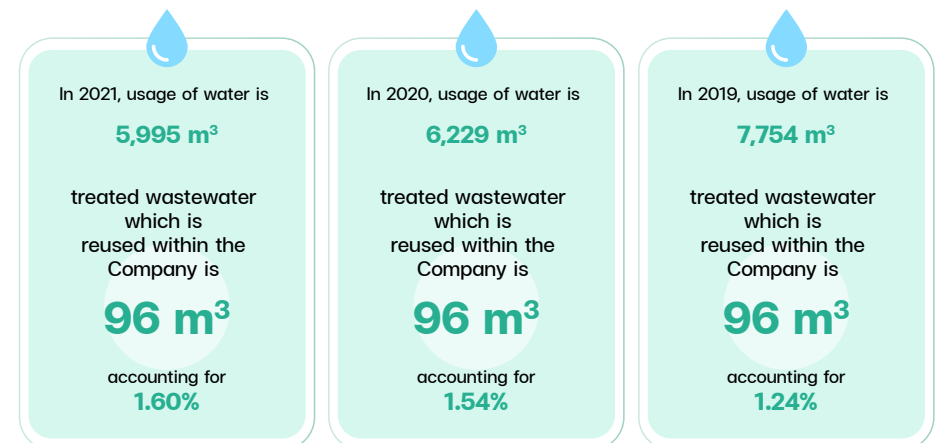
The Company's performance in water resource management is in accordance with the Organization Quantification and Reporting of Greenhouse Gases Standard (ISO 14064-1) of the Company and the group. The Company is officially certified by an accredited third-party organization to international standards. The scope of data collection operations are as follows:

ที่	Company	Code
1	Gunkul Engineering Public Company Limited	GUNKUL
2	Wind Energy Development Company Limited	WED
3	Greenovation Power Company Limited	GNP
4	Korat Wind Energy Company Limited	KWE
5	NK Power Sola Company Limited	NKP
6	Solar Energy Society Company Limited	SES
7	Gunkul Solar Roof 1 Company Limited	GSR-1
8	Rang Ngern Solution Company Limited	RNS
9	ECO Thai Energy Company Limited	ECO
10	BMP Solar Company Limited	BMPS
11	Gunkul Solar Power 2 Company Limited	GSP

In 2021, the Company has a total water consumption of 61 cubic meters (m³), having water usage per employee at a total of 0.36 cubic meters (m³), by dividing the data into 3 groups as follows: 1) the use of tap water from the head office 2) the use of tap water from solar energy business group and 3) the use of the tap water from wind energy business group. However, the Company has started collecting data and has been officially certified by external agencies for the first year. Therefore, the data of 2021 will be used as the base year to compare water resource management against the following year. The Company aims to reduce water usage per employee by 5% by 2022.



Information on water consumption from the production process and the amount of water being treated.



Scope of information : G.K. Assembly Co., Ltd. and G.K. Power Products Co., Ltd.

Water Management Activities

Image of wastewater being collected for analysis by third-party agencies.



Waste Management

The Company is aware of the implementation of the waste management policy and waste from production process, minimizing the production of waste, in order for the organization to make the best use of its resources. By that, the Company has a system to prevent impacts on communities, society, and the environment, and strives to develop technology and innovations to manage waste and waste from production process, and further use these wastes for other benefits in order to prevent the risk of waste that may increase in the future, encouraging the organization to operate in a circular economy.

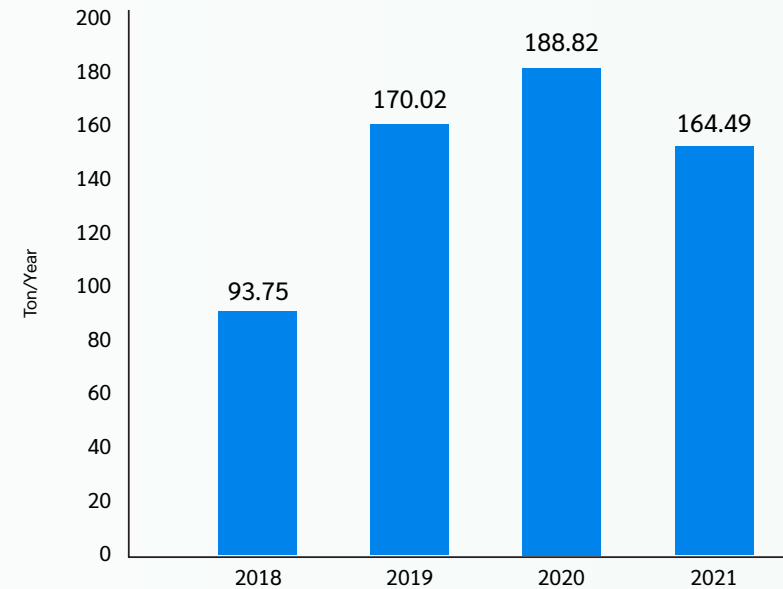
Waste Management Strategies

- Carry out activities or projects to campaign for waste management and waste from production process to minimize the production of waste.
- Apply the 3R principles within the organization through project activities and work processes, which including Reduce, Reuse, and Recycle, such as 5S activities.
- Develop technology and innovation to manage waste and waste from production processes to prevent the damage from waste in the future, especially electronic waste

Performance

The amount of waste from production process that has been disposed/recycled properly

The Company is committed to reduce the amount of waste from production process within the factory. Therefore, it is managed by promoting the reduction of waste and separating waste that can be reused or recycling. The Company has selected licensed operator from the Department of Industrial Works to provide the service for recycling waste as required by law. In 2021, the Company had the amount of waste from production process that has been properly disposed/recycled at a total of 164.49 tons, decreased 12.88% from the previous year. The factor of the decreased was from the decreased production of the Company's products due to the situation of COVID-19 in 2021.



Scope of information : G.K. Assembly Co., Ltd. and G.K. Power Products Co., Ltd.

Table summarizing the details of waste from production process that have been properly disposed.

No.	List	Disposal (tons)		
		2019	2020	2021
1	Graphite	0.45	1.77	0.83
2	Glue residue	5.81	2.18	1
3	Water filter sand	0.02	0	0
4	Used light bulb	0.02	0.08	0
5	Used Solvent	0.30	0.2	0.48
6	Wire to tie work	0.20	0.38	0.25
7	Stick stainless scrap	0.06	0.72	0
8	Non-stick stainless scraps	0.65	0.59	0
9	Zinc scrap	3.68	1.69	1.71
10	Machined steel scrap	3.73	2.07	4.64
11	Structural steel scrap	24.12	50.40	27.96
12	Stamping steel scrap	66.43	93.65	66.53
13	Metal sheet scrap	6.30	5.14	3.33
14	Gutter steel scrap	38.00	17.68	45.88
15	Machined aluminum scrap (cut)	1.38	1.17	1.20
16	Aluminum pieces scrap	2.49	2.72	1.62
17	Aluminum from lamp cover	0.08	0	0
18	Machined copper scrap	10.67	4.48	1.52
19	Copper scrap	2.70	2.33	2.33
20	Machined brass scrap	2.45	1.19	0.80
21	Brass pieces scrap	0.47	0.38	2.61
22	Copper scrap 85 %	0.01	0	0
23	Wires scrap (aluminum wires)	0	0	1.80
Total disposed volume (tons)		170.02	188.82	164.49

Scope of information : G.K. Assembly Co., Ltd. and G.K. Power Products Co., Ltd.

Waste Management Activities



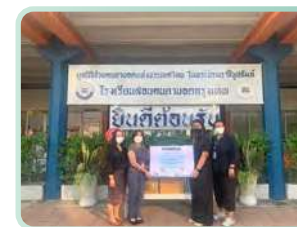
1. Donated plastic cups and clear plastic water bottles to Wat Chak Daeng for making monks'-robes

Representatives from the executives and employees of the Company jointly donated plastic cups and clear plastic water bottles to Wat Chak Daeng, Samut Prakan Province for making monk's robes. This project is part of #GUNKULZeroWasteProject , which is participated to campaign the conservation the environment, reduce the waste caused by plastic, and also to preserve religion.



2. Donated can opener and other aluminum materials for making prosthetic legs.

The Company's representatives donated can opener and other aluminum materials to the Pollution Control Department for making prosthetic legs. This project is part of the project #GUNKULZeroWasteProject, which is participated to campaign for the conservation of the environment.



3. Donated old calendars to make braille books for the visually impaired.

The Company's representatives donated old calendars to make braille books for the visually impaired to the Foundation for the Blind in Thailand, under the royal patronage (Bangkok School for the Blind). This project is part of the project #GUNKULZeroWasteProject, which is participated to campaign for the conservation of the environment by making use of office equipment for maximum benefit. It is also considered as helping fellow human beings.

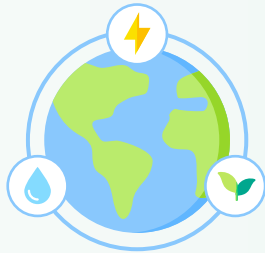


4. Old lottery donations to make wreaths and sandalwood flowers for the unclaimed bodies

Donated old lottery to the Special Child Development Center at Huai Mu Temple Ratchaburi for making wreaths and sandalwood flowers for the unclaimed bodies by autistic and disadvantaged children. This is an internal activity to campaign and create awareness among employees within the organization to know how to use waste for maximum benefit, and to support income generation for autistic and disadvantaged children.

Greenhouse Gas Emission Management

The Company gives importance to the management of greenhouse gas emissions which is a major cause of climate change that continue to happen today. As the Company is a leader in technology and innovation in clean energy that is environmentally friendly, therefore, the Company aims to take part in solving the global warming problem seriously to develop the production process, reduce carbon dioxide emissions, and to be able to operate business sustainably by formulating management strategies to reduce greenhouse gas problems as follows:



Focus on efficient use of resources and to maximize benefits (Resource Efficiency)

The key idea is to maximize the use of resources within the organization, have processes to improve operations using high quality technology and innovation to drive the business in accordance with circular economy guidelines.



Focus on clean energy in the internal production process (Clean Energy)

Increase the consumption of clean energy in internal production processes such as solar power generation, including other related clean energy products and



Focus on building a green network (Green Network)

services. Aim to create a green network with all stakeholders, promoting the creation of a society of environmental conservation to develop sustainable management of climate change.

The Process of Evaluating Greenhouse Gas Emissions

- Establish a committee to conduct an assessment and review the effect of greenhouse gas emissions to develop standards, operational quality, enable the organization to achieve its environmental sustainability goals, and be in line with Thailand's greenhouse gas emission reduction policy plan and the United Nations' Net Zero Emission target.
- Prepare environmental policies and promulgation to serve as rules and guidelines for internal operations of the Company.
- Campaign to create knowledge and understanding for executives and employees to realize the importance of climate problems.
- Organize activities or projects that promote environmental conservation and continuously help alleviate climate problems within the Company

Greenhouse Gas Emission Disclosure

The organization's disclosure of greenhouse gas emissions is an important step to effectively manage and control the amount of greenhouse gas emissions, in consistent with the Greenhouse Gas Management Guidelines at both national and international levels. It is also the Company's important goal to be a Carbon Neutral Organization and Net Zero Emission in the future. At present, the Company has data preparation process as follows:



In 2021, the Company has assessed greenhouse gas emissions from the business processes covering a total of 11 companies as follows:

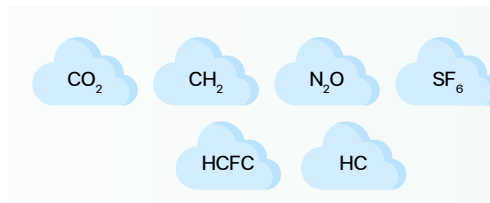
No.	Company	Code
1	Gunkul Engineering Public Company Limited	GUNKUL
2	Wind Energy Development Company Limited	WED
3	Greenovation Power Company Limited	GNP
4	Korat Wind Energy Company Limited	KWE
5	NK Power Sola Company Limited	NKP
6	Solar Energy Society Company Limited	SES
7	Gunkul Solar Roof 1 Company Limited	GSR-1
8	Rang Ngern Solution Company Limited	RNS
9	ECO Thai Energy Company Limited	ECO
10	BMP Solar Company Limited	BMPS
11	Gunkul Solar Power 2 Company Limited	GSP



Greenhouse Gas Inventory Report

Corporate Greenhouse Gas Emissions

The Company examined and collected greenhouse gas emissions data from various activities throughout the organization's production process in 2021 and found that there were 6 types of greenhouse gas emissions covering 3 scopes as follows:



Corporate Activities		
Scope 1 Direct Greenhouse Gas Emissions (Direct Emissions)	Scope 2 Indirect Greenhouse Gas Emissions (Indirect Emissions)	Scope 3 Other Indirect Greenhouse Gas Emissions (Other Indirect Emissions)
Car diesel usage	Electricity Usage	Paper usage
Gasoline usage in cars		Tap water usage
NGV usage in cars		Employee's journey to work
Diesel fuel usage in generator and fire pump		Transportation of raw material
Diesel fuel usage in flood protection pumps		Freight
Gasoline usage in a lawn mower		
Diesel fuel usage in tractors and trucks		
Diesel fuel usage in a washer		
Filling of CO ₂ extinguishing agent		
Filling of HFC-134a refrigerant		
HFC-410a refrigerant filling		
SF ₆ in HV Switchgear		
Filling of HFC-32 refrigerant		
Filling HC-600a refrigerant		

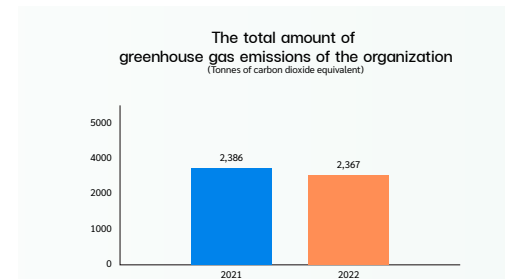
The total amount of greenhouse gas emissions of the organization (tonnes of carbon dioxide equivalent) in 2021

The Company collected corporate greenhouse gas emissions data within the specified reporting scope in which such information has been verified by experts from Bureau Veritas Certification (Thailand) LTD.

and has been certified for Greenhouse Gas Verification Statement according to measurement review standards and reporting greenhouse gas emission and reductions at the organization level (ISO 14064-1:2018) on March 14, 2022 with the amount of greenhouse gas emissions as follows:

Scope	Tons of carbon dioxide equivalent (TonCO ₂ e)
Scope 1	660.55
Scope 2	1,393.99
Scope 3	332.24
Scope 1 + 2	2,054.54
Total of 3 Scope	2,386.78
Carbon Intensity (Total 3 Scope)	4.54 TonCO₂e/ MWh

The Company has disclosed greenhouse gas emissions data in 2021 for the first time and will use this data as a base year to compare greenhouse gas emissions against the following year. The Company aims to reduce its corporate greenhouse gas emissions by 5% by 2022, and has set goal for reaching Carbon Neutral and Net Zero Emissions in the future.

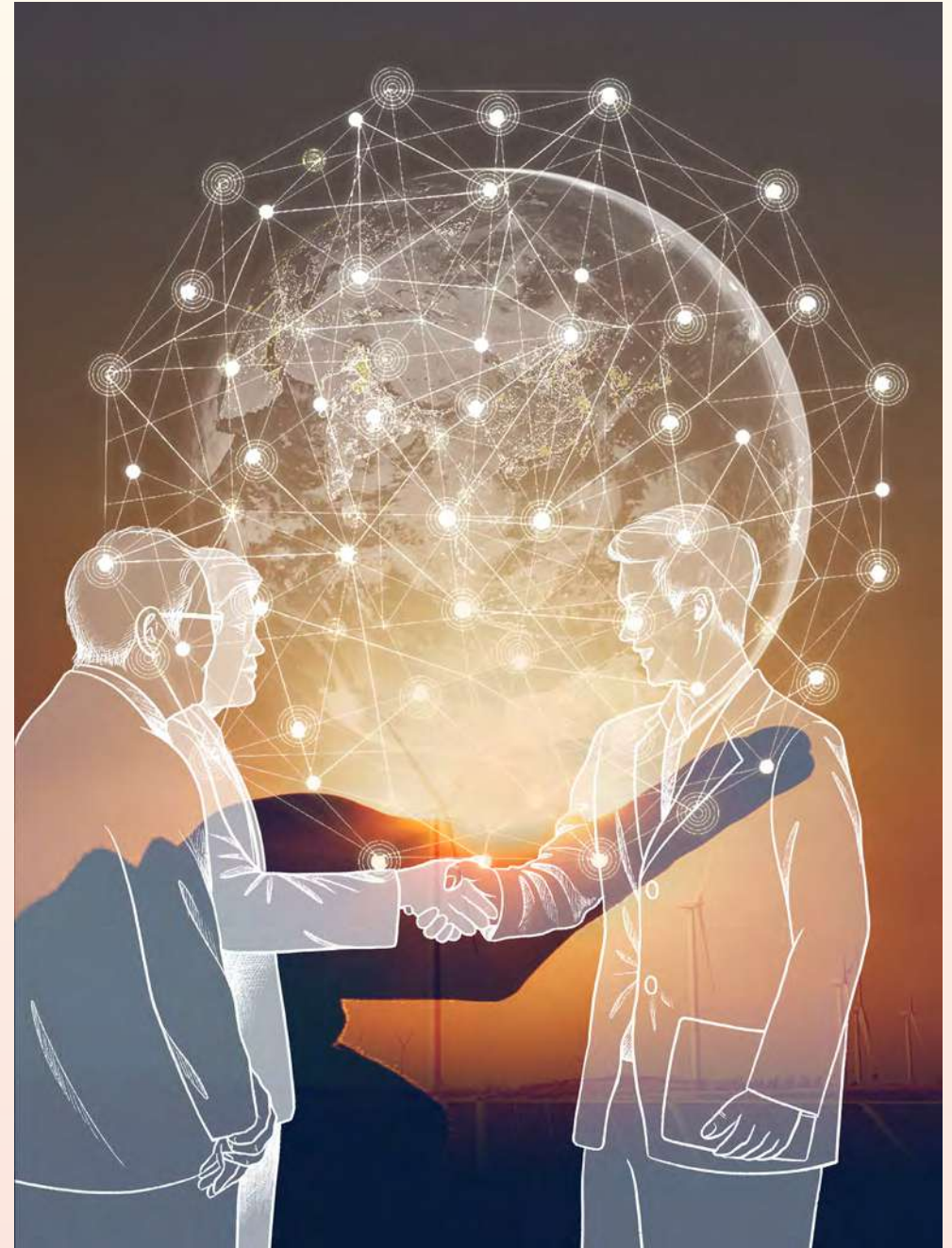


Management Activities to Reduce Greenhouse Gas Problems

1. The Company's representatives joined in supporting the planting of renewable trees in the area around the renewable energy power plant of Korat Wind Energy Company Limited in order to promote environmental conservation and increase green areas in the surrounding areas.
2. Established Gunkul Zero Waste project to carry out activities about the reduction of solid waste within the organization, which is one of the causes of greenhouse gas emissions; donation of water bottles for making monks' robes; donation of old calendars for making braille books for the visually impaired; and donation of can opener and tin cans for making prosthetic legs for the disabled, which is an ongoing project throughout the year. Also, there are activities with the committee, 5S activities, and Big Cleaning Day every month to separate office equipment or paper to be reused or resold for further recycling.

Social

The Company is aware of business driving and the importance of participating in social development for strong, sustainable growth through enhancing the process of working with communities both within the organization and outside the organization as well as community networks in all sectors to be in line with the business direction and create a strong society. The Company has strictly complied with the regulations and laws, including giving importance to all groups of stakeholders equally and fairly without discrimination as well as respecting human rights principles and being responsible to consumers. The Company has established and disclosed a sustainable development policy on the Company website.



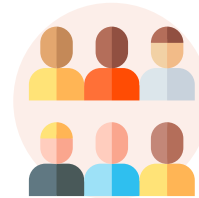
Labor and Human Rights

The Company believes that one of the most important resources is human resources. Therefore, it has developed and promoted business operations in accordance with labor and human rights principles, relevant laws and regulations, business ethics and good corporate governance. This is in line with the United Nation's Sustainable Development Goals (SDGs) on SDG8 decent employment and economic growth. This is an important factor that makes the Company successful in terms of operating results, and sustainable business, details are as follows:



Respect For Human Dignity

Respect for human dignity, fundamental rights and freedoms under the provisions of the Constitution, including the safety in life and property of the stakeholders of the Company.



Manage Human Resources Fairly and without Discrimination

Manage human resources fairly and do not discriminate with minimum legal compliance, such as employment (the prohibition of child and forced labor), including against verbal, behavioral and offensive sexual harassment. In which the Company has clearly set penalties.



Promote Equality

Promote equality, treat workers fairly, and all employees have the right to grow and advance in their careers. The Company has provided appropriate and competitive compensation and benefits for employees in the same industry, including the use of a system for measuring performance KPIs that can be measured in numbers by providing opportunities for training / developing and promoting the advancement in the work of the employees equally.



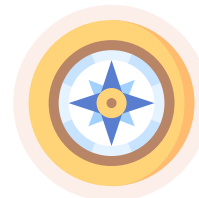
Communicate Directly with Stakeholders

Provide a direct communication channel with stakeholders and a channel for complaints, including processes for resolving complaints and grievances that are efficient and fair to all parties in order for the operations to be audited and transparent.



Respect Differing Opinions

Respect for differing opinions, freedom of religion, beliefs, traditions and culture, including the privacy and confidentiality of those who involved.



Uphold Integrity, Ethics and Professionalism

Adhere to virtue, ethics and professionalism in the Company's business and operations.



Human Rights Policy

Channels for Complaints and/or Reporting Clues



01
Contact the Audit Committee:
audit_committee@gunkul.com



02
Website : www.gunkul.com
In the topic.
"Channels for Complaints"



03
Sealed postage
To Chairman of the Audit Committee
Gunkul Engineering Public Company Limited
1177 Pearl Bangkok Building, 8th Floor,
Phaholyothin Road, Phayathai Subdistrict,
Phayathai District, Bangkok 10400



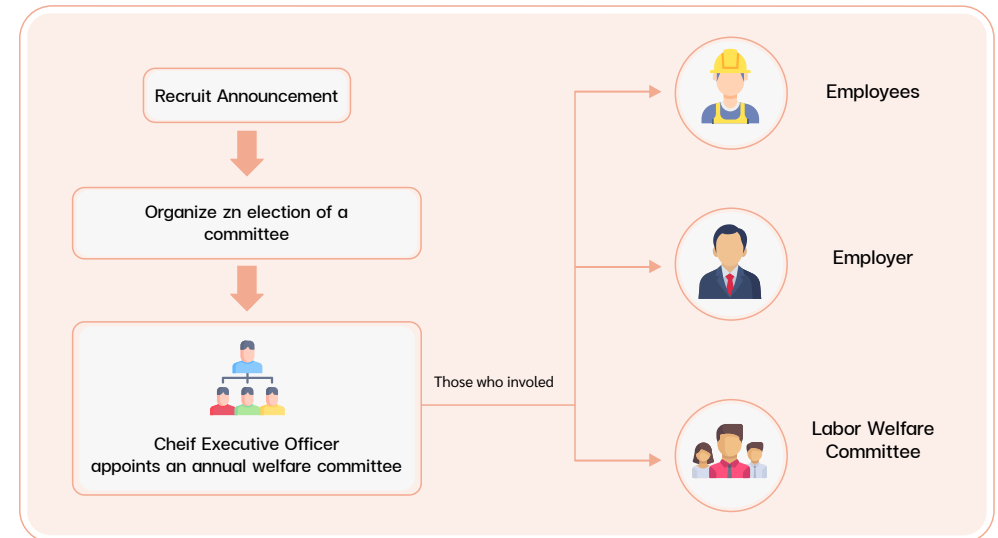
04
Whistleblowing and Corruption
Complaint Box eithin the company
(Open the box by the Audit Committee
and/or the Secretary to audit Committee)

This approach has been taken and adopted as a guideline for business operations. The Board of Directors and the management of the Company have set it as the basic responsibility that the Company should treat to the stakeholders of the Company and assign the Office of Chief Executive Officer to closely supervise the strict compliance to build trust and confidence among shareholders, employees, partners, customers, communities and society, bringing the Company's reputation and good image continuously. In addition, the Company has established the Labor Welfare Committee to represent employees on the matter of governance, equal and fair treatment, and development of labor operations as well as to promote knowledge and understanding of fair operations in accordance with human rights

principles. This includes helping labors in labor matters and building a network of the Company's workers which provides a channel for communication to listen to and gather employee opinions in order to continuously improve the employee welfare process accordingly. Roles and responsibilities of the Welfare Committee are as follows:

1. Collaborate with employers to arrange welfare for employees.
2. Give advice and make recommendations to employers on welfare arrangements for employees.
3. Inspect, control, supervise welfare arrangements that employers provide to employees.
4. Offer ideas and guidelines on organizing welfare that are beneficial for employees to the Labor Welfare Committee.

Labor Welfare Committee Appointment Process



Labor Pride



Agency : Ministry of Labor

Thailand Labor Management Excellence Award 2021

which covers 5 companies

- Gunkul Engineering Public Company Limited
- Gunkul Power Development Company Limited
- Future Electrical Control Company Limited
- G.K. Assembly Company Limited
- G.K. Power Products Company Limited

The Company is committed to improving its operations in labor services and assistance, taking care of all personnel equally, promote the creation of knowledge and understanding on fair labor practices and human rights, leading to implementation throughout the organization.

It also encourages employees to maintain a work life balance and focuses on communication to listen to and gather employee opinions to improve work systems, working environment and welfare for employees continuously.

Employee Care and Retention

Summary of Operations for the year 2021

All Employee



Amount (Persons)

959

Disability Employment



Amount (Persons)

8

Elderly Employment



Amount (Persons)

8

The Average Score of Employee Satisfaction with the Organization



Mean Employee Satisfaction Score



Promotion Rate with Special Projects

(Excluding promotion
according to age of work)



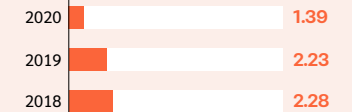
Turnover Rate

percent

1.63



Historical rate



Annual Scholarships for Employees' Children, total 76 scholarships

Total (Baht)

410,000

Employment

The Company values on the fundamental human rights and operates its business in accordance with humanitarian principles and laws, with fair employment and recruitment which are appropriate for the Company's business direction. It also supports employee diversity, without discrimination on gender, race or religion so that all employees can work happily and efficiently. As of December 31, 2021, the Company has a total of 959 employees, divided into 610 male employees (63.61%) and 349 female employees (36.39%). There are 8 employees with disabilities who are registered as disabled with the Department of Empowerment of Persons with Disabilities, in compliance with the requirement thereof, and the Company aims to continually support more people with disabilities. At present, the Company has employees classified by age range. This includes 8 elderly people employed by the Company in order to provide them with income to support themselves and their families and live in a balanced society equal to the general public.

Number of Employees

Number Of Employees	Number of Employees		
	2019	2020	2021
Total employees (person)	844	964	959
Monthly	716	854	849
Daily	128	110	110
Number of employees by type of employment (persons)			
Full Time	718	791	835
Contracted	126	173	124
Number of employees by gender (persons)			
Male	538	603	610
Female	306	361	349
Number of employees by other hiring (persons)			
Disabled	2	7	8
Elderly	5	6	8

Number Of Employees	Number of Employees		
	2019	2020	2021
Number of employees by employee level (persons)			
Management Level	34	38	41
Manager Level	60	65	71
Supervisor Level	88	114	117
Staff Level	421	476	509
Operator Level	241	271	221
Number of successful recruiting of employees (persons)			
Management Level	5	4	4
Manager Level	15	19	25
Supervisor Level	31	29	17
Staff Level	130	158	165
Operator Level	65	5	4
Employee turnover rate (%)	2.23	1.39	1.63

At the executive level, the Company set up a working group for care and treatment of employees, through Nomination and Remuneration Committee and HR Committee who manage employee welfares, listen to suggestions and complaints from employees in each department and line of work through their respective executives, representing the HR Committee. Meetings are held on a regular basis for every parties to join in finding conclusions and guidelines for solutions including developing competitive and attractive welfares, transforming into policies and implementing the policies.

Training and Development of Personnel Potential

Number of courses
Amount (Courses)

111

divided into

- 62 internal training courses
- 49 external training courses



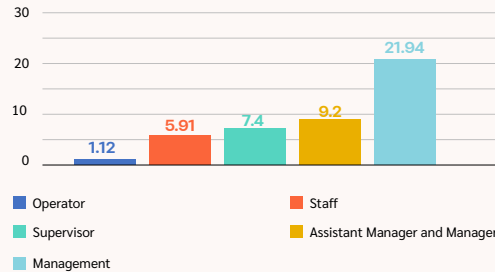
Average Training Hours



Amount (hour/person/year)

5.01

Average Number of Training Hours by Employee Level

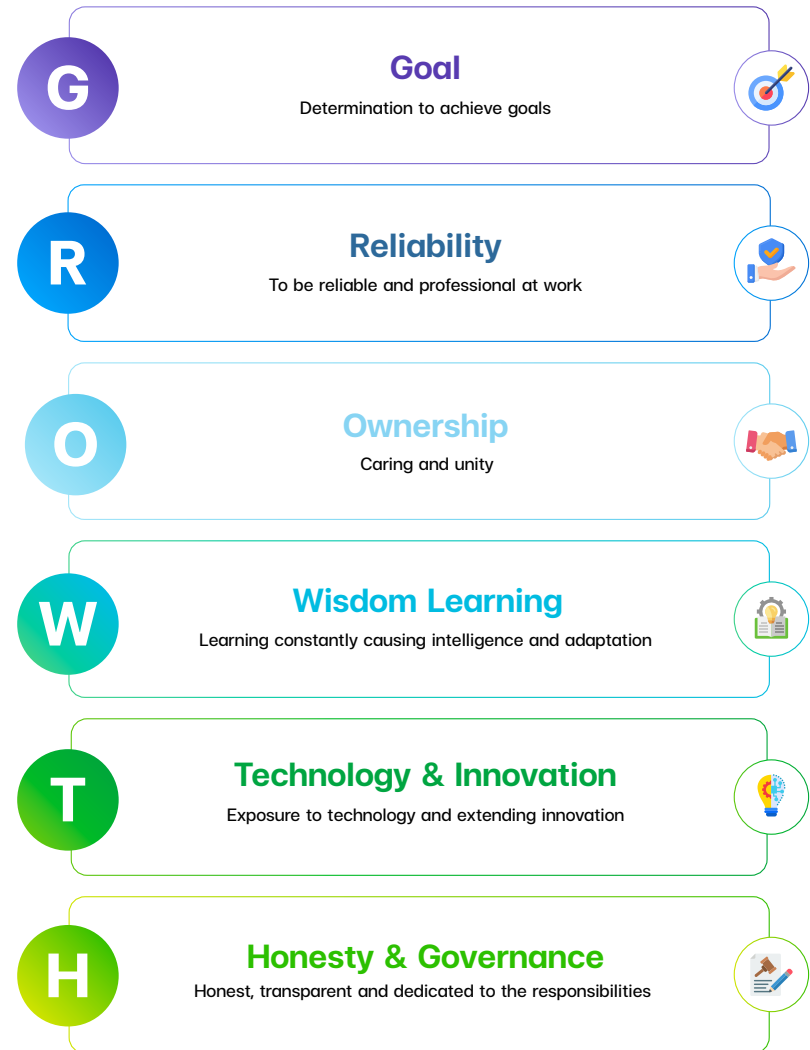


* Employee capacity development for the year 2020 is adjusted according to the situation of the epidemic of COVID-19.
* Change some courses to online courses.

The Company realizes that “employees” are the starting point for driving the business towards the goal, which is the main driving force that will lead the organization towards sustainability. Therefore, the Company has developed human resource management on the basis of treating personnel with fairness and respect for human rights, by focusing on opportunities, advancement, rewards, appointment, promotion, potential development along with moral development, maintaining the environment, safety and organizing a cooperative work system; as well as, promoting skills and learning throughout the working period with the aim of building employees to be talented people, good teams and excellent organizations, by focusing on and building on the characteristics, skills and potential that the organization expected, with the following aims

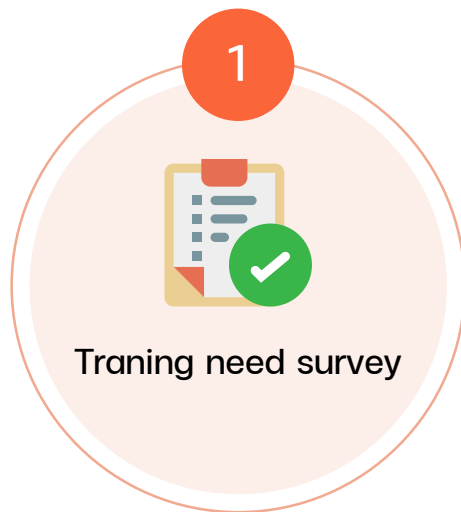
- Build people to be smart, good, committed, teamwork and lead the organization to excellence, by linking employee behavior with corporate culture “**Organization grows Employees Growing**” (G We GROWTH Together). Co-creating strong corporate culture behaviors is like laying the foundations of the organization to be stable and sustainable, which is the duty of all employees in the organization to participate in building “**Corporate culture**” creates unity.

We GROWTH Together

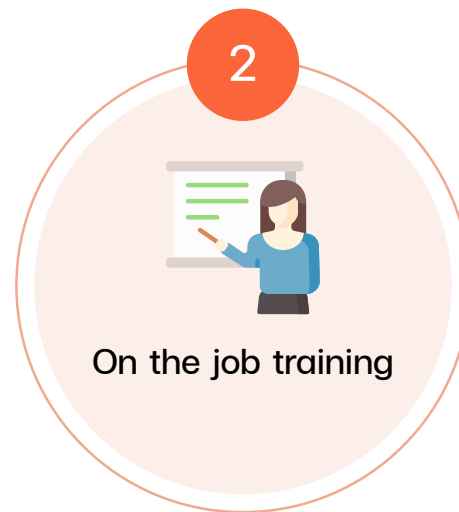


- Develop employee potential to prepare for the growth of the organization by creating an Individual Development Plan and an Annual Training Plan. Including knowledge management within the organization through the following process;
 1. Creating a Knowledge Sharing
 2. Creating a Knowledge Network
 3. Creating a Knowledge Search Engine or in many organizations creating a KM Center.
- Make career progress plans for employees in the organization (Career Paths).
- Establish a succession plan for important work of the organization through the policy of job promotion.

Throughout the past period, the Company has continuously increased the number of personnel, due to the continuous growth of the Company all the time. Therefore, the Company has designed the human resource development course structure in connection with the results of competency assessments, performance results (KPIs) and the organization's strategic plan for each year as appropriate for the personnel at each level to be as a database for analysis and preparation of human resource development courses in response to the vision, mission and direction of the Company's strategic plan, in order to be an important force to drive the Company to be a stable and sustainable organization in the future and to prepare for the development of manpower to keep up with the growth of the organization through various training processes as follows;



Determined from the needs of the agency and individual needs as appropriate for each job position.



Defined the needs of individuals who come to perform the duties of the agency and define the measurement process, either in written form or in practice form.



Off-job training, whether attending special training or using simulations and case studies.



Transfer the organization knowledge to promote and develop skills, knowledge, abilities and their application for effective work.

In order for employees to be “Good people”, the Company has allocated budget for 111 employees potential development training courses and the average number of training hours for employees is 5.01 hours per person per year. The details are as follows:

Budget and Training Statistics

Details	2019	2020	2021
Training budget (million baht)	3.85	3.15	2.00
Number of courses	168	135	111
Number of employees attending the training	2,231	1,022	1,371
Average training hours/person	16.57	13.23	5.01

- Note
- 1) Employee potential development for the year 2021, adjusted according to the epidemic situation of COVID-19
 - 2) Some training courses have been adapted to online formats

Average number of training hours by employee level

Employee Level	Average number of training hours/ employee at each level		
	2019	2020	2021
1. Operator Level	9	5	1.21
2. Staff Level	14	7	5.91
3. Supervisor Level	26	6	7.40
4. Assistant Manager and Manager Level	36	6	9.20
5. Management Level	36	23	21.94

Besides the training course, the Company realizes the importance of personnel starting a new job by focusing on the employees to grow together with the organization, with care from the first day of work by organizing an orientation for new employees (On Boarding Program) to understand and learn corporate culture by creating a mentor system, in order to enable new employees to understand the correct working system, organizational culture, occupational health and safety and various rules and policies in their work and in balance between employees and the organization to understand and coordinate work in a balanced and team manner. In addition to develop training to support the business, the organization also offers courses “Investment planning for tax benefits and saving money for retirement age” for employees to have a good life balance before retirement for supporting employees who are retiring, which is a preparation before retirement for life plan, health plan, asset management to ensure life balance after their retirement.

On Boarding Program

(1 Year)



- Mentor System
- Evaluation System
- Key Performance Indicator
- Training
- Follow up

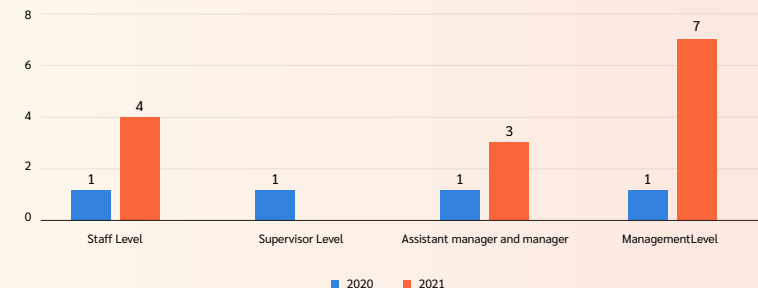


High-Performing Team

In 2021, due to the COVID-19 situation, for the safety of employees, the Company therefore chose to organize more online trainings and, because the Company has a large number of executives and employees who have received external trainings, these online trainings were organized in the form of Knowledge Sharing by encouraging said executives and employees to transfer the knowledge and skills learned from previous trainings to interested employees. This sharing process helps promote learning within the organization, and also serves as a follow-up and assessment on the results of the trainings.

Number of executives and employees who can transfer knowledge and skills through Knowledge Sharing activities (separated by employee level)

Knowledge Sharing Activities (Person)



Details of Training Courses in 2021

Data as of December 31, 2021 divided by employee level

Training Course Records for the year 2021				
Level/Course	Quality System Courses	Human Resource Development Courses (Core Competencies)	Administration Courses	Administration Courses
Management Level	<ul style="list-style-type: none"> Introduction to ISO9001:2015 Quality Management System Standard and Environmental Management ISO14001:2015 ISO/IEC 17025:2017 	<ul style="list-style-type: none"> Creative Talk Conference 2021 Leadership Succession Program (LSP), Class 12 	<ul style="list-style-type: none"> Construction contract management CFO's Orientation Course for New IPOs, Class 5 Management according to the Personal Data Protection Act B.E. 2562 (2019) on Human Resource Management (Practical) Class 3 	<ul style="list-style-type: none"> Basic knowledge about safety, occupational health and working environment Safety officer at work at the management level Development of e-Form using Alfresco and Bleaf Solution for E-Doc system (Module 1 - 4). Tax Law Update year 2021 Professional use of PVsyst program Update financial reporting standards for the year 2021 and accounting standards for agriculture "Guarantee", not to be overlooked Foresight, prevent risks with construction project insurance and property insurance (C.A.R. & I.A.R : Constructor's All Risk Insurance and Industrial All Risk) The decree to adjust interest rates First time in 95 years Techniques for controlling civil works Know before you make a mistake, Computer Act in the era of COVID-19 and update IT Policy Guidelines and considerations about the problems encountered Often in construction work Solar Business and Its Context in Thailand Design, Installation of Solar Rooftop and Effects Income tax withholding (Withholding Tax) Strengthening of capacity for reporting on activities or greenhouse gas volumes in the IPPU field Secondary draft law project under the Personal Data Protection Act B.E. 2562 Develop knowledge of smart grid in 8 subjects Webinar on the Join Crediting Mechanism (JCM) Implementation in Thailand 2021 - Innovation for Carbon Neutrality Through JCM What is the process for selecting directors according to CG principles? Knowledge and Analytical Skills for 2021: A New Dimension in Sustainable Securities Analysis through One-report Green Accounting Standard, SC. Using OMICRON CMC 356

Training Course Records for the year 2021

Level/Course	Quality System Courses	Human Resource Development Courses (Core Competencies)	Administration Courses	Administration Courses
Manager Level	<ul style="list-style-type: none"> Introduction to ISO9001:2015 Quality Management System Standard and Environmental Management ISO14001:2015 ISO/IEC 17025:2017 	<ul style="list-style-type: none"> The 9 Essential Skills for People Management Culture Challenges 	<ul style="list-style-type: none"> Construction Contract Management CFO's Orientation Course for New IPOs Class 5 	<ul style="list-style-type: none"> Basic knowledge of safety Occupational health and working environment Training 5S activities and the environment of the 5S committee for the year 2021 Safety officer at work at the management level Development of e-Form using Alfresco and Bleaf Solution for E-Doc system (Module 1 - 4). Tax Law Update year 2021 Professional use of PVsyst program Update financial reporting standards for the year 2021 and accounting standards for agriculture "Guarantee", not to be overlooked Foresight, prevent risks with construction project insurance and property insurance (C.A.R. & I.A.R : Constructor's All Risk Insurance and Industrial All Risk) The decree to adjust interest rates First time in 95 years Techniques for controlling civil works Know before you make a mistake, Computer Act in the era of COVID-19 and update IT Policy Guidelines and considerations on common problems in construction work Solar Business and Its Context in Thailand Design, Installation of Solar Rooftop and Effects Income tax withholding (Withholding Tax) HR Fundamental Skill Class 2 - Subject Recruitment & Selection HR Fundamental Skill Class 2 - Remuneration Management HR Fundamental Skill Class 2 - Employee Relations HR Fundamental Skill Class 2 - Learning & Development topic HR Fundamental Skill Class 2 - Workforce Planning HR Fundamental Skill Class 2 - Performance Management topic HR Fundamental Skill Class 2 - Career Management HR Fundamental Skill Class 2 - Organization Development Compliance with the PDPA within 30 days TCFD & SDGs Workshop for Beginners Break through the disruption, the challenge of accountants in the digital age. Applications of PLAXIS 2D in Professional Engineering, Class 1 Renewable energy technology and lithium-ion batteries Webinar on the Join Crediting Mechanism (JCM) Implementation in Thailand 2021 - Innovation for Carbon Neutrality Through JCM Green Accounting Standard, Green, SC. Using OMICRON CMC 356

Training Course Records for the year 2021

Level/Course	Quality System Courses	Human Resource Development Courses (Core Competencies)	Administration Courses	Administration Courses
Supervisor Level	<ul style="list-style-type: none"> Introduction to ISO9001:2015 Quality Management System Standard and Environmental Management ISO14001:2015 Environmental management according to regulations ISO14001:2015 and environmental management for wind power plants, generation 1-2 ISO9001:2015 Refreshing ISO/IEC 17025:2017 	<ul style="list-style-type: none"> The 9 Essential Skills for People Management 	<ul style="list-style-type: none"> Construction Contract Management 	<ul style="list-style-type: none"> Basic knowledge of safety Occupational health and working environment Training 5S activities and the environment of the 5S committee for the year 2021 Safety officer at work at the management level Development of e-Form using Alfresco and Bleaf Solution for E-Doc system (Module 1 - 4). Safety in working in confined spaces (for permits, operators, helpers, and operators) Tax Law Update year 2021 Professional use of PVsyst program Update financial reporting standards for the year 2021 and accounting standards for agriculture “Guarantee”, not to be overlooked Foresight, prevent risks with construction project insurance and property insurance (C.A.R. & I.A.R : Constructor’s All Risk Insurance and Industrial All Risk) The decree to adjust interest rates First time in 95 years Techniques for controlling civil works Know before you make a mistake, Computer Act in the era of COVID-19 and update IT Policy Guidelines and considerations on common problems in construction work Solar Business and Its Context in Thailand Design, Install Solar Rooftop and Effects Income tax withholding (Withholding Tax) HR Fundamental Skill Class 2 - Subject Recruitment & Selection HR Fundamental Skill Class 2 - Remuneration Management HR Fundamental Skill Class 2 - Workforce Planning HR Fundamental Skill Class 2 - Performance Management topic HR Fundamental Skill Class 2 - Career Management topic HR Fundamental Skill Class 2 - Organization Development Break through the disruption, the challenge of accountants in the digital age. Latest update of e-Payment laws, rules and procedures for e-Tax Invoice & e-Receipt, e-Withholding Tax. Secondary draft law project under the Personal Data Protection Act B.E. 2562 Working at heights for supervisors Compliance audit Accounting Standard, Green Line, SC. Using OMICRON CMC 356

Training Course Records for the year 2021

Level/Course	Quality System Courses	Human Resource Development Courses (Core Competencies)	Administration Courses	Administration Courses
Staff Level	<ul style="list-style-type: none"> Introduction to ISO9001:2015 Quality Management System Standard and Environmental Management ISO14001:2015 Environmental management according to regulations ISO14001:2015 and environmental management for wind power plants, generation 1-2 ISO9001:2015 Refreshing ISO/IEC 17025:2017 	<ul style="list-style-type: none"> The 9 Essential Skills for People Management Reorganize Agile with Scrum Tool The Power of Servant Leadership in the Post Pandemic World 	<ul style="list-style-type: none"> Construction Contract Management) 	<ul style="list-style-type: none"> Basic knowledge of safety Occupational health and working environment Training 5S activities and the environment of the 5S committee for the year 2021 Safety officer at work at the management level Development of e-Form using Alfresco and Bleaf Solution for E-Doc system (Module 1 - 4). Tax Law Update year 2021 Professional use of PVsyst program Update financial reporting standards for the year 2021 and accounting standards for agriculture “Guarantee”, not to be overlooked Foresight, prevent risks with construction project insurance and property insurance (C.A.R. & I.A.R : Constructor’s All Risk Insurance and Industrial All Risk) The decree to adjust interest rates First time in 95 years Techniques for controlling civil works Know before you make a mistake, Computer Act in the era of COVID-19 and update IT Policy Guidelines and considerations on common problems in construction work Solar Business and Its Context in Thailand Design, Installation of Solar Rooftop and Effects Income tax withholding (Withholding Tax) Leadership in safety for construction and installation of machinery (Anzen Leader Training Course) HR Fundamental Skill Class 2 - Subject Recruitment & Selection HR Fundamental Skill Class 2 - Employee Relations HR Fundamental Skill Class 2 - Learning & Development topic HR Fundamental Skill Class 2 - Organization Development Strengthening of capacity for reporting on activities or greenhouse gas volumes in the IPPU field High Voltage Substation: Connection Requirements, Design, Test, and Application In-depth workshop on calculating and reporting on corporate carbon footprint Preparation of Sustainability Disclosure according to One Report Compliance with the PDPA within 30 days CSR operations of the organization during the COVID-19 crisis TCFD & SDGs Workshop for Beginners Secondary draft law project under the Personal Data Protection Act B.E. 2562 Challenges to increase the share of renewable energy in Thailand Reduce, use and manage plastic wisely with circular economy principles



Training Course Records for the year 2021

Level/Course	Quality System Courses	Human Resource Development Courses (Core Competencies)	Administration Courses	Administration Courses
Staff Level				<ul style="list-style-type: none"> • Prepare to change for sustainability with One Report • Working at heights for supervisors • One report, Sustainability Disclosure Requirement: The Challenges Ahead • Renewable energy technology and lithium-ion batteries • TCFD & SDGs Workshop: ESG Risk Analysis and GHG Accounting • Business and Climate Change #understanding climate change as business drivers • Knowledge and Analytical Skills for 2021: A New Dimension in Sustainable Securities Analysis through One-report • Green Accounting Standard, SC. • Using OMICRON CMC 356
Operator Level	<ul style="list-style-type: none"> • Introduction to ISO9001:2015 Quality Management System Standard and Environmental Management ISO14001:2015 			<ul style="list-style-type: none"> • Basic knowledge of safety occupational health and working environment • Training 5S activities and the environment of the 5S committee for the year 2021 • Working at heights for operator

Summary of the Number of Employees in each Training Program in 2021 (Divided by Employee Level)

Course Name	Number of Models	Employee Level (person)						Total
		MGT	MGR	SUP	LED	STF	OPR	
New employee orientation course								
Orientation for new employees	38	6	26	12	0	173	3	220
Internal training course								
Training on 5S activities and the environment by the 5S committee for the year 2021	2	0	2	8	0	52	4	66
The 9 Essential Skills for People Management	1	1	5	15	1	4	0	26
Developing e-Form using Alfresco and Bleaf Solution for E-Doc System (Module 1 - 4)	1	2	3	1	0	11	0	17
Construction contract management	1	7	11	12	2	30	0	62
Safety in working in confined spaces (for licensors, operators, helpers, and operators)	1	0	0	0	1	0	0	1
Compliance Environmental Management ISO14001:2015 and environmental management for wind power plant Class 1	2	0	0	1	1	15	0	17
Safety officer at work, executive level	1	2	10	9	0	12	0	33
Tax Law Update year 2021	1	4	6	11	0	29	0	50
Professional use of PVsyst	1	1	1	1	0	22	0	25
Update Financial Reporting Standards for 2021 and Accounting Standards on Agriculture	1	4	6	11	0	29	0	50
Using OMICRON CMC356	1	2	5	3	0	12	1	23
ISO/IEC 17025:2017	1	1	4	3	0	4	0	12
People Change The World	1	39	54	7	0	2	0	102



Course Name	Number of models	Employee level (person)						Total
		MGT	MGR	SUP	LED	STF	OPR	
Internal training course (Knowledge Sharing)								
"Guaranteed" important things to know should not be overlooked	1	5	6	8	0	18	0	37
Foresight, protect against risks with construction project insurance and property insurance (C.A.R. & I.A.R : Constructor’s All Risk Insurance and Industrial All Risk)	1	6	8	15	1	18	0	48
Royal Decree adjusting interest rates First time in 95 years	1	7	7	10	0	14	1	39
Techniques for controlling civil works	1	1	2	10	4	28	0	45
Know it before you make a mistake, the Computer Crime Act in the COVID-19 era and update the IT policy	1	4	5	12	0	30	0	51
Guidelines and considerations on common problems in construction work	1	3	12	12	6	45	0	78
Solar Business and Its Context in Thailand	1	6	8	9	1	37	0	61
Solar Rooftop Installation Design and Effect	1	6	6	4	1	29	0	46
Income tax withholding (Withholding Tax)	1	25	16	25	0	75	0	141
External training courses								
Leadership training in safety for construction and installation of machinery (Anzen Leader Training Course)	3	0	0	1	0	7	0	8
HR Fundamental Skill Class 2 - Recruitment & Selection	1	0	1	1	0	2	0	4
HR Fundamental Skill Class 2 - Remuneration Management	1	0	1	1	0	0	0	2
HR Fundamental Skill Class 2 - Employee Relations	1	0	2	0	0	2	0	4
HR Fundamental Skill Class 2 - Learning & Development Topics	1	0	1	0	0	3	0	4
HR Fundamental Skill Class 2 - Workforce Planning	1	0	2	0	0	0	0	2
HR Fundamental Skill Class 2 - Performance Management	1	0	2	0	0	0	0	2
HR Fundamental Skill Class 2 - Career Management	1	0	2	0	0	0	0	2
HR Fundamental Skill Class 2 - Organization Development	1	0	2	0	0	0	0	2
CFO's Orientation Course for New IPOs Class 5	1	1	1	0	0	0	0	2
Creative Talk Conference 2021	1	1	0	0	0	0	0	1
Strengthening the capacity to report GHG activities or volumes in the IPPU field	1	1	0	0	0	1	0	2



Course Name	Number of models	Employee level (person)						
		MGT	MGR	SUP	LED	STF	OPR	Total
High Voltage Substations: Connection, Design, Test, and Use Requirements	1	0	0	0	0	1	0	1
In-depth workshop on calculating and reporting corporate carbon footprint	1	0	0	0	0	1	0	1
Leadership Succession Program (LSP), Class 12	1	1	0	0	0	0	0	1
Preparation for Sustainability Disclosure according to One Report	1	0	0	0	0	1	0	1
Compliance with the PDPA Act within 30 days	1	0	1	0	0	2	0	3
Corporate CSR Actions During the COVID-19 Crisis	1	0	0	0	0	1	0	1
Management according to Personal Data Protection Act B.E. 2562 (2019) on Human Resource Management (Practical) Class 3	1	1	0	0	0	0	0	1
TCFD & SDGs Workshop for Beginners	1	0	1	0	0	1	0	2
Discussion on the topic of Breaking Disruption, the challenges of accountants in the digital age	1	0	3	4	0	0	0	7
Applications of PLAXIS 2D in Professional Engineering, Class 1	1	0	1	0	0	0	0	1
Latest Update on e-Payment Laws, Rules and Procedures for e-Tax Inv. & e-Receipt, e-Withholding Tax	1	0	0	1	0	0	0	1
Seminar Secondary Law Draft Project under the Personal Data Protection Act B.E. 2019	1	2	0	2	0	2	0	6
Challenges in increasing the share of renewable energy in Thailand	1	0	0	0	0	1	0	1
Working at height for operator	1	0	0	0	0	0	4	4
Reduce, use and manage plastic wisely with circular economy principles	1	0	0	0	0	1	0	1
Prepare to change for sustainability with One Report	1	0	0	0	0	1	0	1
Working at height for supervisors	3	0	0	1	0	3	0	4
Develop knowledge of smart grid in 8 subjects	1	1	0	0	0	0	0	1
One report, Sustainability Disclosure Requirement: The Challenges Ahead	1	0	0	0	0	1	0	1
Renewable energy technology and lithium-ion batteries	1	0	1	0	0	1	0	2
Webinar on the Join Crediting Mechanism (JCM) Implementation in Thailand 2021 - Innovation for Carbon Neutrality Through	1	2	1	0	0	0	0	3



Course Name	Number of models	Employee level (person)						
		MGT	MGR	SUP	LED	STF	OPR	Total
Compliance audit	1	0	0	1	0	0	0	1
ISO9001:2015 Refreshing	1	0	0	0	0	2	0	2
Culture Challenges	1	0	1	0	0	0	0	1
Organizational Agile with Scrum Tool	1	0	0	0	0	1	0	1
What is the process for selecting directors according to CG principles?	1	1	0	0	0	0	0	1
TCFD & SDGs Workshop: ESG Risk Analysis and GHG Accounting	1	0	0	0	0	2	0	2
Business and Climate Change #understanding climate change as business drivers	1	0	0	0	0	2	0	2
2021 Knowledge and Analysis Skills Course: A New Dimension in Sustainable Securities Analysis through One-report	1	1	0	0	0	2	0	3
The Power of Servant Leadership in the Post Pandemic World	1	0	0	0	0	1	0	1
Green Accounting Standard, SC.	1	8	7	9	0	2	0	26
Management System Standards Consultant Development Project Safety in the year 2022	1	0	0	1	0	0	0	1
Anzen Leader Refreshment Training	1	0	0	0	0	1	0	1
Total	111	152	233	221	18	734	13	1,371

Note

- MGT is Management Level
- MGR is Manager Level
- SUP is Supervisor Level
- LED is Leader Level
- STF is Staff Level
- OPR is Operator Level

In addition to promoting the potential of internal personnel, the Company also supports the employees' children in education funds. In 2021, the Company has awarded scholarships to the employees' children totaling 76 scholarships, or a value of more than 410,000 baht. In addition, the Company sees the potential of youth in society and commits to support educational opportunities through real-life working experiences and produce quality personnel for society, by creating a network with educational institutions to recruit students for internships with the Company. In 2021, the Company supported 13 students from internship and co-operative education programs who are capable and wanted by the departments within the organization.

Summary of the Number of Internship Students in 2021

Department	Amount (person)	Institution
General Internship Project, totaling 8 people		
Information Technology Department	2	King Mongkut's University of Technology Thonburi
Innovation Department	1	Chulalongkorn University
Project Management	1	Sirindhorn International Institute of Technology,Thammasat University
	1	Chulalongkorn University
Electrical Equipment and lighting Development and Improvement Department	2	Rajamangala University of Technology Thanyaburi
Internal Audit Department	1	Songkla University, Trang Campus
Cooperative Education Project, totaling 5 people		
Power Plant Maintenance Department	1	Phetchaburi Technical College
Information Technology Department	1	King Mongkut's Institute of Technology Ladkrabang
Human Resources and Administration Department (Factory)	2	University of Phayao
Internal Audit Department	1	Rajamangala University of Technology Phra Nakhon

In addition to providing educational opportunities, the Company is also committed to promoting career advancement by hiring knowledgeable, ability and potential students that meet the needs of various fields after graduating from university.

Number of Interns

from general internship and cooperative education project

Historical data 2018-2021



45 persons

Number of Interns

that receiving opportunities for further employment

Historical data 2018-2021



3 persons

Employee Engagement

Employee Engagement	2018	2019	2021
Employee turnover rate (percent)	2.23	1.39	1.63
Employee satisfaction score (percent)	67	87	86

The Company builds employee engagement through corporate culture **"GROWTH together"**. The organization believes that the behaviors created by people in the organization arise from learning each other and adhere to each other until it is a tradition as a foundation for a culture of work within the organization that will help create change, expand business opportunities, aiming to be a leader in the integrated energy business and move forward steadily to the next year. In the past year, the Company had an employee turnover rate of 1.63% of the total employees.

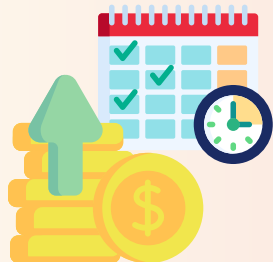
The Company believes that creating employees' loyalty and developing human resource is the driving force of the business to grow with the organization. In 2021, the Company had an average score of employee satisfaction and loyalty equal to 86%. In 2022, the Company has established welfares and activities for bonding among employees, and with their families as follows:

Welfare, Compensation and Engagement activities among employees, and their families

In addition, the Company focuses on continuous human resource development, with the belief that the driving force behind the success of the organization comes from the development of human resources in accordance with the business direction, to encourage employees to provide results and development themselves together with the organization continually. Engagement between employees and the organization is also important and it is done through welfare and employee relationship activities as follows:



Remuneration and Welfare for Executives and Employees Policy



Financial Welfare and Facilities

- Bonus payments and annual adjustments, assessed by performance results, skills and employee arrival times
- Employee Provident Fund
- Staff uniforms
- Flexible working hours and convenient and safe workplaces such as work from home.
- Adding vacation days according to the length of work



Health and Safety

- Group accident insurance and travel insurance in case of traveling abroad
- Insurance for COVID-19
- Medical expenses in case of outpatients and inpatients.
- Dental allowance
- Set up a sub-office, split location and work from home to divide manpower and keep distance during operation to prevent and reduce the risk of spreading of COVID-19
- Provide equipment to prevent COVID-19 for employees such as COVID-19 (ATK) test kit, GUNKUL Care Bag, GUNKUL care bag, fabric mask, and thermometer, cleaning equipment, liquid soap, alcohol gel, germs sanitization in the workplace, and setting up partitions between the desks to prevent the spread of COVID-19
- Contact and coordinate with government agencies, the private sector, including preparing public relations media for vaccination registration sites, preventive practices during each period of the COVID-19 epidemic situation for employees to know how to protect themselves, and arrange for them to receive the first and second dose of COVID-19 vaccine. The vaccination goal is to achieve 100 percent or not less than 90 percent of the total number of employees. In 2022, the Company also have a campaign and provides third dose vaccines to employees continuously for the safety of all employees and to prevent the spread of COVID-19 continually
- Morning Talk activity – JSA: Job Safety Analyst, job analysis before working for safety in accordance with Plan-Do-Check-Act (PDCA) principles



Employee Family Welfare

- Scholarships for employees' children
- Disaster assistance
- Funeral assistance for the employees' parents and children



Religion, Culture, Tradition

- Making merit, offering food to together with the community surrounding the Company on important Buddhist days and make merit for the Company's annual ceremony
- Asking for blessings through auspicious oranges according to Chinese traditions during the Chinese New Year.
- Distributing auspicious envelopes "Ang Pao" to employees.
- Annual merit-making activities



Mental and Participation

- Employee birthday events, dining together birthday gift and/or consecration and listening to sermons
- 5S and QCC activities to create participation in the development/improvement of working methods and environment
- Organizing activities for employees throughout the organization because employees in all departments are involved in achieving the quarterly sales target.
- Executive visit activities or meetings via Google Meet or Zoom, solar power plants, wind power plants and construction sites to boost morale. Attend meetings and talk with all employees to exchange ideas, requests, development and maintenance of employees' well-being



Volunteer Activities

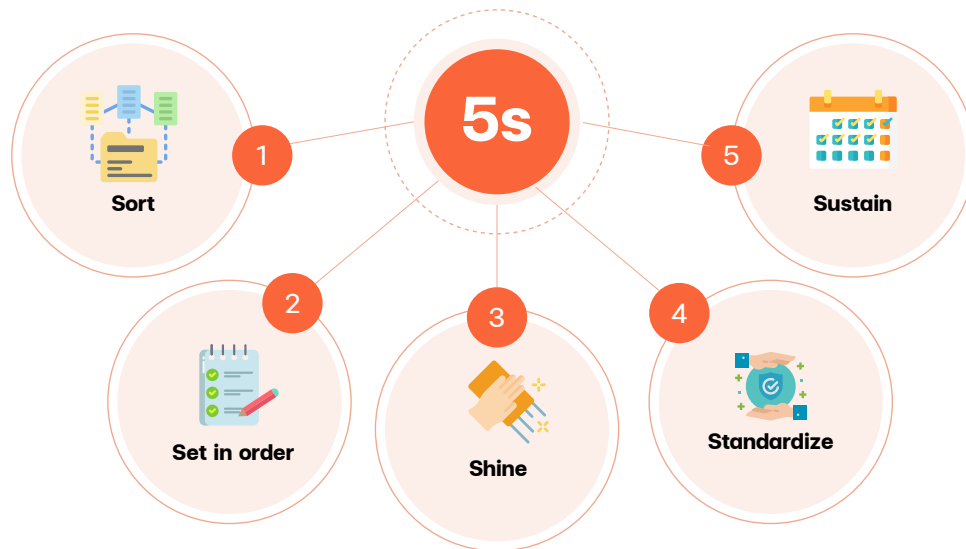
- Social service activities: cleaning toilets, sweeping the temple yard, and collecting trash around the Company and community.
- Transfer knowledge about installation of solar panels, and replacement and installation of LED light bulbs
- Sustainability development activities, promoting social and environmental responsibility, comprehensive response to stakeholders

Productivity Activities (5S Activities and the Environment)

To promote a cooperative work environment as well as to promote skills, abilities, experience and learning throughout the employee's working period by giving employees a sense of belonging to the organization, love and cherish, bond with the organization through activities that support productivity with the following objectives:

- To encourage all employees to participate in work improvement, quality and work together as a systematic team, known how to solve immediate problems by themselves and know how to improve themselves.
- To create cooperation in creating work to meet the target quality by searching for weaknesses and finding the root cause in order to fix, improve and plan the quality systematically.
- To create incentives for compensation and/or honor certificates to employees who participate in beneficial activities and create value for the organization.
- To jointly care for the environment and create something good for stakeholders.

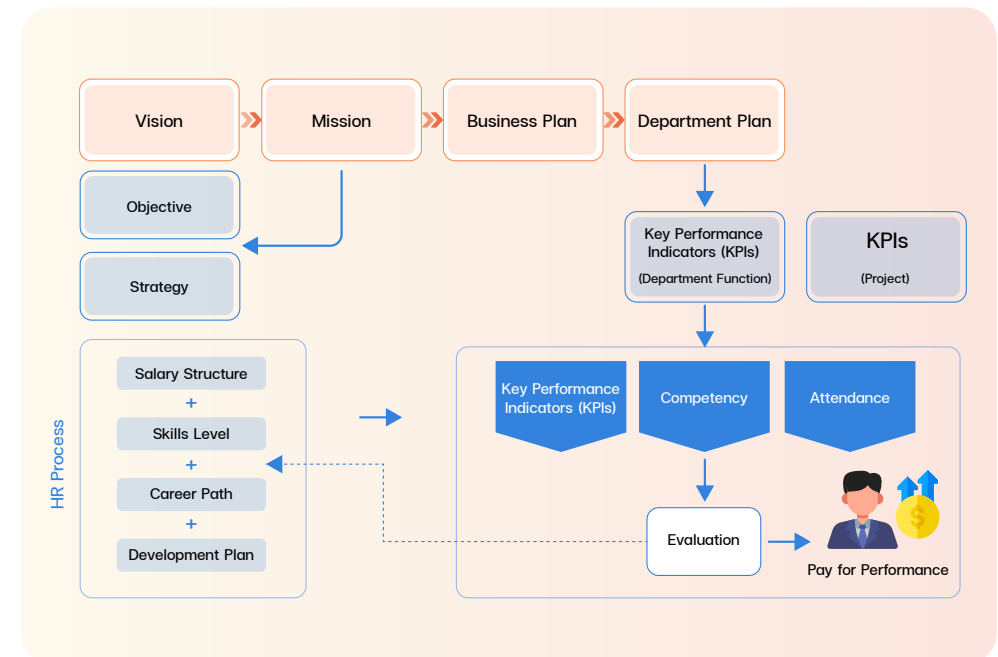
Activities



5S is an activity to improve the work of employees by themselves according to the principle of “Sort, Straighten, Shine, Standardize and Sustain” in their own workplaces, thus the Company has employees with discipline from the employees’ conscience, making the workplace environment clean, tidy, safe and has a proper waste management, create a balance with the environment and generate income for activities to improve activities. The procedure also generates income that can be used to improve the activities. The Company also added 1 more S to the activities, Safeguard Environment, meaning that the activities shall take into account the conservation of environment, not just the Company itself. Through the adoption of 3Rs, which are Reduce, Reuse, and Recycle, the Company intend to efficiently utilize resources and reduce unnecessary waste.

In addition, the Company also creates incentives by awarding compensation and honor certificates to the top 3 scores from the 5S assessment in order to promote discipline about “Sort, Straighten, Shine, Standardize and Sustain” among employees to benefit the organization and employees volunteer in doing good deeds.

The Company has a process to link compensation with skills, competence and performance appraisal to align with the vision, mission, policies and strategies of the Company as follows:



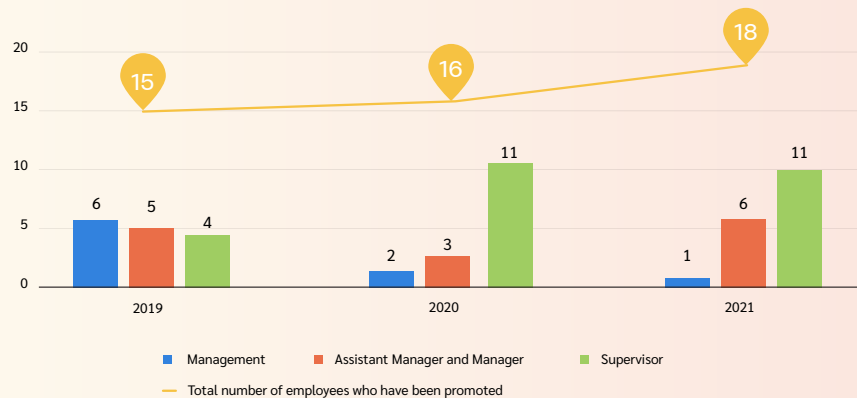
Promoting Employee Progress

The Company has policies, rules and regulations for the selection and promotion of internal personnel to receive job promotion adjustments to create incentives for personnel and maintain personnel awareness of the stability in their own career that will continue to grow or move to a higher position or any department. When the employees have knowledge, capability and qualifications that required for the position with higher duties and responsibilities according to the succession plan, the employees will be nominated for job promotion. In 2021, 18 employees were promoted by this process.

The process will have a fair selection criteria and will be screened by High-level executives in each department that is the personnel management committee by having the Chief Executive Officer as the Chairman of the Personnel Management Committee, HR Committee. Their duties are as follows:

- Consider the qualifications of personnel who have been proposed to be promoted in accordance with the policies, regulations, and rules set by the Company in accordance with the succession plan.
- Consider problems, obstacles and other factors that related to the organization's human resource management.
- Approve policy guidelines and solutions within the scope of authority and responsibilities that assigned by the Company.
- Suggest ways to solve problems or guidelines or criteria for human resource development in accordance with the Company's policy.
- Personnel Management Committee is appointed from senior management and the Human Resources and Administration Manager serves as a committee and secretary with the approval of the Chief Executive Officer.

Statistics of the number of employees who have been promoted



Employee level that has been promoted	Number of employees who have been promoted		
	2019	2020	2021
Management Level	6	2	1
Assistant Manager and Manager Level	5	3	6
Supervisor Level	4	11	11
Total number of employees who are promoted each year	15	16	18

Labor disputes

The Company had no complaints or disputes regarding labor in the past three year.

Safety, Occupational Health and Working Environment Management

The Company believes that the safety, occupational health and work environment of employees is one of the key factors that will help them achieve efficiency and productivity. Therefore, the Company has developed a management system for safety, occupational health and working environment in accordance with the law, international standards and other requirements to create work safety for employees and those who come to contact or come to work within the Company. There is also a factory safety exhibition week within the Group to promote awareness among employees and to participate in all levels in the management of safety, occupational health to occur continuously and sustainably. In the past year, the details of the injury rate that leads to day off for more than 1 day (Lost Time Injury Frequency Rate: LTIFR) are as follows:



Report of the number of accidents and the number of safety days (Data as of 31st December 2021)

Company	2019		2020		2021		
	Number of time-off accidents (more than 3 days)	Number of consecutive accident-free days	Number of time-off accidents (more than 3 days)	Number of consecutive accident-free days	Number of time-off accidents (more than 3 days)	Number of time-off accidents (more than 1 days)	Number of consecutive accident-free days
GKA	1	133	1	421	0	1	26
GKP	0	1,846	0	2,134	0	0	2,416
WED	0	1,098	0	1,463	0	0	1,828
GNP	0	646	0	1,011	0	0	1,376
KWE	0	560	0	925	0	0	1,290
FEC	0	560	0	925	0	1	N/A
GPD	0	730	0	1,095	0	0	N/A

Note

1) Due to Future Electric Control Company Limited (FEC) and Gunkul Power Development Company Limited (GPD) are construction business groups, each construction site has different construction periods base on their respective agreements. Therefore, the total number of consecutive accident-free days cannot be calculated.

2) Data on the number of time-off accidents (more than 1 days) were first collected in 2021.

Accident Reduction Target in 2021 – 2024

- 1.1 The rate of time-off accidents (more than 3 days) to be zero.
- 1.2 The targeted Lost Time Injury Frequency rate (case per 1,000,000 working hours) to reduce by 5% in 2022.

Safety Activities of the Group in 2021

WEBD	Solar	GKAP
Safety Measures Related to the COVID-19 Situation <ol style="list-style-type: none"> 1. Establish measures in case of an on-site spread 2. Employees, contractors and visitors must be screened by temperature measurement before entering. 3. Visitors must comply with the following measures: <ol style="list-style-type: none"> 3.1. Wear a mask at all times inside the power plant. 3.2. Visitors must have ATK results (not more than 48 hours) and submit them to the power plant staff for verification before approval of entry. 	Safety Measures Related to the COVID-19 Situation <ol style="list-style-type: none"> 1. Establish measures in case of an on-site spread 2. Employees, contractors and visitors must be screened by temperature measurement before entering. 3. Employees and contractors must comply with measures if they have traveled to the designate red areas as announced by the government, whereby they must report and go through quarantine 14 days before entering. 	Safety Measures Related to the COVID-19 Situation <ol style="list-style-type: none"> 1. Establish measures in case of an on-site spread, such as social distancing and temperature measurement 2. Arrangement of space for distance during meals 3. Disinfection of the working area
Occupational Safety and Health <ol style="list-style-type: none"> 1. Setting targets to reduce accidents 2. Orientating 6 employees before starting work 3. Orientating the employees of the 24 contractors before starting work, totaling 229 people. 	Occupational Safety and Health <ul style="list-style-type: none"> • Orientating new employees before starting work • Orientating the employees of the contractors before starting work 	Occupational Safety and Health <ol style="list-style-type: none"> 1. Annual inspection of the working environment by external agencies that are authorized by government authority. 2. Testing of parts of and equipment for overhead cranes
Prepare safety manual as a guideline for employees, business partners, contractors and related persons.		

Customer Relationship Management

The Company's primary focus is on manufacturing electrical equipment that meets international standards for engineering and turnkey projects, as well as on renewable energy business in order to avoid risks associated with the use of goods or services. The following are certified standards of the Company's products:

Product Quality Standard and Safety Standard Certification



Product Testing to Ensure
Compliance with Specific Product
Standards (LPS/EGAT)



International
Electrotechnical
Commission

Certified International Standard
of Product (UL + IEC)



Register TISI Certification for
new Equipment



Quality Management System
according to International Standards



Environmental Management
System Standards

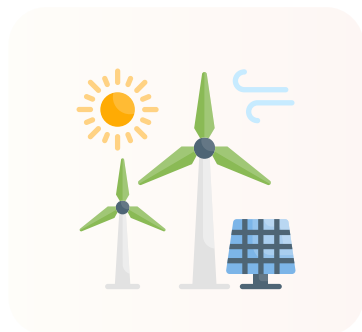


Occupational Health and Safety
Management System Standards



Industrial Product Standards

In addition, the Company plans to develop and manage relationships, as well as to increase customer satisfaction as follows:



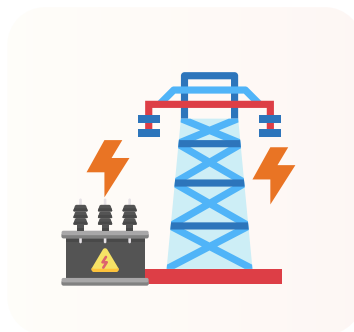
1. Renewable Energy Business Group

- Focus on product and service efficiency with new production technologies to be able to generate electricity with quality and stability.
- Apply technology and innovation in management processes and operations.
- Develop before and after sales service to meet customer's requirement for highest satisfaction from products and services.



2. Engineering and Turnkey Business Group

- Focus on efficient construction and service with new production technologies to be able to generate electricity with quality and stability, with the least project operating time, reduce loss of opportunity costs, reduce cost for customers.
- Apply technology and innovation in management processes and operations.
- Develop new communication and public relations channels to reach a more diverse customer base.



3. High Voltage Equipment Business Group

- Prompt response to customer needs to ensure satisfaction and an exceptional customer experience to entice customers to continue using the Company's services.
- Maintain relationships with various customer segments, including contact, customer visit, as well as supporting activities such as training, sporting events, and CSR events.
- Assist customers in identifying new products for testing to resolve electrical problems, including detailing, standards, TOR requirements, and supplying equipment for high voltage systems, as well as adding Company's products in vendor list /product list of customer agencies to increase long-term sales opportunities.



4. Ecosystem Business Platform & Innovation Business Group

- Focus on developing new technologies and innovations that will improve the quality of life and meet customers' requirement.
- Develop new sales/ marketing/ communication and public relations channels to reach a more diverse customer base.
- Promote access to clean energy for customers to access to clean energy as the Company believes that energy is a fundamental human right.

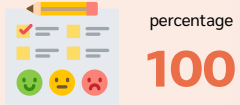


5. Cannabis Business Group

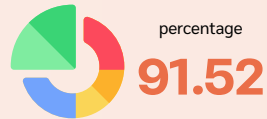
- Focus on product and service efficiency through the use of new manufacturing technologies in response to the need to maintain people's health through the use of natural products.
- Produce hemp and cannabis in accordance with GAP and GMP standards in order to expand into a variety of products that improve consumers' quality of life.
- Develop new sales/ marketing/ communication and public relations channels to reach a more diverse customer base.

2021 Performance

Number of customers
who participated
in the assessment of
overall satisfaction



Average score of
overall customer satisfaction

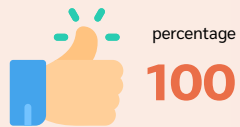


Number of complaints
about products and services



2022 Target

Short term goals



Average score of
overall customer satisfaction

Taking recommendations from
the customer satisfaction
assessment form to improve
and to make a project to
develop products and
services every year.



Long term goal

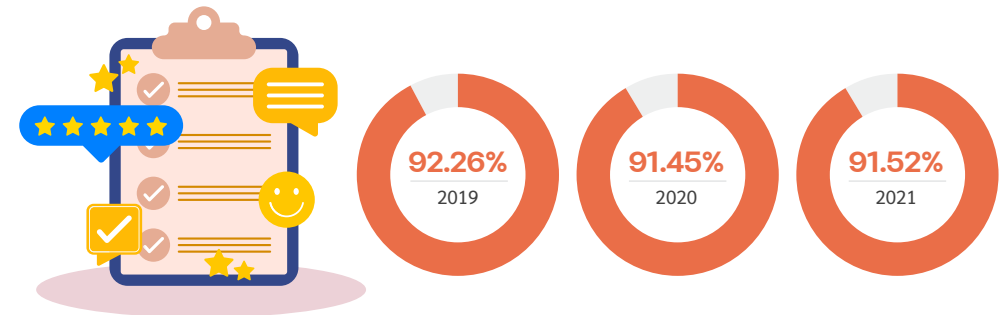


Develop a relationship between
customers and business
management plan

Summary of Customer Satisfaction Questionnaire 2021

Survey Topic	Scores (%)
Prompt price offer	91.29
Providing product information	89.83
Prompt resolution to problem	91.45
Convenient to contact	92.44
After sales service	92.69
On-time delivery	89.64
Packaging and logistic quality	92.07
Product Accuracy	89.58
Overall satisfaction with the Company	94.67
Average	91.52

Summary of Average Scores of Overall Customer Satisfaction in 2019-2021 (%)



Customer Relationship Activities of Sales and Marketing for the year 2021

Supporting and Participating in Sporting Events with Various Agencies

1. The MEA Classic 2021 Charity Golf Tournament was sponsored in 2021, but the event was postponed to January 2022

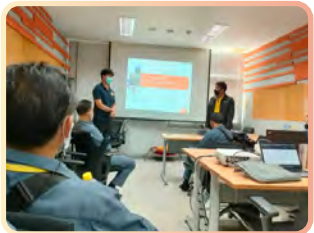


Training and Product Presentation

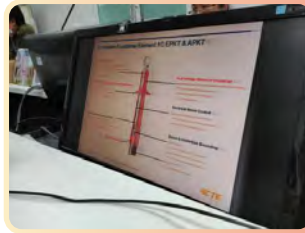
1. Provide an explanatory introduction about the equipment used in the maintenance of SF6 gas, DILO products, and application techniques and other solutions for customers to electricity generating authority of Thailand and various companies.



2. Organize training on the installation of MV Termination Kit and Splicing Kit for TE products to the Electricity Generating Authority of Thailand.



3. Organize training on equipment installation of MV Termination Kit and Splicing Kit for TE products to Future Plan Company.



4. Organize 22kV Termination Kit and Splicing Training for AIT company.



5. Participate in the inspection and give advice on the installation of 115 KV substation equipment, Sieyuan products to the Provincial Electricity Authority at the Phran Kratai Power Station, Kamphaeng Phet Province and the Khukhan Power Station, Sisaket Province.



6. Organized a lecture to introduce Ni Cd Batteries, ALCAD products to the Metropolitan Electricity Authority by organizing WEBINAR online lectures from foreign manufacturers.



7. Participate in training events and give advice on how to use Load Break Switch equipment to staff of Metropolitan Electricity Authority at the Metropolitan Electricity Authority Office, Rat Burana District.



Responsibility towards the Community and Society

The Company is committed to promote the coexistence with the community by creating friendship and helping each other as “Good neighbors” to develop and strengthen the community to have a sustainable quality of life and society; promoting community involvement to stay informed and enhance mutual understanding and following up on performance; managing the potential impact of the Company’s operations and giving importance to the exchange of knowledge and experiences. The Company gives importance to jointly develop the community and society by cooperating with agencies, educational institutions in organizing activities that are beneficial to the community and society every year by supporting the event budget and sending employees to participate in various activities organized by the community.

Framework for responsibility towards Community and Society

Company Policy

- Operating business under the Principles of Good Corporate Governance with good governance and transparency.
To be one of the leaders in renewable energy and integrated power systems business with stable steps towards the future.
Assessing risks in all dimensions to build
- credibility and trust with stakeholders.



Concept “not only the energy, we care”

- Building friendship and helping each other under “Good neighbors” towards the community and society.
- Managing to reduce the impact that may occur from the Company's operations.
- Promoting creative activities and developing sustainable social quality.
- Bringing complaints from the community to improve and develop.



Target

- Community and society having no complaints against the Company's operations.
- The Company and the community having a good relationship in organizing various activities together.
- Promoting the image of the Company as a trustworthy organization, being friendly and approachable.

Operating Guidelines

The Company's operations are divided into 2 target groups according to the area:

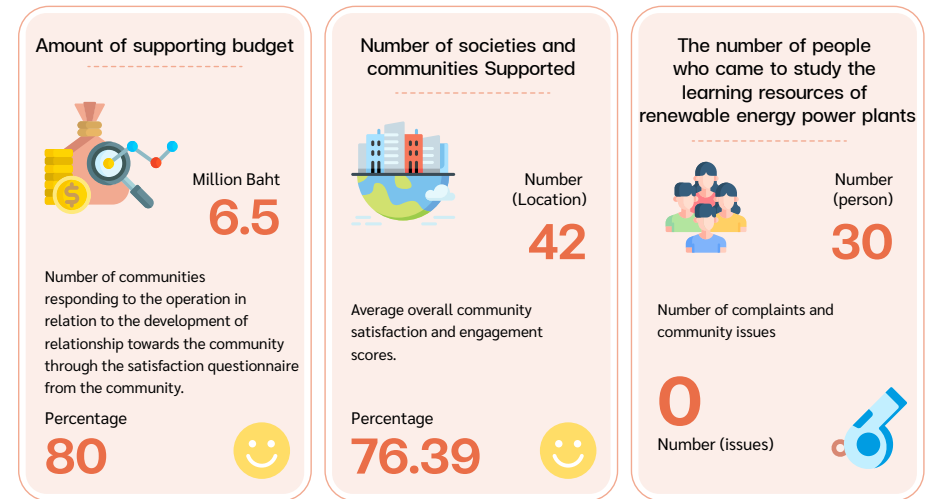
1. Community/Society area surrounding the business, such as communities surrounding renewable energy power plants.
2. General area level, such as agencies/community areas that are not related to the Company or is a society as a whole.

Operational Goals for the year 2022



In 2021, the Company has implemented projects through its social and environmental activities; promoted community participation; placed importance on creating educational opportunities; and supporting sports excellence, inheriting local culture and traditions way of life of the community. Also, preserving and restoring the quality of the environment in order to achieve the balance of nature and sustainable life, and living together with the community in helping each other with the awareness that it is the duty of the Company owed to the society, which is a stakeholder related to the Company.

Performance in year 2021



Scope of information: Communities surrounding the establishment in 5 km radius

Actions on Social Responsibility



Project to promote learning resources about renewable energy power plants

The Company recognizes the importance of education, knowledge enhancement, and of being an organization of learning for educational institutions, school students, university students, teachers, organizations, and surrounding communities who are interested in solar power plants, to take a visit and study on solar and wind power plants to expand their knowledge, and apply to further study sparking ideas on renewable energy for development and application in their daily life. However, due to the COVID-19 situation in 2021, the Company must limit access to study visits in accordance with government measures to strictly prevent the spreading of COVID-19. Therefore, there were 3 faculties with a total of 30 people from organizations in both public and private sectors that took the study visits at renewable energy power plants.



Donated pain reliever medication to Chulalongkorn Hospital, Thai Red Cross Society

Dr. Gunkul Dhumrongpiyawut, Chairman of the Board of Directors, Ms. Sopacha Dhumrongpiyawut, Chairman of the Executive Committee, and Dr. Somboon Aueatchasai, Chief Executive Officer donated pain reliever medication to Chulalongkorn Hospital, Thai Red Cross Society, amounting to 10 devices as an important factor in promoting efficient medical treatment for patients and spreading opportunities for patients to access quality medical care to promote good quality of life.



Operations on the COVID-19 situation with the Dusit District Office Bangkok

The management representatives participated in supporting the operation to prevent the spreading of the epidemic, proactive screening, and other operations to prevent and mitigate the COVID-19 situation for the communities surrounding the Dusit District office area, Bangkok.



Supported the activities of the Elderly Club on Songkran day

The management representatives donated money to help organizing activities for the elderly club at Wat Sawat Waree Simaram Community and Wat Noi Noppakhun Community on Songkran day of the year 2021. The club has organized an activity to donate clothing and food for the elderly in the community to help and alleviate suffering due to the COVID-19 situation.



Supported jasmine rice to the communities surrounding the Dusit District Office Bangkok

The management representatives supported 1,000 kilograms of jasmine rice to the Dusit District Office, Bangkok to help and alleviate suffering of the communities surrounding the Dusit District Office Bangkok who are affected by the COVID-19 situation.



The 14th Employee's Child Scholarship Award Ceremony of the year 2021

Mrs. Areewan Chaloemdan, Chief Operating Officer in high voltage equipment line sector and Mr. Chaloempon Sricharoen, Director of Sales and Marketing and the management representatives gave scholarships to employees' children. This is one of the welfare programs to help and support employees and their families, which the Company has continuously been doing. Its purpose is to open up and distribute educational opportunities so the youth have an equal access to quality education, grow with potential, and be the force in the development of the nation in the future.



Supported Oxygen concentrator machine with high flow type to Thammasat University Hospital

Mr. Chaloempon Sricharoen, Director of Sales and Marketing, as the management representative, supported oxygen concentrator machine with high flow type valued at 200,000 baht to Thammasat Chalerphrakiat Hospital as supporting tool for medical personnel in treating patients and as part of the fight against the COVID-19 situation.



Supported drinking water for people affected by COVID-19 and bedridden patients

The Company supported drinking water for people affected by COVID-19 and bedridden patients in the community of Maha Sawat Subdistrict, Bang Kruai District, Nonthaburi Province.



Donated water bottle which is in good condition to production staff to prevent the spread of COVID-19

Employees of the Company's head office donated new water bottle or water bottle, which is in a good condition, to production staff as part of preventing the spread of COVID-19 and to use leftovers or rarely used product to make benefit.



Supported drinking water Air Force Field Hospital (Don Mueang)

Mr. Chaloepon Sricharoen, Director of Sales and Marketing as the representative of the management team supported drinking water to the Air Force Field Hospital (Don Mueang), which is a collaboration between Bhumibol Adulyadej Hospital Royal Thai Air Force Medical Department and Chulabhorn Royal College to help medical personnel and patients who are infected with COVID-19.



Donated oxygen concentrator machine to Community Isolation at Plai Bang Subdistrict Municipality School, Wat Sunthon Thammikaram

Mrs. Areewan Chaloezman, Chief Operating Officer of high voltage electrical equipment and Mr. Chaloepon Sricharoen, Director of Sales and Marketing as the management representatives supported oxygen concentrator machine to Community Isolation at Plai Bang Subdistrict Municipality School, Wat Sunthon Thammikaram, Bang Kruai District, Nonthaburi Province to help in the COVID-19 situation and support infected patients who are waiting before being admitted into the hospital.



Supported drinking water at COVID-19 screening point at Plai Bang Wat Sunthonthammikaram Municipal School, Nonthaburi Province

The Company supported drinking water for COVID-19 screening points to support medical personnel and those who were examined at Plai Bang Wat Sunthon Municipal School, Plai Bang Subdistrict, Bang Kruai District, Nonthaburi Province.



Old calendar donation to produce braille books for the visually impaired

The Company representatives donated old calendars to the Foundation for the Blind in Thailand under the royal patronage to produce a braille book for the blind. This project is an activity organized as part of the project #GUNKULZeroWasteProject which is participated as a campaign to conserve the environment.



Donated used stapler, CDs, and other electronic devices

The Company and its employees jointly donated used stapler, CDs and other electronic devices to the International Association for the Disabled to be recycled for other benefits. This project is part of the project #GUNKULZeroWasteProject which is participated as a campaign to conserve the environment.



Supported PPE kits for staff to screen for COVID-19

The Company's representatives provided PPE kits for medical personnel who are undergoing COVID-19 screening point, to give morale and support the frontline personnel to work safely at Maha Sawat Subdistrict Health Promoting Hospital, Nonthaburi Province.



Made merit, offered Kathin, built a cubicle at Wat Rong Chang, Suphan Buri Province

The management and employees jointly made offering as the co-host of the Kathin Unity and Building Merit to preserve religion at Wat Rong Chang, Sala Khao Subdistrict, Mueang District, Suphan Buri Province.



Supported the professional NK Basketball Club, Bangkok Club, Wat Noi Noppakhun School.

Dr. Somboon Aueatchasai, Chief Executive Officer supported the budget for professional basketball club at NK Basketball Bangkok Club team to promote youth with sports talent. The team was able to win the second runner-up position in the women's team category from participating in the professional basketball trio 3x3 Thai Basketball League 2021, which was held for the first time at Ambassador City Hotel, Jomtien, Pattaya, Chonburi Province, between 8 - 21 November 2021.4



Gunkul with King Prajadhipok's Institute installed a solar cell system for agriculture

The Company in collaboration with Por Por Sor 15, King Prajadhipok's Institute installed a solar system in the water pump project for agriculture at Wat Koh Wang Sai School, Nakhon Pathom Province to help saving energy and take care of the environment for sustainability.





Donated medical equipment to Kamphaeng Saen Hospital

The Company in collaboration with Por Por Sor. 15, King Prajadhipok's Institute donated medical equipment as part of the COVID-19 prevention in nearby communities to Kamphaeng Saen Hospital, Kamphaeng Saen District, Nakhon Pathom Province.



Supported the budget to prepare for the spread of COVID-19, Dan Khun Thot District

The Company's representatives supported the budget to support the spread of COVID-19 at Dan Khun Thot District Office, Dan Khun Thot District.



Supported life-saving bags for people in COVID-19 quarantines, Huai Bong Subdistrict, Dan Khun Thot District, Nakhon Ratchasima Province

The Company's representatives supported life-saving bags for people in COVID-19 quarantines, Huai Bong Subdistrict, Dan Khun Thot District, Nakhon Ratchasima Province.



Joined the meeting to summarize the guidelines in preventing the spread of COVID-19 at the power plant

The Company's representatives attended the meeting to summarize the preventive and countermeasures against the spreading of COVID-19 virus at the power plants in Dan Khun Thot district, Nakhon Ratchasima province.



Supported the PEA NE3 OPEN 2021 Charity Golf Tournament

The Company's representatives supported the budget for the PEA NE3 OPEN 2021 Charity Golf Tournament, which is held at Bonanza Golf and Country Club, Pak Chong District, Nakhon Ratchasima Province.



Attended a meeting with representatives of Ban Huai Bong Village to discuss ways in dealing with the spread of the COVID-19 virus around the village.

The Company's representatives attended the meeting to summarize the guidelines in preventing and dealing with the spread of the COVID-19 virus around the village of Ban Huai Bong, Huai Bong Subdistrict, Dan Khun Thot District, Nakhon Ratchasima Province.



Supported purchasing goat breeds for community enterprises project

The Community's representatives jointly with the Electricity Development Fund (ERC) supported the procurement of goat breeds community enterprise to support careers for communities surrounding the power plant, Huai Bong Subdistrict, Dan Khun Thot District, Nakhon Ratchasima Province

In 2022, the Company was a committee that participated in the budget allocation with the Power Development Fund by using the budget from the year 2021 to support 15 projects in the area around the power plant in Nakhon Ratchasima Province, Region 4



Supported the release of fish at the wind farm according to the Agricultural Bank Project which is a participatory activity to support the Aquaculture Production Bank

The Company's representatives joined to support the release of fish at the wind farm according to the Agricultural Bank Project, which is a participatory activity to support the Aquaculture Production Bank at Ban Noi Phatthana Reservoir, Huai Bong Subdistrict, Dan Khun Thot District, Nakhon Ratchasima Province.



Attended the meeting with representatives of Ban Sila Ruam Samakkhi Village to discuss ways to deal with the spread of COVID-19 around the village

The Company's representatives attended the meeting to summarize the preventive measures and ways to deal with COVID-19 epidemic around the village of Ban Sila Ruam Samakkhi, Huai Bong Subdistrict, Dan Khun Thot District, Nakhon Ratchasima Province.



Supported shirts and hats to the Village Public Health Volunteer Group (VHV) of the community

Supported shirts and hats to the Village Public Health Volunteer Group (VHV) of the community at Huai Bong Sub-district, Dan Khun Thot District, Nakhon Ratchasima to be the morale and support in carrying out the public health work.



Participated in a charity golf tournament which is a contribution to the poor students in Northeastern region

The Company's representatives participated in the charity golf tournament at Ubonrat Dam Golf Course, Khon Kaen Province, which is a contribution to the poor students in Northeastern region.



Supported the budget in building houses for those who are in a state of dependence

The Company's representatives contributed to the budget in building housing for those who are in a state of dependence in Nong Nam Sai Municipality, Sikhio District, Nakhon Ratchasima Province, to help and raise quality of life of people in need.



Joined to support the budget to help those who are quarantined and affected by COVID-19

The Company's representative supported the budget to the Don Mueang Subdistrict Administrative Organization to assist in the caring of people in quarantines from observing for COVID-19 and those affected by COVID-19 in Don Mueang Subdistrict, Sikhio District, Nakhon Ratchasima Province.



Supported the budget to heal with those affected by COVID-19

The Company's representatives supported the budget for Village No. 5, Nong Chumphon Subdistrict, Phetchaburi Province, to help and heal those affected by the COVID-19 situation.



Supported the budget to set up a checkpoint in Nong Nam Sai Municipality to prevent and prepare for the spread of COVID-19 in the area

The management representative supported the budget to Nong Nam Sai Municipality to set up a checkpoint for Nong Nam Sai Municipality to prevent and prepare for the spread of COVID-19 in the area of Sikhio District, Nakhon Ratchasima Province.



Supported food and beverage for medical personnel at the local COVID-19 checkpoints

The Company's representatives delivered food and beverages to Khao Yoi District Office to provide morale and support to medical personnel at the COVID-19 checkpoints to prevent and prepare for the spread of COVID-19 in the Khao Yoi District.



Supported the budget for renovating student's bathroom at Ban Tha Merid School

The Company's representative supported the budget for Ban Tha Merid School to renovate the student's bathroom as it was deteriorated and unsafe for use.



Supported budget for the procurement of crushed stone to adjust the flooded road area at Moo 6, Nong Chumphon Subdistrict, Phetchaburi Province

The Company's representative supported the budget to the village headman of Village No. 6 to procure crushed rocks to adjust the flooded road area at Moo 6, Nong Chumphon Subdistrict, Phetchaburi Province, so the villagers in the community have more convenient and safer route.



Supported the village funding for the year 2021 of Village No. 1, Ang Thong Subdistrict, Thap Sakae District, Prachuap Khiri Khan Province

The Company's representatives donated money to support the Village Funding for the year 2021 to Mr. Chalit Petchdee, the village headman of Village No. 1 to participate in activities with the community at Village Headman's Office at Village No. 1, Ang Thong Subdistrict, Thap Sakae District, Prachuap Khiri Khan Province.



Supported the budget for the care of people in COVID-19 quarantines at Wat Khao Ploeng, Phang Tru Subdistrict, Tha Muang District, Kanchanaburi Province

The Company's representatives supported the budget to help taking care of people who is in quarantines to prevent COVID-19 in the area.



Supported the village funding for the year 2021 of Village No. 3, Ang Thong Subdistrict, Thap Sakae District, Prachuap Khiri Khan Province

The Company's representatives donated money to support the village funding for the year 2021 to Mr. Wichit Choi Roi, the Village Headman of Village No. 3, to participate in activities with the community at Village Headman's Office at Village No. 3, Ang Thong Subdistrict, Thap Sakae District, Prachuap Khiri Khan Province.

With the situation of COVID-19 epidemic, the Company sees it as a challenge to continually carry out activities that benefit the society and cover the expectations of stakeholders.

For instance, the Company has planned for the year 2022 to implement projects through activities that are continually beneficial to society, such as **"Professional Networking Projects Around Power Plants"**, which is to support career in the community areas surrounding the power plant; promote career for people in the community; and build a network of the same career by supporting the establishment of a career group to expand it to be a community enterprise. This is to increase the bargaining power with the market and increase the opportunity to be certified with standards from relevant agencies to enhance the quality of life for the community in a sustainable way.

Community Complaints

The Company had no complaints from the community in the past year.



Supported scholarships for students who lack funding in the area of Moo 3, Ang Thong Subdistrict, Thap Sakae District, Prachuap Khiri Khan Province.

The Company's representatives donated scholarships to students in the area of Moo 3, Ang Thong Subdistrict, Thap Sakae District, to support education for students who lack funding at Ban Mu 3 Auditorium, Ang Thong Subdistrict, Thap Sakae District, Prachuap Khiri Khan Province.

Business Innovations to Build a Society



The Company focuses on developing innovation to improve and develop the quality of the operation. Also, the Company creates new technologies and innovations to develop the society and solve environmental problems both internally and externally in society. Additionally, preventing risks that may affect the Company and to be able to cope with the changes in the world situation to create economic value and in order for the business to be able to operate continuously. In 2021, the Company has organized activities for QCC quality improvement group to create participatory work in the development and improvement of quality of work in various fields in the organization, with a total of 22 groups (first half of the year data), divided into:

- Propose guidelines to reduce operational procedures, amounting to 5 issues
- Propose guidelines to reduce working time, amounting to 4 issues
- Propose guideline to increase work efficiency, amounting to 13 issues

Quality improvement of QCC operations in 2021 can reduce costs for the company by 1,001,200.07 baht.

Year	Number of stories each year	Quantitative results
2018	46 stories	Reduce expenses by approximately 3,118,085.23 baht
2019	46 stories	Reduce expenses by approximately 2,092,083.35 baht
2020	47 stories	Reduce expenses by approximately 3,217,343 baht
2021	22 stories	Reduce expenses by approximately 1,001,200.07 baht

Example of Activities



Make a jig to assemble the fish tail.

Before improvement: The production takes 738 seconds/set.
Production amount 34 sets/day

After renovation: The production takes 552 seconds/set
Production amount 46 sets/day



Make a jig tap

Before improvement: Production amount 1,750 pieces / day

After renovation: Production amount 2,038 pieces / day

In addition, the Company has created innovations to the society outside the organization to meet the needs of the new generation of consumers, starting from setting the framework for innovation in accordance with the direction, vision and business policy to the invention, promotion, development, and extension of innovation, to be able to create benefits for the society with details as follows:

Innovation No. 1

1. Vision, mission, and policies that promotes the development of business innovation for society

GUNKUL SPECTRUM unit is the Company's business innovation unit. It is responsible for studying and creating innovations in the field of energy to meet the basic needs of users, namely being able to choose energy sources by themselves, accessible to power, stable performance, reasonable price, and good energy quality, under the concept **"Energy is a basic human right."**

2. The process of promoting, inventing, and developing business innovations

Creating an atmosphere that is conducive to creativity, assertive, and daring to express different opinions; encouraging to learn how to listen to know the needs, problems, beliefs, and attitudes; encouraging participation in training and seminars; jointly conducting research with research agencies; and continually monitoring business trends to be used as information for thinking and improving the development of the production process to be more efficient, time-efficient, reduce frustration or using labor to create more value.

3. Extension process, improve and develop work processes for business innovations

Innovation doesn't have to be amazing, but it's about continually improving and helping to solve problems for services, products, processes and benefiting others for sustainable business growth.

4. Innovation details

The production and distribution of electricity from wind power in combination with energy storage systems improves power quality and increase stability in 22,000-volt distribution systems. Currently, wind power generation systems are increasingly playing a role in power distribution systems, but the disadvantage of wind power generation system is that it can cause negative effects on power quality, such as voltage ripples, it is unstable due to unstable power sources and may not correspond to the demand for electricity. Such negative effects may have a direct impact on electricity users, for example causing power users to have go on without electricity for a while or cause poor power quality, and the backup of production by the electricity authority is uncertain. In the future, the power generation system that comes from renewable energy, such as sunlight and wind, will have a significant increase in volume according to the Renewable Energy Plan (AEDP). For a zero-greenhouse gas emission target, there must be an energy storage system to help make energy management as efficient as possible and to reduce fluctuations in production from wind and sun which is uncontrollable, helps in overall energy management and laying the foundation for the development of a Smart Grid (SMART GRID) in the near future according to Thailand's Smart Grid Development Master Plan.

Due to the above reasons, the Company is interested to study and find a solution to this problem. The Company has a guideline to apply the energy storage system to the wind power plant that is jointly owned by the Company to use the algorithm to manage the storage system and collect energy, wind forecast data (Wind Forecast), load forecast data (Load Forecast) and other information. The information will be used as a factor in the development of such algorithms in order to optimize the energy storage system and to mitigate the impact of power quality and instability from wind power generation systems.

5. The benefits of innovation

- Reduce the impact from the problem of power quality and instability in electricity distribution from wind power plants towards electricity users.
- It is conducive to the study of the operation of the energy storage system and management system so that it can be a prototype energy storage system and management system for studying, developing, and expanding in the future.
- Facilitate the study of benefits, impacts, limitations, and regulations from the sale of electricity to the distribution system by the energy storage system.
- Reduce the acceleration of equipment deterioration and increase the efficiency of the electricity generation from wind power generation system.

6. Comparative quantitative measurements before and after using innovations

The Company has conducted a comparative study on the installation of energy storage systems to improve power quality and increase stability in 22,000-volt distribution systems in the production and distribution of electricity with wind power, as follows:

Investment value analysis

Case 1	Without installing the BESS system, the trip will continue and cause damage to the windshield equipment which will need to be replaced.
Case 2	Without installing the BESS system, the trip will continue and increase the cost of maintenance and management of the wind turbine.
Case 3	In the case of installing the BESS system, the trip generation is significantly less and will not exceed the standard value that the wind turbine manufacturer guarantees.

As a result, Case 3 provides the best financial return, reduces the risk of equipment being damaged in wind power projects, reduces the damage suffered by electricity users from unstable and poor-quality energy during the cut-out period and helps people to use electricity with a lower rate of blackouts.

Innovation No. 2



1. Vision, mission, and policies to promote the development of business innovation for society

Focuses on the development and study of the necessary systems or technologies in order to focus on the creation of Smart Grid, which can improve the efficiency of domestic electricity usage.

2. The process of promoting, inventing, and developing business innovations

Focuses on design and installation so that it can be used in practice by emphasizing the benefits of users as much as possible.

3. Extension process, improvement, and development of work processes for business innovations

Designed and used by focusing on standard systems or equipment, which can be used as further development and provide education in the commercial sector so that they can step into the real market in later life.

4. Innovation details

Installed Microgrid and Battery Energy Storage system (BESS) along with Energy Management System (EMS) by using Machine Learning technology coupled with electricity load control by Direct load control.

5. The benefits of innovation

As a model of Microgrid which can be used in practice, BESS enables users within the Renewable Energy College and Smart Grid Technology, Naresuan University to have access to electricity for a period of time even though the main electrical system of the Electricity Authority is unable to supply electricity. The user will not know or briefly know about the change in the power outage. In addition, using in conjunction with EMS in the intelligent management of electricity usage by using Machine Learning technology together with BESS and the Solar Cell System, electricity users within the Microgrid can use the electricity cost-effectively. The system can manage excess electricity from the Solar Cell System during the day and electricity can be stored in the BESS system which

can be used at night or used during the time when the electricity cost is high. In addition, the use of DLC also allows electricity users to be able to choose to cut off unnecessary loads at certain times to reduce electricity consumption.

6. Comparative quantitative measurements before and after using innovations

Microgrid system can significantly reduce the number of power outages within the Renewable Energy College and the management of electricity by using BESS and Solar Cell System. Therefore, it can make electricity that is produced in excess at certain periods from Solar Cell be used cost-effectively and caused the overall cost of electricity to dramatically drop for the colleges.

7. Support for innovative research with Naresuan University

7.1 Details of the preliminary research

- Research Name: Microgrid Service Solution
- Type: Smart Grid
- Timeline: Start designing, installing and operating in 2020
- Scope: Installed and used under the School of Renewable Energy and Smart Grid Technology, Naresuan University

7.2. The Company's role in supporting in the research

- Investment, design, installation, commissioning, and delivery

7.3. After completing the research, how will the information obtained from the research be disseminated/applied?

Apply in-depth technical knowledge to the current work of Gunkul Co., Ltd. and used as development in the creation of new innovations that will be used in practice for commercial use whether it is the application of the Microgrid system to the Solar Cell system, or the use of the battery to get the most benefit in the industry and the household sector.

Crisis Management Relating to COVID-19 Situation

Due to the ongoing situation of COVID-19 epidemic during the past 2 years, the Company is still determined to take care of its business operations to run smoothly and like in the normal situation; and to ensures the safety and hygiene of employees, customers, business partners, and all stakeholders.

However, the Company still has to set up an ad hoc working group which is responsible for meeting, discussing, considering, reviewing and being the center of command of the COVID-19 response plan. Also, the group will communicate within and outside the organization and act the center to ensure that all Company's executives and employees strictly comply with the Company's specific measures. To respond to the situation, promote and develop the use of technology and information technology equipment mainly in the management and operation; and develop a production system as a system turnkey production. There is sufficient stock of raw materials during the crisis situation.

In addition, the Company holds meetings to discuss about the preparation of an emergency plan (Business Continuity Plan) which is a backup plan for preventive surveillance and an emergency plan to cope with COVID-19 on an ongoing basis and up to date according to the severity of the situation. Such plan is for all business groups of the Company and various lines of work so that they can operate normally and receive the least impact. There is a plan to divide manpower in operating the work at the office, set up sub-offices (Split Location) and have measures for employees to work from home by considering the safety, prevention, and reduction of the risk of spreading the infection to prevent business interruptions. The Company has provided technology equipment and information for employees to access data by VPN remote communications; recruit new employee by remote conferencing via VDO Conference system, provide online training; make approval of documents; order and disbursement through a highly secure digital document management system (E-Document) to ensure that employees who work anywhere can work and the Company's business can operate normally during the COVID-19 epidemic crisis.

The Company also has other measures such as providing an antigen test kit for employees to use for preliminary testing before entering the workplace; prepare a Gunkul Care Bag containing nonprescription drugs, mask, alcohol gel, thermometer, and oxygen meter at your fingertips to help employees who is in the risky group and need to be quarantined to watch out for symptoms or employees who receive home Isolation treatment; and support and campaign for the employees to be fully vaccinated against COVID-19 infection.

Summary of the operations in preventing the situation of COVID-19 epidemic

Continually focus and monitor by dedicated working team

Continuous improve Business Continuity Plan corresponding to current situation

Leverage technology to reduce pandemic risk

Communicating within and outside the organization about knowledge understanding of the symptoms of the disease. Countermeasures and self-defense as announced from the Ministry of Public Health and the government on an ongoing basis to employees.



Operations to help employees



No policy to reduce wages and employee's salaries



Work from Home measure



Establish a sub-office (Split Location) to distribute the working area



Provide insurance for COVID-19 to employees continually for the second year



Specific preventive measures for employees in risky groups



Providing services for the safety of employees such as body temperature measurement, alcohol gel service point, handing out cloth masks to employees, implement partition between desks and spraying disinfectants the offices, etc.



Prepare a Gunkul Care Bag containing nonprescription drugs, mask, alcohol gel, thermometer, and oxygen meter at your fingertips to help employees who is in the risky group and need to be quarantined to watch out for symptoms or employees who receive home Isolation treatment.



Providing free COVID-19 testing kits (Antigen test kit) to employees for preliminary testing before entering workplace.



Help support and campaign for employee to be fully vaccinated against COVID-19 infection.

Actions to help stakeholders



The Company communicates guidelines in keeping customer safe from COVID-19 to ensure that their purchases, receipts, and services are safe from COVID-19.



Arranging the Annual General Meeting of Shareholders

Increasing the method in communicating by using live Stream.



- Campaign to wear a mask.
- Body temperature measurement before attending the meeting.
- Social Distancing
- Provide medical supplies such as masks and alcohol gel to maintain hygiene throughout the meeting.
- Organize a nursing unit and emergency ambulance to create confidence for shareholders.



Supporting the community and society that has been suffering from the ongoing COVID-19 situation.

Other management approaches to hedge the risk to ensures the business could operate continuously



Installing VPN (Virtual Private Network) software to allow employees to work from anywhere.



Video Conference for inside and outside the organization.



Develop an E-Document management system to reduce touching and to enable working from anywhere.



Part 4

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Specific Standard Disclosure

The Company prepares the 2021 Sustainability Report to communicate performance and key issues to all stakeholders, while taking into account the economic, social, and environmental dimensions and focusing on the implementation of the strategic plan to achieve the organization's vision and mission in accordance with the Good Corporate Governance Policy. The report also serves as a framework for preparing reports that are consistent with the Global Reporting Initiative's scorecards (GRI).

This sustainability report has been reviewed and approved by the Board of Directors and Senior Executives to ensure that it contains comprehensive information on economic, social, and environmental issues in order to foster trust from public and stakeholders. The following companies are included in the scope of this report:

Gunkul Engineering Public Company Limited		
Associated Company		Type of Business
Bright Green Power Co., Ltd.	BGP	<ul style="list-style-type: none"> Conducting business in investing in other companies both of domestic and overseas Manufacturing equipment for electrical systems
G.K. Assembly Co., Ltd.	GKA	
G.K. Power Products Co., Ltd.	GKP	
Gunkul Energy Solutions & Lighting Co., Ltd.	GES	<ul style="list-style-type: none"> Manufacturing and selling of lighting products (LED)
K.N.P. Supply Co., Ltd.	KNP	<ul style="list-style-type: none"> Distribution of equipment for electrical systems and different systems that related to customers, government groups
Gunkul Power Development Co., Ltd.	GPD	<ul style="list-style-type: none"> Construction of power plants and equipment distribution business for electrical systems and different systems that related to the construction of power plants
Future Electrical Co., Ltd.	FEC	<ul style="list-style-type: none"> Construction of power plants, transmission line stations, sub-cables and distribution business of equipment for electrical systems and various systems that related to the construction of power plants and transmission lines both overground and underground
Gunkul Chubu Powergen Co., Ltd.	GCPG	<ul style="list-style-type: none"> Operating the business of producing and distributing electricity from renewable energy (Solar energy)
Gunkul Solar Power 2 Co., Ltd.	GSP2	
Gunkul Solar Roof 1 Co., Ltd.	GSR1	
Rangngern Solution Co., Ltd.	RNS	
NK Power Sola Co., Ltd.	NKP	
Gunkul Solar Community Co., Ltd.	GSC	
Wind Energy Development Co., Ltd.	WED	<ul style="list-style-type: none"> Operating the business of producing and distributing electricity from renewable energy (Wind energy)
Greenovation Power Co., Ltd.	GNP	
Korat Wind Energy Co., Ltd.	KWE	



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Assurance Statement

The Company values business operations that are transparent, accurate, auditable, and accountable to all stakeholders, and consistent with good corporate governance principles. In order to enable the Company to manage its business to grow efficiently under the deterioration of climate change conditions, particularly recently, the Company recognizes the significance of this and prepared to address it in order to mitigate any potential impact. As a result, the Company prepared greenhouse gas emissions reports that were consistent with the report's specified scope in order to streamline the process and conduct business efficiently. On March 14, 2022, the Company underwent a limited confidence level review conducted by an expert, Bureau Veritas Certification (Thailand) Co., Ltd., and received the Greenhouse Gases Verification Statement in accordance with measurement review standards and reporting greenhouse gas emissions and reductions at the organization level (ISO 14064-1:2018) for the reporting period during January 1, 2021 to December 31, 2021.



Greenhouse Gas Inventory Report

Bureau Veritas Certification



Greenhouse Gases Verification Statement

Awarded to

Gunkul Engineering Public Company Limited

1177, 8th Floor, Pearl Bangkok Building, Phahonyothin Road,
Kwaeng Phayathai, Khet Phayathai, Bangkok, 10400, Thailand

**For Organisation Boundaries
Covering**

Headquarter office: Gunkul Engineering Public Company Limited
Solar Power Plant: NK Power Solar Co., Ltd., Solar Energy Society Co., Ltd.,
Gunkul Solar Roof 1 Co., Ltd., Rang Nern Solution Co., Ltd.,
Eco Thai Energy Co., Ltd., BMP Solar Co., Ltd.,
Gunkul Solar Power 2 Co., Ltd.
Wind Power Plant: Wind Energy Development Co., Ltd.,
Greenovation Power Co., Ltd., Korat Wind Energy Co., Ltd.

*Bureau Veritas Certification has carried out the verification of the quantity of Greenhouse
Gas emissions of the above organisation as per ISO 14064-3:2019.*

*The Greenhouse Gas emission quantification and reporting is found to be in accordance
with the requirements of the standard detailed below*

STANDARD

ISO 14064 - 1: 2018

SCOPE OF CERTIFICATION

DIRECT EMISSION: 660.55 tons CO₂-equivalent
ENERGY INDIRECT EMISSION: 1,393.99 tons CO₂-equivalent
INDIRECT EMISSION: 332.24 tons CO₂-equivalent
EMISSIONS DUE TO BIOMASS COMBUSTION: Nil

REPORTING YEAR: 1ST JANUARY 2021 TO 31ST DECEMBER 2021[#]
LEVEL OF ASSURANCE: LIMITED

To check this certificate validity please call: +66 2 670 4800

*Further clarifications regarding the scope of this verification certificate and the applicability of the
ISO 14064-1:2018 requirements may be obtained by consulting the organisation.*

Certificate Number: THAILAND/GHG/2022/05

Date: 14 March 2022

Mr. Prawaltong Tongyai Na Ayudhaya
Certification Manager

Gunkul Engineering Public Co., Ltd.

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