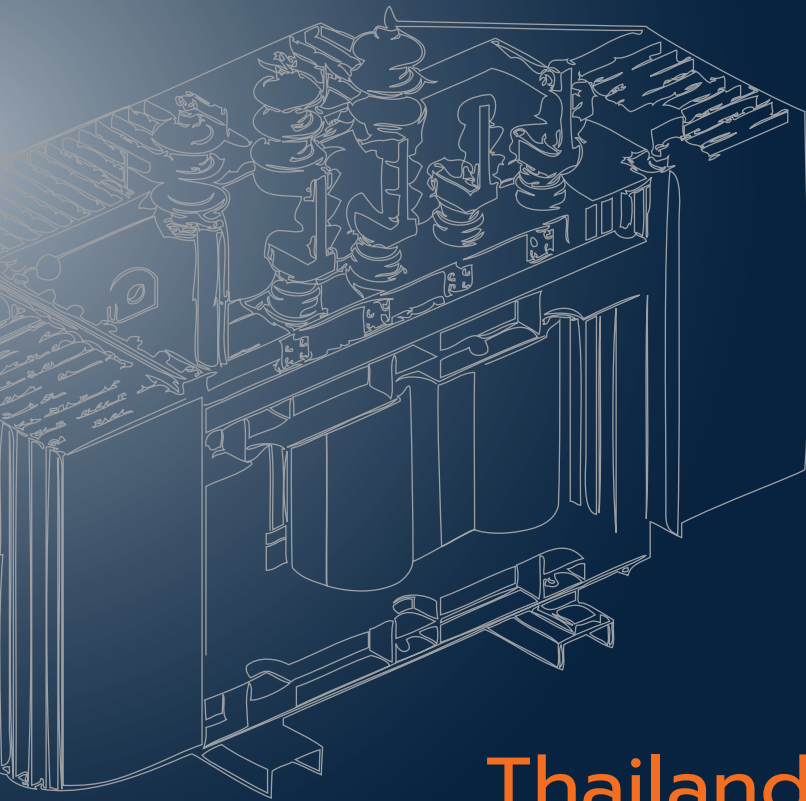




EKARAT ENGINEERING
PUBLIC COMPANY LIMITED

56-1 One Report 2022



Thailand & ASEAN

Leading Transformer Business



Table of Contents

4	Message from the Chairman	●	Mr. Vichit Yamboonruang Chairman of the Board	
7	Board of Director	●		
12	Part 1 Business Operation and Operating Results	●	1. Organizational structure and operation of the group of companies	13
			2. Risk management	48
			3. Business sustainability development	50
			4. Management discussion and analysis (MD&A)	86
			5. General information and other material facts	96
100	Part 2 Corporate Governance	●	6. Corporate governance policy	101
			7. Governance Structure and significant information relates to the Board of Directors, Subcommittees, Executive, Employees and Others	112
			8. Report on key operating results on corporate governance	132
			9. Internal control and related party transactions	148
154	Part 3 Financial Statements	●	Independent Auditor's Report and Financial Statements	156
225	Attachment	●	1. Details of directors, executives, controlling persons and the company secretary	226
			2. Details of the directors of subsidiaries	241
			3. Details of the Heads of the Internal Audit	242
			4. Assets for business undertaking and detail of asset appraisal	244
			5. Corporate Governance Policy and Code of Business Ethics of the Company, including Authorities, Duties and Responsibility of the Board and Sub Committee.	244
			6. Report of the Audit Committee	244

Message from the Chairman

AKR has grown steadily for more than 40 years and continues to seek investment opportunities according to the global energy trends. To generate good and sustainable returns for shareholders, along with operating according to the ESG framework, taking care of the environment, developing communities and society under the principles of Good Corporate Governance, transparency and accountability in all areas of the business to create value added for all stakeholders by comprehensive and sustainable.

Overview of our performance in 2022

In 2022, the COVID-19 epidemic situation began to decrease and the government relaxed epidemic control measures. As a result, the economy of Thailand began to recover in both consumption and investment. The Company's operating performance has improved with net profit of 161 million baht, increase of 79%, total revenues were at 2,121 million baht, increase of 49% compared to the previous year. The Company has adjusted its corporate strategy according to the fluctuating economic conditions, including management and control of costs and expenses. Along with the application of digital technology in transformer development and increasing the efficiency of transformer maintenance services to be faster and more accurate.



Transformer Business

The revenue of sale of transformers increased from the previous year 49%. Transformer manufacturing is the main business of the Company with the highest proportion of revenue or 76% of total revenue. Although the price of some raw materials imported from abroad were higher than the previous year. We are tried to solve the problem without passing the burden on the consumer alone by reducing production costs, controlling expenses for the entire organization and increasing income from transformer maintenance services when the measures to prevent the spread of COVID-19 are less stringent.

Solar Energy Business

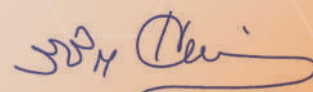
The solar energy business is quite competitive but AKR still gives importance to electricity generation with solar energy, which is a sustainable and environmentally friendly energy. Nowadays, the entrepreneurs are increasingly paying attention to climate change and using clean energy to reduce the amount of greenhouse gases by installing a solar power generation system for use in the workplace. Including the government's policy to encourage electricity consumers to install solar power generation systems on their residential roofs (Solar Rooftop) to reduce the electricity costs. Causing the solar energy business in Thailand to continue to grow and have more users.

Moving towards the digital age... along with the environmental conservation

In 2023 will be a challenging year as the economy starts to recover. The Company has to come up with a plan to cope with various risks, especially the fluctuations in exchange rates and inflation, which lead to higher interest rates. Along with continuously developing products by using digital technology to increase work efficiency to maximize profits and become a leading transformer manufacturer in ASEAN region based on a sustainable business plan that focuses on the impact on community, society and environment.

Ekarat Engineering Public Company Limited would like to thank you shareholders, customers, business partners, management and all employees who participates in supporting the Company's continued growth. We'll develop our potential to keep in the business leader of transformers together with sustainable growth. However, our policy emphasizes on social and community responsibility for the greatest benefits to the public along with social responsibility, community development and environmental conservation at the same time for the utmost benefit of all stakeholders.

On behalf of the Directors and Management Team



(Mr. Vichit Yamboonruang)
Chairman of the Board

One Report 2022



Board of Director



1. Mr. Vichit Yamboonruang

Independent Director
Chairman of the Board

2. Mr. Vinai Vittawasgarnvej

Independent Director
Chairman of the Audit Committee

3. Mr. Wara Tongprasin

Independent Director
Chairman of the Nomination and Remuneration Committee
Audit Committee

4. Mr. Aroon Sricharoon

Independent Director
Audit Committee

5. Mr. Thunya Siltorn

Independent Director
Chairman of Risk Management Committee





6. Mr. Chatri Siripanichkorn

Independent Director
Nomination and Remuneration Committee

7. Miss. Urawee Kanokpruk

Director
Nomination and Remuneration Committee

8. Mr. Wiwat Sangtian

Director

9. Mr. Danucha Noichaiboon

Director
Nomination and Remuneration Committee

10. Miss. Rompissri Noichaiboon

Director
Managing Director
Risk Management Committee



Intelligent Monitoring and Display System

AKR developed a transformer by using the Industrial Internet of Thing (IIOT) system to connect wireless data monitors (Online Monitoring) to the transformer. The customers save time and money on work planning and maintenance planning. Make energy management efficient and have safety standards in the workplace.



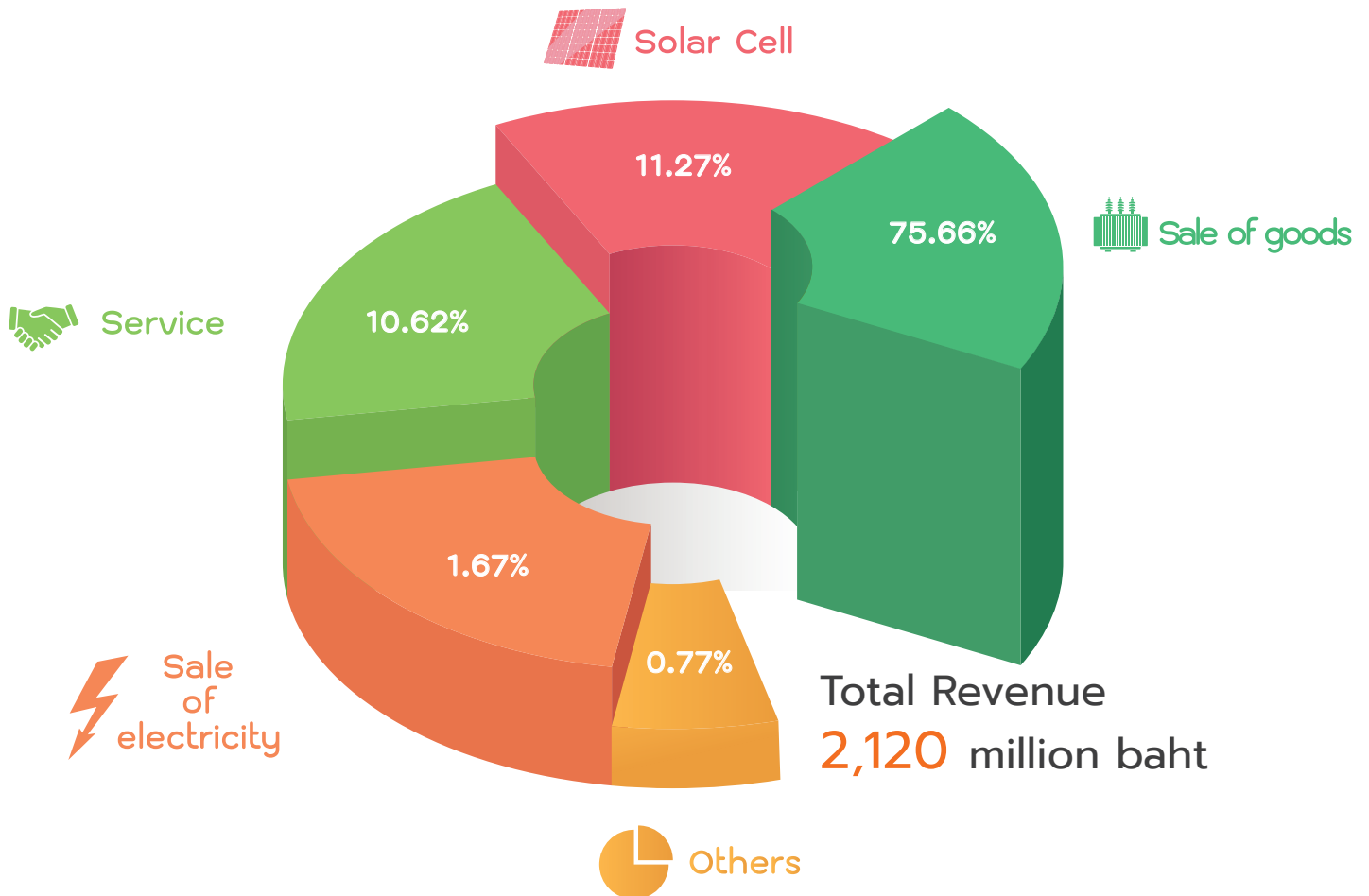
IIoT

Transformer

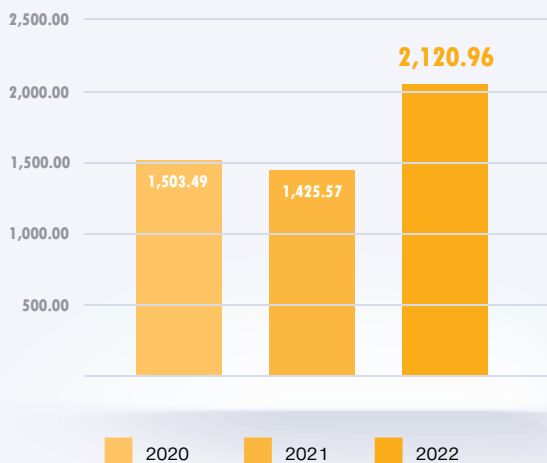


Operating Result 2022

Revenues



Total Revenue
million baht



Profit
million baht



Financial Highlights 2022

Ekarat Engineering Public Company Limited and Subsidiary for the year ended December 31, 2022

Consolidated Financial Statements (Million Baht)

	2020	2021	2022
Revenue From Operations	1,488	1,414	2,105
Total Revenues	1,504	1,426	2,121
Net Profit	98	90	161
Total Assets	1,530	2,076	2,209
Total Liabilities	467	795	834
Total Shareholders' Equity	1,063	1,281	1,375

Share Information

Book Value per Share (Baht)	0.75	0.85	0.90
Ordinary Shares (Million Baht)	1,343	1,471	1,471
Paid-up Share Capital (Million Baht)	1,075	1,177	1,177
Earnings Per Share (Baht)	0.073	0.063	0.109

Financial Ratio (%)

Gross Profit Margin	25.22	25.11	22.75
EBIT Margin	9.43	8.55	10.51
Net Profit Margin	6.50	6.30	7.57
Total Debt to Equity (times)	0.44	0.62	0.61
Return on Total Assets	8.74	6.76	10.40
Return on Equity	9.67	7.67	12.09

Part 1

Business Operation and
Operating Results



1. Organization structure and operation of the group of companies

1.1 Policy and business overview

Background

Ekarat Engineering Public Company Limited (the "Company") was incorporated on June 24, 1981 with initial registered capital amount 4 million baht by Noichai boon's Family as a major shareholder. The Company operates manufacturing and distribution (Distribution Transformer) under the trademark "EKARAT" which distributed in both domestic and international markets in South East Asia, South Asia, the Middle East and Australia, gained the trust in design and engineering until the sales always be the number one.

- 1994, the Company transformed into a public company.
- 1998, the Company increased its registered capital 302 million baht
- 2006, the Company was approved to be listed and started trading in the Stock Exchange of Thailand in the energy and utility sector under the name of the securities "AKR" and increased the registered capital to 790 million baht with a total of common stock 790 million shares with a par value of 1 baht per share.
- 2012, the Company reduced its registered capital by reducing the par value to par 0.80 baht which caused the registered and paid-up capital of the company to decrease to 632 million baht.
- 2013, the Company increased the registered capital to 1,074.63 million baht by issuing new ordinary shares 503 million shares par value 0.80 baht which is making the Company with registered capital 1,074.63 million baht and divided into common stock 1,343.29 million shares.
- 2019, the Company has issued the Warrants to purchase ordinary shares of the Company (AKR-W1) to the existing shareholders in the number of 671,571,134 units. On May 28, 2021, AKR-W1 had expired and the shareholders exercised their rights to purchase ordinary shares of 128.24 million shares. As a result, the Company currently has a registered capital of 1,611.95 million baht, of which 1,177.23 million baht is issued and paid-up capital.
- 2022, the Company reduced its registered capital to made the amount of the registered capital and the paid-up capital are identical. After the expiration of AKR-W1, the Company has unsold shares remaining in the amount of 543.40 million shares par value 0.80 baht. Therefore, the registered capital was reduced from 1,611.95 million baht to 1,177.23 million baht, equal to the current registered and paid-up capital.

In addition, the Company has the initiative to find new businesses which was consistent and able to support the transformer business therefore the importance and need for clean energy sources for electricity generation to be recognized by observing the potential and various factors in Thailand. The solar energy business, which was the solar power generation system producing the clean energy to be renewable and good for our environments.

- 2004, the Company invested in establishing Ekarat Solar Company Limited to manufacture and supply solar cell (Solar Module), with manufacturing, assembly and distribution of solar panels at Chachoengsao Province with a capacity of 15 MW per year.
- 2006, the Company set up a solar cell factory at Amata City Industrial Estate, Rayong Province, with a capacity of 25 MW per year. In addition, the Company also designs and installs electricity from solar energy and renewable energy and to be consultant on the energy conservation process, including the construction of power plants.
- 2015, the Company invested in the establishment of Ekarat Energy Company Limited, which was operated in all energy businesses as a distributor, advising, bidding, investing in the energy business industry including various power plants both inside and outside the country.

In the present, the Company Headquarter is already operational in Bangkok. The transformer factory and the solar panel assembly is located at Chachoengsao Province. The solar cell factory is located in Rayong Province. In addition, there are 11 Service Centers for transformer in nationwide.

1.1.1 Policy and organization direction

The Company is committed to produce the products that are standard and durable, be able to meet the needs of consumers in all aspects by running the business under the good corporate governance. Adhere to the principles of corporate governance with transparency, accountability, ethics and commitment to sustainable business development with the environment and social responsibility with regard to stakeholders both inside and outside the organization.

On December 15, 2022, The Board of Directors has reviewed vision, mission, policy and operating strategy in accordance with the main goals of the Company, appropriate current situation and disseminated to employees in the organization for the purpose in the same direction. The details are as follows;

Vision

“To be a leader organization in transformer business and renewable energy which we aim to be the highest market share in ASEAN.”

Missions

1. Continue developing quality of Products and Services to be more durable and effective.
2. Serves customer with a professional, follow international standard and work under the law and regulation.
3. Focus on maximize return on investment for shareholder, customer, partner and employees.

Philosophy of work

“Adhere to the quality and be honest to customer”

Corporate policy

1. Operate the business with a moral which are acceptable in the business sector.
2. Bring the policy of “quality throughout the organization” to use for developing the product, service and business management.
3. Facilitate for learning and developing new idea in order to drive organization forward.
4. Select investments and business operations with high returns and low risk.
5. Search for the opportunity to grow the business in both vertical and horizontal, domestic and international market.
6. Focus on aggressive market strategies for every customer (existing and new customer).

Rewards in 2022



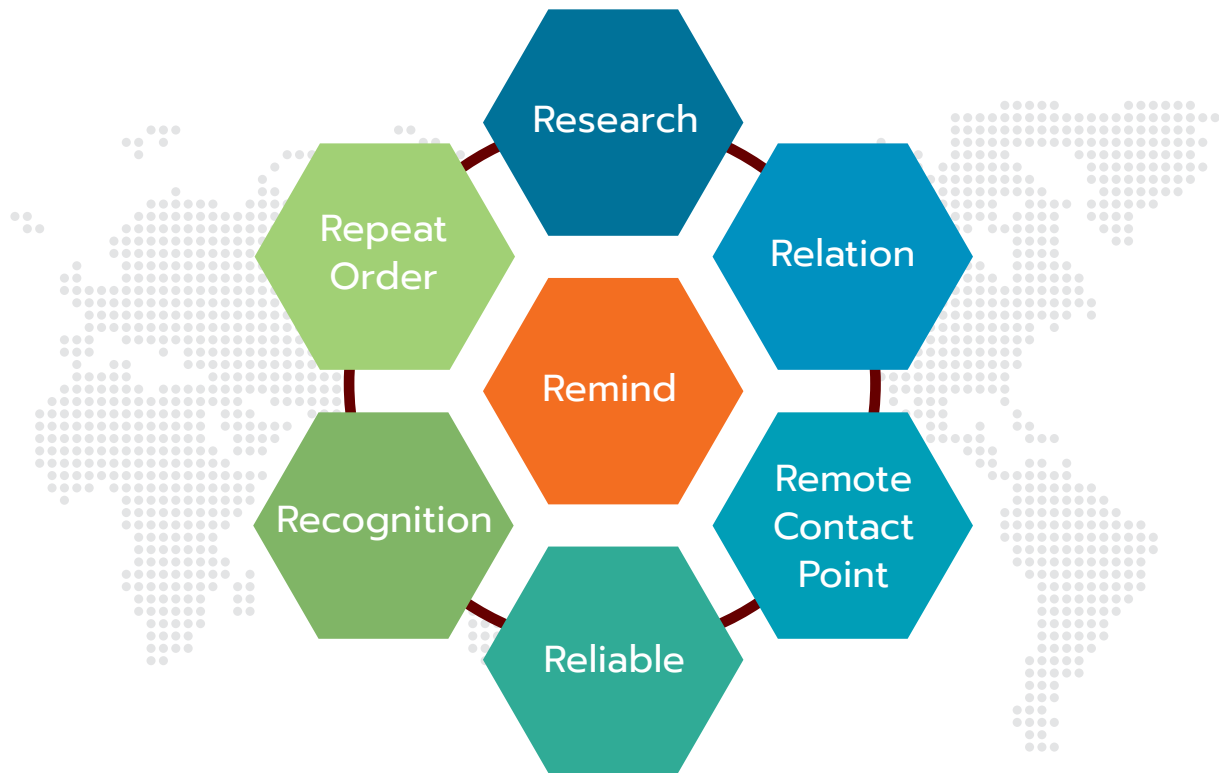
AKR is accredited to the Corporate Social Responsibility Standards, CSR-DIW Continuous 2022 from Department of Industrial Works, Ministry of Industry which the Company has been continuously certified since 2015



AKR participated in the award plaque ceremony for the establishments that passed the assessment criteria for environmental governance in the fiscal year 2022 at the Chachoengsao Provincial Industrial Office.

Marketing strategies 2023

We operate and run business under the motto of “keep our quality and be honest to customer”. Therefore, this made who we are today, which is to be the leader in distribution transformer business. Our 2023’s business plan are as follow;



Research

Searching and organizing databases for planning sales promotion of transformers, services and solar cells.

Relation

Increase new customer groups, especially customers who own various businesses and contractors. Including expanding sales areas in foreign markets by seeking new sales agents. Creating confidence in the quality of "Ekarat" transformers.

Reliable

Recognition

Designing products and services that are acceptable to customers.

Remote Contact Point

Facilitate customers by adding more communication channels, both via Line Official and Call Center staff who can respond to needs and coordinate between customers and the Company as well.

Repeat - Return Order

Maintain the existing customer base in order to have repeat purchases and word of mouth.

Remind

Content creation, Event Marketing, Exhibitions, Advertisements.

Stepping into digital technology

The Company has been continuously developing products since 2020 by applying IIOT (Industrial Internet of Thing) digital technology to use with transformers to meet the needs of customers who want to manage energy efficiently, quickly and save costs. By connecting a wireless data monitor (Online Monitoring) to our transformers, it is possible to monitor the operation status of the transformer anytime and anywhere, along with 1 year IIOT device warranty.



Ekarat Service Platform is a program that will facilitate customers and our service staff for transformer maintenance services. Customers can access their transformer information, book online service appointments and view past transformer inspection history. The system will work to connect IIOT devices and the Company's ERP systems.

Cost Reduction

In 2022, the company has reduced production costs without affecting the quality standards of the products and continuously adjust to suit the situation, through the following methods:

- Importing the low cost of raw materials to replace the original raw materials that too high price.
- Mass production will make the company have lower unit cost.
- Cost reduction from Supply Chain system to be faster and reduce transportation costs to the lowest level.
- Reducing the number of redundant personnel and improving the workflow faster.

Expansion and increase of business competitiveness

The Company plans to expand and increase the competitiveness of the business by

- Increasing the ability of personnel to provide advice on investing in solar power plants including services in various areas to respond to an investor.
- Increasing competitiveness by finding business partners that are technologically advanced continuously developing and training skills for employees. It is an important to maintain the leadership of the Company.
- Focus on creating understanding and trust among users about the equal quality between transformers using aluminum windings and copper windings. But most consumers are still not confident in the efficiency of aluminum and still prefer to use copper as the main one.

In this regard, the Board of Directors' meeting will review Vision, the business plan and follow up on the Company's performance annually to adjust the operating strategy to suit the changing situation at all the times.

Strategic Plan for 3 years (2023-2025)

Strategic plan for the year 2023-2025 is long-term overview of the organization. Focus on being an organization with high capabilities covering all important operations, including transformer distribution systems, customer service and other support systems such as human resource management, management of information and communication technology. Creating a business model that facilitates opportunities for future related business development and focus on conducting a complete electrical business to strive to be a leader in Asian.

- 1) Encourage the organization to grow sustainably and Good corporate governance principles.
- 2) Management and allocation of assets to create financial stability.
- 3) To be an organization with high competence and developing products and services to meet customers' needs and expectations.
- 4) Promote and create cooperation in research and innovation development in core businesses and related businesses.
- 5) Seek investment opportunities for related businesses both domestically and internationally.
- 6) Promote and support in renewable energy.
- 7) Promote and develop ICT (Information and Communication Technology) capabilities in accordance with standards, safety, reliability and thoroughness to support the organization's driving efficiency.

1.1.2 Changes and developments

In 2022

- The 2022 Annual General Meeting of Shareholders held on April 29, 2022 resolved to approve the dividend payment at the rate of Baht 0.03 per share with the total amount of Baht 44,145,985.68. The date to determine the names of shareholders who entitle to receive dividend (Record Date) to be scheduled on May 12, 2022. The dividend payment will be scheduled on May 27, 2022.
- The 2022 Annual General Meeting of Shareholders resolved to approve the reduction of the Company's registered capital from 1,611,947,284.80 baht to 1,177,226,284.80 baht by cancelling authorized but unissued shares of 543,401,250 shares with a par value of 0.80 baht per share, which are the remaining shares after the exercise of AKR-W1 and approved the amendment to Clause 4. of the Company's Memorandum of Association. The Company has registered the reduction of its registered capital with the Department of Business Development, Ministry of Commerce on May 11, 2022.
- The Board of Directors' Meeting No. 8/2022 held on September 15, 2022 resolved to approve the interim dividend payment for the period ended June 30, 2022 at the rate of 0.015 baht per share for a total of 1,471,532,856 ordinary shares, totaling 22,072,992.84 baht with dividend payment on November 17, 2022.

The Company has signed Memorandum of Understanding (MOU) with Planet Communications Asia Public Company Limited (PLANET) to jointly design, develop and set standard specifications for transformer and use Internet technology of Thing for “The project to install electric vehicle charging stations which has a tendency to grow more in the future, considering the green economy is important.



The Company and Faculty of Engineering Kasetsart University Sriracha Campus signed an MOU to cooperate in developing student quality, consisting of cooperation in learning and students' activities, developing graduate quality, recruiting students for cooperative education projects, including working together in any activities under consideration of both parties.



The Company has invested and improved the production process;

The Company has changed its ERP (Enterprise Resource Planning) software system used in enterprise management from QAD system to SAP S/4HANA system in order to work more efficiently, faster and internationally.



The Company has purchased the most advanced silicon steel cutting machine from Germany to increase the efficiency of cutting steel quickly and accurately.

- Reduction of rework work from winding high-voltage coils, under/over speed by installing new programme rev counter with a target that fails the test due to under/over speed to zero.
- Developing an online time recording system to reduce the time of employees working in recording production by using the Ipad device to facilitate work.

In 2021

The result of the Board of Director Meeting No.3/2021 on March 18, 2021 as follows:

- **Appointment of new director**

Miss Rompissri Noichaiboon appointed to the director replacing Mrs.Daranee Kantamara who retired and effective on March 1, 2021 onwards.

- **Appointment of new management team**

The Board of Directors has resolved to appoint Ms. Rompitsri Noichaiboon as Managing Director to replace Mr. Danucha who retired, effective from April 1, 2021 onwards.

In addition, two executives have been appointed to replace those who retired on December 31, 2020, as follows:

- Appoint Mrs.Suwannee Sujaritvanitchpong as Deputy Managing Director of Finance (CFO) replacing Mr. Anan Santichewasatian who retired, effect from 1 January 2021 onwards.
- Appoint Miss Hansa Bur as Deputy Managing Director of Finance (CFO) replacing Mr. Anan Santichewasatian who retired, effect from 1 January 2021 onwards.

- **Report on the exercise of AKR-W1**

The Warrants to Purchase Newly Issued Ordinary Shares of Ekarat Engineering Public Company Limited No.1 (AKR-W1) allocated to the existing shareholders of the Company in amount 671,571,134 units at May 30, 2019. The last Exercise Date will be the date of the 2nd anniversary from the issuance date, which was on May 30, 2021. There wer the warrant holders exercised their rights to purchase ordinary shares in amount 128,243,452 shares on the exercise price Baht 1 per share in total value 128,243,452 baht. The number of ordinary shares of the Company increased to 1,471,532,856 shares from 1,343,289,404 shares with a par value of 0.80 baht per share and the paid-up capital increased to 1,177,226,284.80 baht from 1,074,631,523.20 baht. The Company has registered the change of paid-up capital with the Department of Business Development Ministry of Commerce on June 9, 2021.

The Company has invested and improved the production process;

- **Ekarat Service Platform**

The Company collaborated with King Mongkut's Institute of Technology Ladkrabang to create the Ekarat Service Platform project, which is a program that facilitates service customers. The customers can access their own transformer data, make an appointment online and can see the history of checking the transformer in the past. In addition, our service staff can record the results of transformer maintenance immediately. This program can reduce the workflow of service staff.

- **Product Registration and Certification of PEA PRODUCT ACCEPTANCE**

The Company has improved the production process of transformers since the design, manufacturing and testing transformer to request for registration and certification of products of the Provincial Electricity Authority. The aims to control the product's quality and to enhance the manufacturers to deliver and maintain the quality in accordance with international principles. The Company has been registered and certified for 10 items of transformer ranging from 30-250 kVA from Industrial Foundation Electrical and Electronics Institute.

- **Internet of Things**

The Company has developed innovations in transformers by using IoT (Internet of Things) systems to be used in conjunction with transformers which can report the working status of the transformer in Real-Time. The users can check the working via computer or mobile phone anytime and anywhere. Therefore, it can prevent and solve problems that occur with transformers quickly.

In 2020

- The Company has established new Service Center, Phitsanulok Service Center. Which will provide maintenance and repair services for transformers covering the area of 6 provinces in the north, including Phitsanulok, Uttaradit, Sukhothai, Tak, Kamphaeng Phet and Phichit. To increase the ability to serve customers and solve the problems of the Company's transformers more quickly. Presently, the Company had 11 Service Centers nationwide.

The Company has invested and improved the production process;

- The production department has provided a tool for measuring partial discharge online (Online Partial Discharge) for 1,300,000 baht to facilitate the inspection and diagnosis of the quality of insulators that may lose some insulation condition via the Internet which is important in the maintenance analysis of high voltage systems.

- The Company has installed the Solar Rooftop 262.75 kW, additional on the factory roof at Bang Pakong, Chachoengsao, amount 10.56 million baht to produce electricity for use within the factory and reduce the cost of electricity consumption.

The awards that the Company received in 2020;

- "Thai Green Label Scheme" a certification of quality and environmentally friendly products by the Thai Environment Institute. The Company was certified transformer green label from an additional 26 items ranging from 50 – 2000 kVA. There were 13 items of 22 kV power system and 13 items of 33 kV power system. That's mean the Company's products through the evaluation and make sure that the standards of environmental compliance by using clean technology and have little environmental impact.

1.2 Nature of Business operation

1.2.1 Income Structure

In 2022, the Company mainly generates income from transformer and services. Its income structure for fiscal years ended December 31, 2020, 2021 and 2022 was as follows

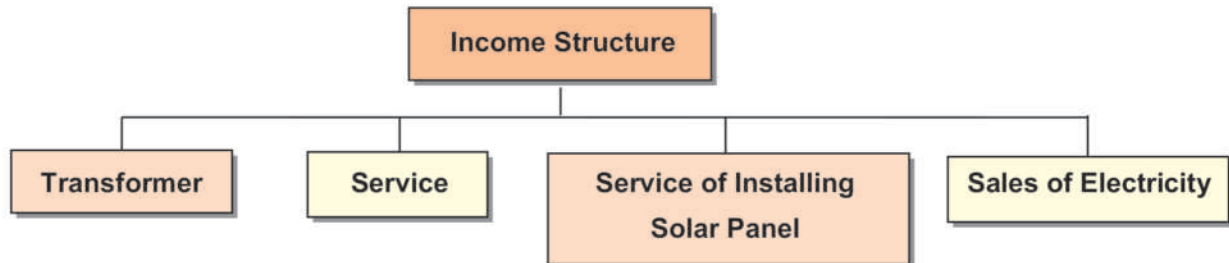


Table of the Company's revenue structure and its subsidiaries from 2020-2022

Type of Revenue	Operated by	2020		2021		2022	
		MTHB	%	MTHB	%	MTHB	%
Revenue from sales of goods	AKR	1,145.10	76.16	1,080.09	75.76	1,604.89	75.67
Revenue from services and maintenance	AKR	223.27	14.85	187.82	13.18	225.23	10.62
Revenue from service of installing a solar panel	AKR	75.56	5.03	108.57	7.62	239.04	11.27
Revenue from sales of electricity	AKR	43.61	2.90	37.78	2.65	35.49	1.67
Other incomes	AKR	15.95	1.06	11.30	0.79	16.31	0.77
Total Revenue		1,503.49	100.00	1,425.56	100.00	2,120.96	100.00

In 2022, the proportion of distribution transformers in the domestic distribution system was about 74.22% of private customers and 25.78% of the government sector customers. In 2020-2022, the proportion of distribution transformer by customer type can be shown according to the following table.

Customer	2020		2021		2022	
	MTHB	%	MTHB	%	MTHB	%
The private sector	683.00	69.49	771.36	80.28	1,079.96	74.22
The government & state enterprise	299.90	30.51	189.42	19.72	375.12	25.78
Total	982.90	100.00	960.78	100.00	1,455.08	100.00

International market, the Company had both sales through dealers and direct sales. The international market is considered as a target for future market expansion. Especially, customers in the Southeast Asian and the Middle East which has low consumption per capita statistics along with the consumption of the distribution transformer system still requires import from abroad. In addition, there are many foreign investors who are interesting in expanding the investment base increasingly, so the trends that are demanded the electricity and the distributed transformers are definitely increased.

However, the venue from selling the electrical distributed transformers in domestic market was 91.55% of the venue from total selling the distributed transformers. The venue from selling the distributed transformers in international markets is 8.45% of the total venues. It is expected that in the future the proportion of revenue from foreign markets will increase further. It will penetrate more foreign markets and make customers accept the quality of the Company's product. The venue from selling the distributed transformers from 2020-2022 can be divided as table below:

Market	2020		2021		2022	
	MTHB	%	MTHB	%	MTHB	%
Domestic	982.90	89.79	960.78	90.42	1,455.08	91.55
International	111.80	10.21	101.74	9.58	134.36	8.45
Total	1,094.70	100.00	1,062.52	100.00	1,589.44	100.00

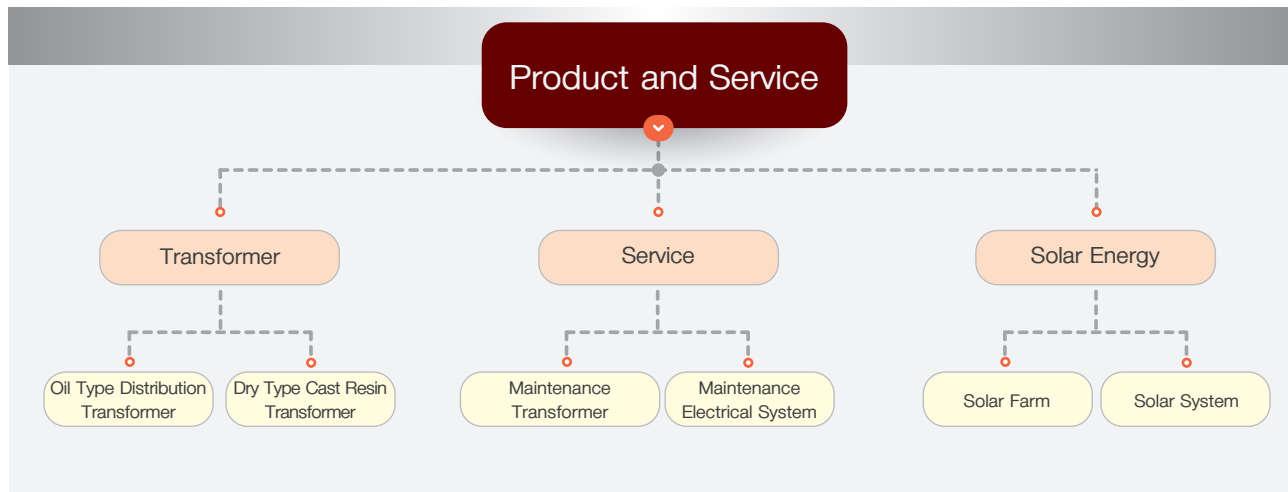
Table of the value that customers in each country order the company's transformers in 2020-2022

Year	Country	Value (MTHB)	% of Selling
2022	Laos	75.35	4.74
	Malaysia	18.35	1.15
	Brunei	22.29	1.40
	Australia	13.61	0.86
	Cambodia	1.05	0.07
	Singapore	1.96	0.12
	Philippines	1.75	0.11
2021	Laos	43.70	4.11
	Malaysia	31.56	2.97
	Brunei	16.74	1.58
	Australia	7.23	0.68
	Singapore	1.29	0.12
	Cambodia	1.23	0.12
2020	Laos	49.35	4.51
	Brunei	32.51	2.97
	Malaysia	19.35	1.77
	Singapore	4.45	0.41
	Myanmar	3.39	0.31
	Australia	2.74	0.25

1.2.2 Product Information

(1) Characteristics of products or services and development of business innovation

From the structure of the group of companies which consists of Ekarat Engineering Public Company Limited, Ekarat Solar Company Limited and Ekarat Energy Company Limited. The product and service of the Company and subsidiaries can be divided into 3 types of Distribution Transformer, Service and Solar Energy with the detail as follows:



• Distribution Transformer

The quality product that be proud of the Company which has been popular, trustworthy on the top of customer under the trademark “Ekarat” which is a high quality transformer that can be compared to various global standards, including international standards (IEC), German standards (VDE & DIN), American standards (ANSI) and Japanese standards (JIS) There is also a distinctive feature is the low loss can withstand lightning voltage (Impulse Voltage) and short-circuit current in maximum when compared to general transformer, causing the least damage rate.

The Company is the first and only manufacturer that dares to protect the damage that will occur. We guarantee the quality of our transformer for 10 years (under the term of the Company) and for all customers that are installed our transformer in Thailand.

The Company can design and manufacture all types of transformers according to international standards or according to customer’s need IEC 60076, ANSI C57, VDE 0532 & DIN 4290, JIS, TIS 384-2543 (2000). The Company’s transformer has the electric power between 1 kVA to 30,000 kVA, both 1-phase and 3-phase with a maximum voltage not over 36 kV, maximum production capacity of 4,900 units or 2,900 MVA per year.

Our product is Distribution Transformer which is used to convert the voltage from the high voltage supply line of the Metropolitan Electricity Authority (MEA) or the Provincial Electricity Authority (PEA) at the pressure level 33 kV 22 kV or 11 kV to the voltage supply line low at a voltage of 230 V or 400 V to be sent to small power users such as houses. You can see it on electric pole on both sides of the road. Some business agencies have to obtain high voltage from MEA or PEA directly and install the distribution transformer by themselves to reduce voltage suitable for use. These business units include medium-sized industrial plants, hotels, hospitals, shopping centers, etc. Distribution transformers can be divided into 2 types as follows:

A Oil Type Distribution Transformer,

using oil to circulate inside for cooling and acting as insulation. Most of oil distribution transformers will be installed outdoors and can be divided into 2 types of oil distribution transformers as follows:

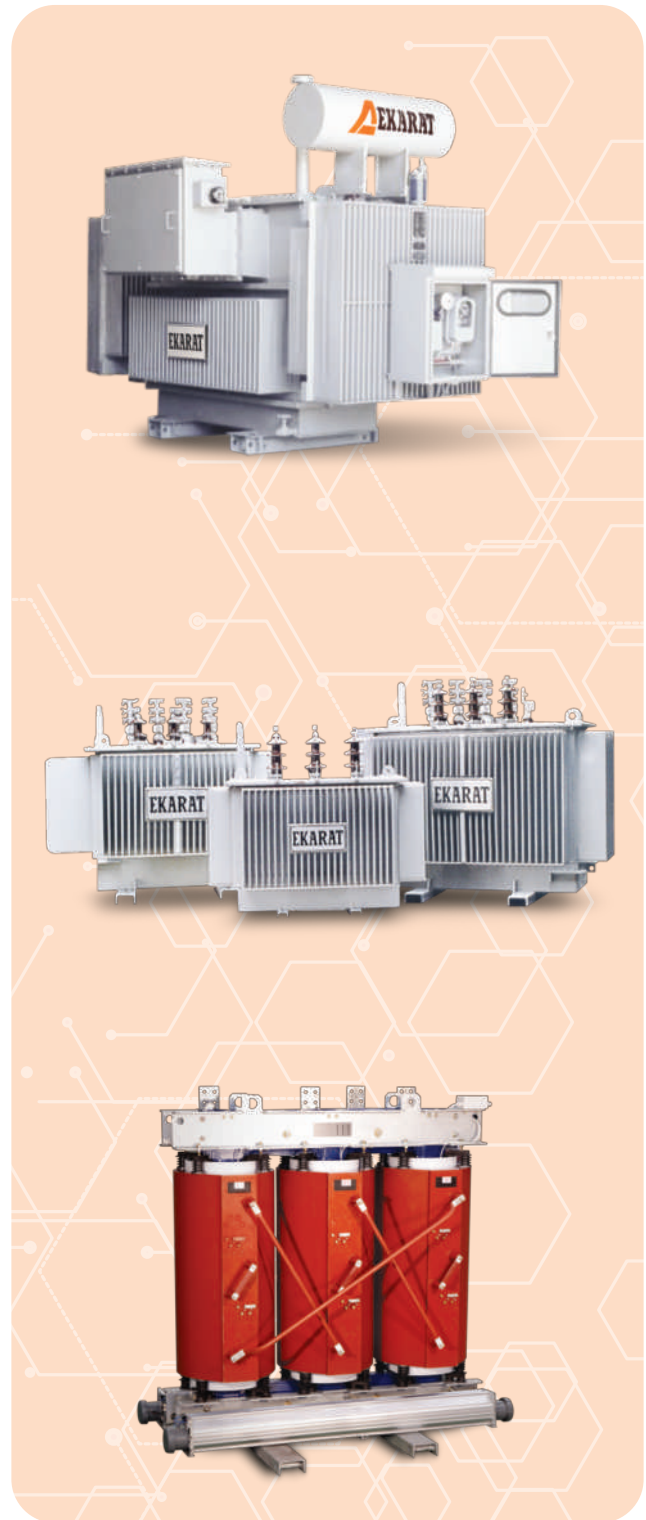
- **Open Type with Conservator**

An old type distribution transformer which has been used for a long time. It cooled by oil and have pipes to allow air to pass through. In addition, there is also a silica gel, a clear blue color to help absorb moisture and measure of the insulation value of transformer oil. It must always check the transformer oil every 6-12 months.

- **Hermetically Sealed Transformers**

This type of oil distribution transformer is a sealed transformer to prevent air entry. Therefore, it has the ability to prevent moisture very well without containing silica gel helps to filter moisture and can maintain the insulation condition of the transformer oil for a long time.

B Dry Type Cast Resin, generally, dry type resin distribution transformer is priced 2-3 times higher than oil distribution transformers. The power sizes ranging from 1-2,500 kVA. It cooling by air and use the resin and polyester as a coil coating to provide a good insulating property to prevent heat.



The Company has quality control of every transformer. After baking and refueling in a vacuum oven to remove the accumulated moisture in the components. Then the transformer will be tested for quality before delivering the product to the customer, which has 2 type tests as follows:

- **Routine Test** : Ratio test, Resistance measurement, Polarity and phase relation test, No-load loss test, Oil test etc.
- **Special Test** (according to customers' requirement): Temperature rise test, Impulse test, additional testing/ witness testing etc.

• Service and maintenance

Our service can be divided into 2 groups, namely the maintenance and repair of the distribution transformer system and the design, installation and maintenance of electrical systems with details of each work group as follows;

A The maintenance and repair of the distribution transformer

Transformer is an important electrical device. Any problems caused by the failure of the transformer cannot supply electricity then will immediately affect the user especially in various industries. The production process must be stopped. Until it may cause a loss in the business system is a high value. Therefore, planning for maintenance of the transformer according to the time period and receiving services from those with direct expertise in addition to prolonging the service life. It also prevents severe damage that may occur. In addition, the Company also provides services covering repairs when problems occur. By focusing on providing services that cover all areas and fast, 24 hours a day. Will provide maintenance and repair services for all types of transformers and all voltage systems by testing and analyzing the quality of oil transformers (DGA), filters and oil transformers check and fix leaks change spare parts, check service, repair and overhaul, as well as fix transformer on site by a team of engineers and technicians with experience in maintenance and repair services for transformers for more than 30 years with equipment and modern testing machines including being able to give advice and improve electrical systems. In addition, during the maintenance and repair of transformers.

The Company has provided an alternate distribution transformer from small to large, more than 100 units to support customers. The customers can borrow, use the distribution transformer until the distribution transformer that the customer ordered, finished production, or completed the repair, which will have a period of production or repair not more than 3 months by the time of production or repair of the transformer. The distribution depends on the size of the distribution transformer. In addition, customers can rent transformers for the Company's distribution system if customers do not want to buy distribution transformers with a year-to-year lease agreement.



Maintenance of transformers Medical Examination



Human

1. Annual Medical Examination
2. See a doctor
3. Temperature measuring
4. Pressure measuring
5. X-Ray
6. Urine Test
7. Blood Test
8. MRI / CT Scan
9. Surgery



Transformer

1. Annual Transformer Maintenance
2. Check the external condition of the transformer.
3. Transformer temperature measurement
4. Check oil level, Pressure, Nitrogen Gas
5. Megger Insulation
6. Oil Testing
7. Special Test : DGA, WT, ACID, PF, IFT
8. Special Test : PF, Winding Resistance, Ratio
9. Over Haul

B Design, Installation and Maintenance of electrical systems.

Design, Installation and Maintenance of electrical systems. There are products and services as follows.

- Maintenance for On Load Tap Changer (parts of the transformer): The Company's personnel have been trained by the On Load Tap Changer's manufacturer. Therefore, they can give advices on the conditional based maintenance, preventive maintenance, change parts, which can provide distribution transformers for all brands and all electrical systems.
- Maintenance services and industrial electrical motor repair: The Company provides maintenance and repair services for industrial electrical motors in accordance with ISO 9001: 2000. Customers can request free charges in the first operating the service team will check the solution at the factory including installation, test run and overhaul. In addition, the alternating current (AC) industrial electrical motor which have voltage ranges during 380 volts to 6,600 volts are also provided to repair DC motors (Direct Current: DC) voltage range from 110 volts to 1,200 volts including changing the rotor bar, spraying the shaft, changing the shaft, connecting the lid or hitting the Laser Alignment Renew Commutator and slip-ring with 1 year warranty.
- Electrical system maintenance: The Company provides electrical system maintenance services to enhance the efficiency of the power supply system with the continuous and consistent importance of the preventive maintenance for the control cabinet due to the dirty electrical equipment such as dust, powder, soot, smoke and other including the cause of the electrical equipment in the power distribution cabinet, also the release of heat until the heat increases at the electrical connection point or the connection point between electrical equipment which caused by the heat accumulated when using. In case of, the metal expands and shrink regularly, damage the electrical equipment, result in the stop supplying electricity for emergency repairs. Therefore, equipment should be maintained with cleaning and check the fastening on electrical equipment firmly at least once a year, which can be maintained in the cycle of annual maintenance or maintenance when encountering hot spots by checking the thermo vision.
- Generator maintenance and repair services: The Company sells spare parts, alternator engines, generators and standard installation of generator. The Company also has provided a service to update the generator set and ATS to be an automatic system, parallel generator (Synchronize Generator), control cabinet and various equipment Including repair, maintenance (Preventive Maintenance), service charge list or annual service contract. In addition, the Company is able to provide the repair or overhaul services for generator's customer by skilled technicians and modern equipment.
- Design and installation of industrial electrical systems, both medium and low voltage systems: For power users who need a comprehensive service from the initial construction to the power supply by designing skills and supervising with professional engineer.
- Design and construction of substation (Substation): The Company is the design recipient, installation and construction of 69-115 kV power substation for large power users to reduce the cost of electricity about 15-20 percent and will also make the power system efficiency.
- Management system consulting: The Company provides consulting services, ISO 9000 quality management system, ISO 14000 environmental management system, occupational health and safety management system OHSAS / TIS 18000 System for quality standards, testing laboratories and calibration of ISO / IEC 17025 and activity systems, suggestions, 5S activities, QCC HACCP etc. professional consultants who work together to create systems that are in line with the business requirements and comply with standards.
- Calibration laboratory services: The Company provides calibration services for electrical measuring instruments and dimensional calibration with a calibration laboratory that has been certified by the ISO / IEC 17025 standard laboratory testing and calibration system from the Office of Industrial Standards, Ministry of Industry.

In addition, the Company gets ready for service to respond the customers with the Mobile Service Test which can test the transformer without the electricity. It can be displaying the test results at the onsite and send information through the internet immediately.



The Company has established service and sales centers in every region which is already have the equipment, transformers distribution reserve and skilled engineers who have experience in controlling each center provide all the time. There are 11 sale and service centers, as follows:

SERVICE CENTER



1. Bangkok Center	Bangkok Samutprakarn Nontaburi
2. Chachoengsao Center	Chonburi Chachoengsao Rayong Chanthaburi Prachinburi Sakaeo Trat
3. Ayutthaya Center	Ayutthaya Pathumthani Angthong Nakhonnayok Saraburi Lopburi Singburi Chainat Uthaithani Nakhonsawan Phetchaboli
4. Nakhonpathom Center	Nakhonpathom Kanchanaburi Phetchaburi Prachuapkhirikhan Samutsakhon Samutsongkhram Ratchaburi Suphanburi
5. Konkaen Center	Konkaen Udonthani Kalasin Loei Nakhonpanom Mukdahan Nongkhai Nongbualamphu Sakonnakhon
6. Nakhonratchasima Center	Nakhonratchasima Chaiyaphum Buriram Roi-et Surin Ubonratchatani Srisakat Amnatcharoen Mahasarakham Yasothon
7. Chiangmai Center	Chiangmai Chiangrai Maehongson Payao Lamphun Lampang Nan Phrae
8. Songkhla Center	Songkhla Trang Pattani Narathiwat Yala Satun Phattalung
9. Suratthani Center	Suratthani Chumphon Ranong Nakhonsithummarat
10. Phuket Center	Phuket Krabi Phangnga
11. Phitsanulok Center	Phitsanulok Uttaradit Sukhothai Tak Kamphaengphet Phichit

Solar Energy

Solar Energy business is the Company's secondary business, divided into 2 types: solar power plants and selling and installing solar panels.

A Solar Power Plant

At present, the Company has 2 ground-mounted solar power plants as follows:

- **Solar Power Plant, Prachinburi Province**

In 2010, the Company has established Solar Farm for generating electricity at Srimahapho District, Prachinburi Province, which has power capacity 0.627 Megawatt per year and selling to Provincial Electricity Authority (PEA) and received the adder supporting from PEA at rate 8 baht per year in 10 years which due in accordance with the agreement in this year 2020. Then, in 2016 the Company has expanded the solar power plant project phase 2 at Prachinburi which located at the same location as phase 1 with capacity 0.627 megawatts per year. Total production capacity 1.26 megawatts per year.



- **Solar Power Plant, Nonthaburi Province**

In 2016, the Company has agreed with the Bang Bua Thong Agricultural Cooperative to operate a ground-mounted solar power project for government agencies and agricultural cooperatives. the Company was all project developers from investment, design, procurement and construction of projects or was called EPC with the objective of producing, sending and selling electrical energy to the Metropolitan Electricity Authority. The purchase rate of electricity is not more than 5.66 baht per unit, fixed throughout the contract period of 25 years.



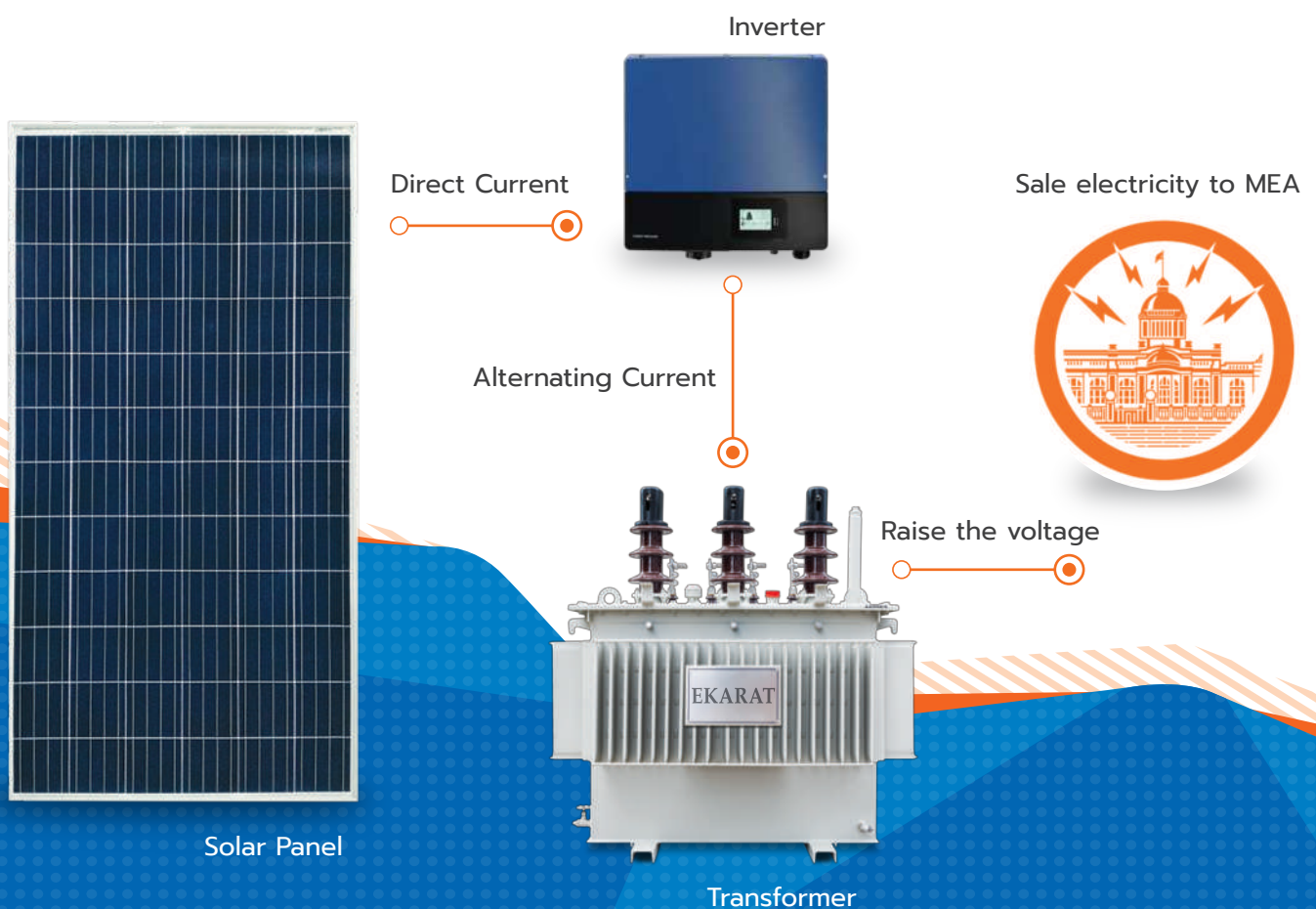
production capacity	3.35 megawatts per year
Value of investment	187.6 million baht
Project Location	Lahan Subdistrict, Bang Bua Thong, District Nonthaburi Province
Size of project area	34 Rai
MEA's power purchase rate	Not exceed 5.66 baht per unit, fixed throughout the contract period of 25 years
Amount of electricity generated per year	4,988,820 kWh/year

Project overview

The project is located in Lahan Subdistrict, Bang Bua Thong District, Nonthaburi Province, that area has enough potential for the implementation of the solar power plant project with average annual solar energy 1,787.90-1,874.00 kWh/m²-day.

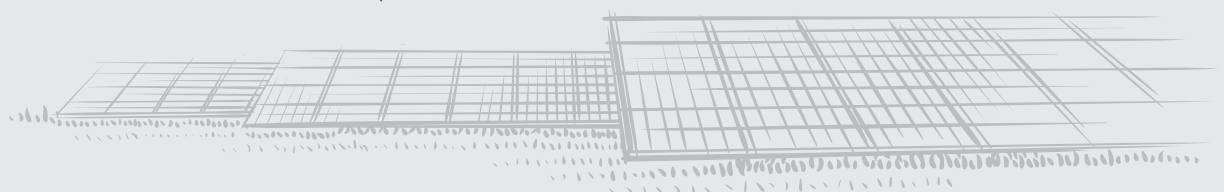
The technology used as a standard technology is common ground-mounted solar power generation. The main working principles of the system are as follows:

- The solar cell will produce electricity with direct current (DC) when the sunlight hits the solar panel.
- The inverter will change DC power to AC power (Alternating Current : AC).
- Such alternating current will be passed through a transformer to increase the voltage and send electricity into the grid system of the Metropolitan Electricity Authority.



B Solar Energy Business

The Company is a manufacturer and distributor of Solar PV Module. We are a provider of design and installation of solar power systems and other renewable and consulting on energy conservation. The Company's solar panels certified by TIS 1843-2553 or equivalent to the international standard IEC 61215 and TIS 2580 or equivalent to the international standard IEC 61730. Solar cells, which generated the power from 5 watts to 440 watts, are from the Thai Industrial Standards Institute since September 28, 2017.



The Company has established 2 subsidiaries to operate solar energy business as follows:

1. Ekarat Solar Company Limited

Operates as a distributor of solar modules as well as a service provider for the design and installation of electricity generating systems from solar energy and other renewable energy and consulting on energy conservation.

2. Ekarat Energy Company Limited

Operate in all energy business, to be a distributor, consultant, bidding, tendering, providing energy management services, including various power plants both domestically and internationally.

Solar Energy business can be divided according to the detail of products and services as follows:

Solar PV Module

The Company manufactures and sells crystalline silicon and multicrystalline silicon solar panels from 60 watts to 440 watts, according to customer's order (Made to Order) and has a capacity of 15 megawatts per year. The solar panels the Company produced will be efficient in converting solar energy into electric energy about 18% of the total solar energy received and can be used for 20-25 years.



Design and Installation (EPC)

for Solar Power Plant, Solar Rooftop and Solar Alone/Off-Grid.



 AKR Factory



 Energy Complex Building

(2) Marketing and Competition

• Distribution Transformer

Marketing Policy

Reliable Quality

The Company focuses on selling high quality distribution transformer. Therefore, our transformer is high-priced transformer according to the quality. Focus on the target customers who want products with high quality and durability. The factors supporting the production of quality transformers are below;

Selection of quality materials such as silicon steel, coil, transformer oil, insulating paper etc. The materials purchased from domestic such as copper wire, transformer oil, etc. and foreign countries such as silicon steel, Coil, cast resin etc.

Using the modern machinery such as the folding fin, which is used to fold the long steel sheet into the fins to make the heat sink fins of the transformer wall must have the least connection. In order to prevent leakage of the tank and foil winding, which is a modern technology for producing low voltage coils to provide a balanced and efficient distribution of electricity resistance to the short circuit and maximum power surge which does not damage the coil and new silicon steel cutting machine from Germany to increase the efficiency of cutting steel quickly and accurately.

The Company has received technology from leading companies around the world such as Starkstrom-Geratebau GmbH in Germany, Westing House Co., Ltd. in USA and Elco Co., Ltd. in Israel, for example, to receive the technology of transformer distribution system such as sealed oil type and dry resin type from Starkstrom-Geratebau GmbH, Germany in the production and process. The Company realized the strengths and weaknesses of each technology in order to be able to use in the country appropriately.

Executives and personnel have experienced in the distribution transformer system for a long time. They have been trained from leading companies around the world of transformer manufacturing technologies such as Westing House Co., Ltd. in USA, Elco Co., Ltd. in Israel Starkstrom-Geratebau GmbH in Germany, etc.

Quick Delivery the Company has stock products to support the needs of customers who urgently need to use transformers by planning to produce standard-sized electrical transformers with high order frequency. Because the production of transformers takes a long time.

The demand for electricity is constantly increasing. Electricity is an important fundamental factor for economic development. When considering the electricity demand in the past compared to the economic growth rate. The growth in electricity demand was in line with the expansion of gross domestic product. The electricity cannot be stored and the electricity demand of users varies in each period. Therefore, the Electricity Generating Authority of Thailand, which is the agency responsible for supplying enough electricity to meet the demand at all times. Therefore, it is necessary to know the electricity demand and forecast the future electricity demand by considering 2 power demand values, namely peak demand and energy demand.

However, the expansion of the power transformer and the distribution transformer industry in the country can be considered from the sales of domestic transformer manufacturers that tend to continuously increase.

For international market It can be determined from the gross domestic product (GDP) in each country of the Company's customers; ASEAN Countries such as Laos, Malaysia, Brunei, etc, South Asian Countries such as India, Nepal, etc. and countries in the Australian continent. The gross domestic product (GDP) growth rate of each country tends to increase accordingly. The GDP growth is consistent with the growth rate of energy demand and the peak demand. The trend of economic growth and the demand for electricity are directly related to the demand for transformer. The transformer is rated to receive a certain amount of current capacity, when the economy expands and the demand for electricity increases, it is necessary to install more transformers in order to be sufficient for their use.

Target Group

Domestic customers

The Oil Type Distribution Transformer will focus on enterprises customers and customers in various industries. The state enterprise customers such as Metropolitan Electricity Authority and Provincial Electricity Authority. The Company will always participate in tenders with both state enterprises which the Company can win the tender regularly. For customers in various industries, the focus will be on high-growth industries, which are important markets that use a large number of distribution transformers, including the automotive industry, petrochemical industry, construction material industry, communication industry, real estate industry, food industry agro-industry, textile industry hotel and tourism industry, etc. The sales to private customers will focus on sales through the contractors, agent and the project owner:

The major distribution transformer customers in the country, most of them are private sector that are famous companies and contractors. For the government agencies are Provincial Electricity Authority and Metropolitan Electricity Authority. The Company's customers in 2022 were domestic private customers, Government and state enterprises, international customers equal to 1,079.96 375.12 and 134.36 million baht or 67.95% 23.60% and 8.45% respectively.

Foreign Customers

The Company has established alliances with foreign operators or dealers to expand production base, increase the customer base and exchange the technologies. It is sold to general private customers and government agencies projects and the Electricity authority in each country Our main customers are neighboring countries in Asia and Australia because they have confidence in the reputation of quality and durability of the "Ekarat" transformer.

Price policy

In determining for the price of the distribution transformer products, the Company determines the price at a level similar to the competitors by relying on product quality, product design and after-sales service as a selling point.



Distribution channels

Distribution channels for transformers can be divided into 2 markets, namely domestic and international markets. Domestic markets can be classified into 2 distribution channels are follows.

Direct sales, which will have local sales and service centers all 11 centers as an important sales channel. It can be classified customers in 2 groups is government sector customers: Metropolitan Electricity Authority, Provincial Electricity Authority and other government agencies which will be sold through direct bidding. Private clients sector customers: industrial factories, hotels, hospitals, office buildings or large residences, etc. to sell for customers who are expanding business or owning projects with the demand of electricity in the operation, including entrepreneurs who expand their business to foreign countries.

Sales through intermediaries, this group of customers are various contractors who received work from bidding both government and private sectors, then ordered from the Company. There are 17 dealers of the Company in 2022. They are qualified according to the Company's criteria and have been well trained to provide knowledge about our products and service. Its possible to reach customers covering all areas.

International Market, the Company had both sales through dealers and direct sales. The international market is considered as a target for future market expansion. Especially, customers in the Southeast Asian and the Middle East which has low consumption per capita statistics along with the consumption of the distribution transformer system still requires import from abroad. In addition, there are many foreign investors who are interesting in expanding the investment base increasingly, so the trends that are demanded the electricity and the distributed transformers are definitely increased. In addition, the Company has also expanded the market to Australia through quality and reliable dealers.

Competition

At present, there are many transformer manufacturers in the market which caused resulting in higher competition than the past, but the Company still has the highest number of distribution transformer sales average from 2018-2022 and it has an average market share of transformer distribution system about 20% which shows that the Company is a leader of the distribution transformer industry in Thailand.

For the competition in the international market, the competition is quite high in neighboring countries such as Laos, Myanmar because there are many entrepreneurs who are interested in expanding the market as well. But most customers will trust and accept the reputation of "Ekarat" as a high-quality transformer with long-lasting use. As a result, the Company has the No. 1 market share of transformers in Laos.



EKARAT

Service  Maintenance

- **Service and maintenance**

Marketing Policy

Commitment to service quickly and efficiently

Transformer maintenance, repair services and electrical system maintenance of the Company are very important task because it prevents the severe damage from the accidents. The Company will focus on using 11 service centers nationwide. In providing customer service for inspection, maintenance, repair services and other electrical systems throughout 24 hours. So that, the Company able to take care customers almost every province and creating confidence for the customers that will receive professional services by checking, maintenance and repair completely and quickly.

Transformer maintenance and repair service industry tends to grow steadily and continually in line with transformer sales. It can also grow from electrical services such as factory electrical safety certification and maintenance services and electrical systems used in large industrial plants.

Follow up and pay attention

The service teams will follow up and take care of our customers both of under the warranty period and annual maintenance service contract customers to provide inspection and maintenance services for transformers within the specified period or near the expiration of the warranty period according to the contract. This team will contact customers for service by offering various price packages, customers can choose according to their needs continually.

Providing services with modern and fast technology

The Company has used digital technology in conjunction with transformer maintenance services to facilitate the service team and customers in accessing transformer data. Customers can check the transformer's working status immediately, anytime and anywhere. Reduces the risk of transformer failures and also helps to solve problems quickly, including providing efficient and modern equipment.

Target Group

- The private customers who are already using distribution transformers: The Company has guaranteed the using of distribution transformer for 10 years. When the insurance period expires, most customers still use the service continued. For the maintenance of other brands transformers, the Company uses the advantage from service and sales center which has nationwide service area, to offer the service for maintenance and repair transformers to customers. The Company is able to offer electrical system services together with the sale of distribution transformers, maintenance and repair services for distribution transformers such as MDB (Main Distribution Board), high-pressure electrical contractor work etc.

- Industrial factories that require safety certifications in electrical systems within the factory: Due to government regulations, the factory must have a certificate of safety in the electrical system within the factory. Therefore, it is an opportunity to expand the sales electrical inspection services, energy conservation consulting work for both the control building and the control factory.

- Large industrial factory: The Company has focused on sales, service, maintenance and repair of electrical systems used in large industrial plants.

Price policy

In determining for the service price, the Company determines the price at the appropriate level, which will have a price close to the price of the competitor. The Company focuses on quality and speed of service to maintain good relationships with long-term customers which will make the Company can offer sales services and other products.

Distribution channels

In 2022, the proportion of the Company's services revenue, most of them are private customers. The Company offers services and sell distribution transformers at the same time. In addition, the Company has 11 service and sale centers which be the important force in the sale of services because there are many opportunities to meet with customers, includes customers who are technicians provide maintenance for transformers and will also offer sales services simultaneously or in cases when customers have problems with the distribution transformer, they will contact the service center first and will get convenient and faster in providing services. The Company has provided maintenance and repair services for all brands of transformers.

Competition

The Company is a leader in the maintenance and repair service's the transformer after sales because the Company have the advantages from being a major producer and there are 11 service centers in the country, spread throughout the region by receive notification 24 hours.

However, the Company pays attention to the maintenance of our transformers, whereby the salesperson will communicate to customers the importance of maintaining transformers since receiving the order in order to use it effectively. The Company is committed to developing maintenance services continuously, bringing new technologies such as Internet of Thing (IOT) to use with transformers. The operation of the customer's transformer can be monitored at all times. If it has something irregular, our service staff from Service centers are able to quickly resolve problems for customers. This will mitigate the damage that may occur. In addition, our service center can also provide advice and the information to those interested in purchasing our transformer and customers can order transformer at any nearby service center.

At present, the competition in the service and maintenance is not so intense, despite the increasing number of competitors such as the electric utility or electrical contractors, etc. Because we focus on providing transformer maintenance services to our customers first in order to ensure the safety of using our transformers. Most of the customers are more confident in using the service with the company than other operators.



• Solar Energy
Marketing Policy

Build confidence in quality products that are certified according to standards

The Company focuses on the policy to produce quality solar panels with modern technology. The solar panels will be tested each panel prior to distribution to the customer to ensure the quality standards solar panels such as TIS 1843-2010 or equivalent to IEC 61215 and TIS 2580 or equivalent to IEC 61730 from the Thai Industrial Standards Institute.

At present, energy is related to the livelihood of people all over the world. It uses energy from coal, solar, wind, natural gas and oil. It is estimated that in 2040 the population is likely to grow to 9.2 billion people, with similar demand for energy and a link between the economy and carbon emissions. China is the world's highest energy consumption country, replacing the United States and expect that in the future the demand for electricity will increase. The power generation process produces air pollution and causes premature loss of lives of the population. Alternative energy; clean and natural sources, such as solar, wind and biological energy are of great interest.

Solar cells are one of the most important technological inventions for converting solar energy into electrical energy. Currently, such technology has been researched and developed in many countries seriously. As a result, the price of solar cells produced has dropped significantly from the past. Although the cost of electricity production is still higher than that of other renewable energy sources. But the development trend to reduce production costs, including the high price of fossil fuels. As a result, solar photovoltaic power generation can compete with fossil fuel power generation in the future.

Growth rate and condition of solar cell manufacturing industry in the world market and Thailand

Currently, the global solar market is booming. Market researchers predict that the use of Photovoltaics (PV) will continue to increase from the innovative manufacturing technologies. As a result, solar panels have better efficiency and lower prices.

The electricity generation from solar energy in Thailand that is high growing too. From the statistics of the Department of Alternative Energy Development and Efficiency, it showed that the performance of solar energy has increased continuously every year. The table showing the performance of renewable energy between 2020-2022 from Department of Alternative Energy Development and Efficiency;

Alternative Energy	unit	Target 2037	Performance		
			2020	2021	2022
Electricity	MW	29,411	11,969.26	12,406.39	12,431.21
	ktoe	7,298	2,968	3,784	3,283
Percentage of Final Energy Consumption	%	5.75	3.73	5.28	3.99
1. Solar Energy ^{3/}	MW	12,139	2,979.30	2,982.53	3,037.41
2. Solar Powered Buoys	MW	2,725	-	-	45.00
3. Biomass ^{3/}	MW	5,790	3,501.18	3,763.77	3,698.47
4. Wind Energy	MW	2,989	1,506.73	1,546.32	1,545.32
5. Biogas ^{4/}	MW	1,565	547.26	630.54	597.04
6. MSW	MW	900	324.44	372.90	363.09
7. Industrial Waste	MW	75	-	-	34.43
8. Small Hydro Power ^{5/}	MW	308	190.39	191.62	191.75
9. Large Hydro Power ^{6/}	MW	2,920	2,919.66	2,918.40	2,918.40
10. Other Alternative Energy (Geothermal P	MW	-	0.30	0.30	0.30

Environmental Focus

Currently, business operators pay attention to environmental conservation and greenhouse gas reduction for sustainable growth of their business. They are interested in using more renewable energy, especially the installation of solar power generation systems in the workplace, such as Solar Rooftops on the factory roofs to generate electricity for use in the factory and reduce electricity costs. Solar energy is clean energy that does not affect the environment or neighboring communities.

Target Group

The Company have both domestic and international customers which were group of customers who operate solar panel business, solar panel installation services and government agencies that are supported by government policies. Including private agencies, who interested investment into the solar rooftop installation for reducing the electricity costs. Including entrepreneurs who are interested in investing in installing a Solar Rooftop for the benefit of reducing electricity costs and caring for the environment for sustainable growth. Also receive benefits from the BOI promotion, which can deduct 3 years corporate income tax at 50% the investment together with the exemption of import duty on machinery. Which will end the project in 2022 and other target customers such as hotels, resorts, personal accommodation that are not in the service area of the Provincial Electricity Authority or want to use clean energy to protect the environment, including communities, schools, national parks, Government agencies located in backcountry areas.

Price policy

In determining for the solar panels price, the Company determines the price at the price level that is close to the competitors also using the costing criteria production costs plus other costs. However, the solar panel prices will vary according to the price of raw materials is solar cell because it is very important and high value for solar panel's production. The Company focuses on producing solar cells with standard quality.

Distribution channels

Currently, the proportion of the installation of the solar power generation system of the Company in 2022 was all private customers. For distribution channels, the public relations will be used to create understanding and confidence in our solar panels. We had a marketing team to meet customers to regularly sell products and to update news for participate in various projects about the solar power of government agencies and private. That has been supported by government policies such as solar power generation projects or the project of installing solar roof for the benefit of electricity production with their own business.

Competition

At present, the government agencies and the private sector pay more attention to environmental impacts. The government's policy to strengthen the security of electric power, causing the renewable energy industry in Thailand to grow as well. Therefore, the core customers are government agencies that have been allocated budgets to support renewable energy.

At present, the solar energy industry in the country is quite highly competitive because entrepreneurs are increasingly interested in this industry. However, the Company saw the opportunity to sell solar panels into the foreign markets with relatively high growth rates. Especially, neighbor countries such as Myanmar, Laos and Vietnam etc.

(3) Procurement of products and services

• Distribution Transformer

The Company produces distribution transformers that have power at 1-30,000 kV amperes (kVA) and have a maximum voltage of no more than 36 kV under the trademark "Ekarat". There are steel core assemblies, coils and internal distribution transformer equipment, located at 190 Moo 6, Tha Sa-An Subdistrict, Bang Pakong District, Chachoengsao. The metal body factory is located at 260 Moo 6, Bangpakong-Chachoengsao Road, Tha Sa-an Subdistrict, Bang Pakong District, Chachoengsao Province. The Company has the production capacity and capacity load during 2020-2022 as shown below:

Capacity	2020	2021	2022
Production capacity (kVA.)*	2,900,000	2,500,000	2,500,000
Volume (kVA.)	1,906,270	1,794,210	2,064,420
Capacity load (%)	65.73	71.77	82.58

* Production capacity is calculated from 1 full time work (8 hours) and additional 1-2 hours of overtime work per day.

The raw materials used in the production of distribution transformers are Copper wire, Silicon steel, Transformer oil, Steel of tank body, Copper tail plate, Coil Cast Resin and other equipment. The raw materials ordered from domestic are Transformer oil, Steel of tank body, Copper wire, Enameled copper wire, etc. The raw materials imported from foreign countries are Silicon, Copper Coil, Coil Cast Resin which can show the details of the order value of raw materials that can be classified according to the source of purchase as shown in the table below:

Source of raw materials	2020		2021		2022	
	MTHB	%	MTHB	%	MTHB	%
Domestic	565.36	76.80	574.77	47.71	543.70	53.41
Foreign	170.81	23.20	630.05	52.29	474.29	46.59
Total	736.17	100.00	1,204.82	100.00	1,017.99	100.00

• Service and maintenance

In terms of service, the Company has prepared more than 100 distribution transformers for customers to borrow or rent and had spare parts for maintenance and repair of distribution transformers to serve customers in the case of their transformer accident or maintenance schedules. The Company had 11 service and sales centers throughout the country to prepare for services to customers. Including, there are the calibration of electrical measurement and dimension calibration services by testing and calibration laboratories that have received ISO / IEC 17025 standards from the Office of Industrial Standards Ministry of Industry which is ready to serve customers. Our personnel have highly knowledgeable and experienced, they have to pass the training course on all service standards before the actual operation.

- Solar Energy

Solar Module

The Company manufactures and sells crystalline silicon solar modules from the customer orders (Made to Order). The Company has selected quality raw materials both in domestic and abroad with reasonable price for quality solar panel production and had competitive price in the market.

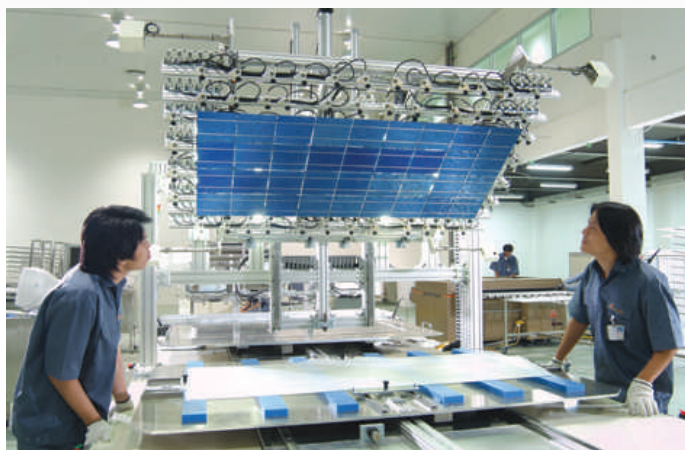
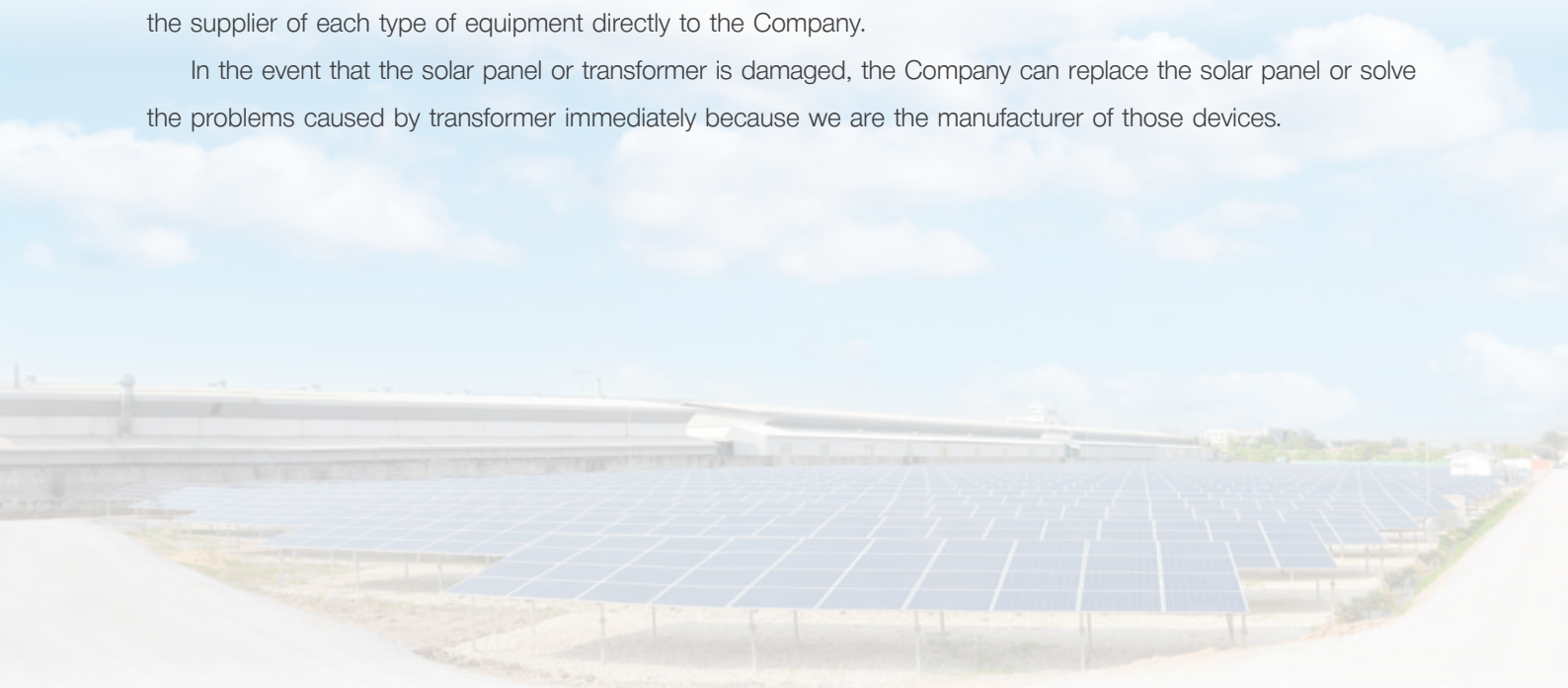
From the production of both solar cells and solar panels, the Company had a CO2 certificate for export to countries in Europe and America.

Solar Farm

The Company has 2 solar power plants located in Si MahaPho District, Prachinburi Province and Bang Bua Thong District, Nonthaburi. The Company is the operator of all project developments from investment, design, procurement and construction. Its objectives are to produce, transmit and distribute electric power to the Provincial Electricity Authority and the Metropolitan Electricity Authority.

The Company manufactures solar panels and transformers for use in the project itself and purchasing the other equipments for the development of the entire project. Therefore, the product warranty form is the direct guarantee from the supplier of each type of equipment directly to the Company.

In the event that the solar panel or transformer is damaged, the Company can replace the solar panel or solve the problems caused by transformer immediately because we are the manufacturer of those devices.



(4) Assets used in business undertaking

Assets used in business operations of the Company and its subsidiaries as of December 31, 2022 are as follows:

List of assets	Book Value (Baht)	Obligation
Non-current financial assets	19,650,000.00	encumbrance on mortgage
Land and land improvement	104,034,296.00	encumbrance on mortgage
Building and construction	316,385,628.00	encumbrance on mortgage
Machinery, tools and equipment	97,918,048.00	encumbrance on mortgage
Furniture and office equipment	8,942,368.00	None
Vehicles	794,211.00	leasing contract
Work under constructions	26,368,898.00	None
Right-of-use assets	75,554,678.00	None
Investment properties	1,631,755.00	None
Assets for rent	3,338,270.00	None
Other assets	1,265,608.00	None
Intangible assets	11,350,690.00	None
Deferred tax assets	70,771,609.00	None
Total	738,006,059.00	

(5) Outstanding Works

Distribution Transformer

The Company had distribution transformers that has been ordered and preparing to deliver for customers but not yet delivered on December 31, 2022 in totally 1,206 units, the amount was 581.33 million baht.

Solar energy

The Company had the service of installing a solar panel that have not been delivered to the customer only high-value projects and take time to deliver as of December 31, 2022

- Ongoing projects from 2021 are approximately 97% complete, with gradually recognizing revenue throughout the year 2022 with a balance as of December 31, 2022 of approximately 10.33 million baht.
- The other projects that have not yet started operating in the amount of 4.38 MW with a total value of 114.58 million baht.

(6) Environmental impact

The Company operates the business of manufacturing transformers distribution systems and solar panels. In the production process, some steps are required painting, piecework cleaning that occurs with an impact on the environment if the waste disposal system are not good. The Company is aware of the potential impact; Therefore, the Company has created an efficient system to eliminate the color spray that occurs from the production process that do not be harmful to workers and neighboring communities. The Company has changed to use raw materials that do not contain toxic chemicals on the environment such as below:

- Using of watercolors to reduce environmental impacts by using water as an ingredient instead of oil paint that requires thinner as a solvent.

- Using of environmentally friendly oil stain remover and using hand washing powder to wash oil stains in maintenance work.

- Using of raw materials that do not contain heavy metals which can be left behind and destroy the environment.

The Company provides training and recommend preventive methods about the operations that may cause accidents including an emergency action plan which have a practicing at least 2 times per year. In addition, the Company has also set up the Committee of Occupational Safety Health and Working Environment which is responsible to prevent various impacts. The Company has been certified with ISO 14001 environmental management system standard which shows the Company had a good environmental management system and international standards.

In addition, the Company has also used various systems to control work and the production quality such as ISO 9001: 2000 system, the health management system and TIS 18001 for safety and reduce the risk of accidents during operations. The Company had operated since 1981 and had no history of disputes or lawsuits from communities nearby the factory or being fined by government agencies related with the environment.

(7) Research and Development

In the Company's business operations both transformer business and solar energy, Its necessary to continually improve production processes and services to keep up with the ever-changing. Increasing the competitiveness of core businesses through education and adoption of new technologies that can promote faster performance.

The Company had a working team for the transformer improvement project, consisting of Deputy Managing Director of Factory, Engineer, Quality System Development Department in order to develop transformers to be durable and have higher efficiency in use.

In 2022, the Company has continued to develop the use of IIOT technology in electrical transformers since 2021.

Ekarat Service Platform Project

It is a continuous development project since 2021. The Company collaborates with King Mongkut's Institute of Technology Ladkrabang in implementing the Ekarat Service Platform project by using information technology to facilitate service personnel and customers by provide services more conveniently and quickly. Ekarat Service Platform is an integrated system where customers can manage information about their own transformers such as past transformer maintenance history, online appointment, monitoring the operation of transformers through the IIOT system, reporting problems with transformers, including facilitating the recording of the transformer maintenance inspection results of service personnel and delivering reports to customers immediately. As a result, work is faster and more responsive to customer needs. It will be completed in early 2023.

1.3 Shareholding structure of the group of companies

1.3.1 Shareholding Structure of AKR Group

The Company is a manufacturer and distributor of transformers under the "EKARAT" trademark. Later, the Company expanded business from seeing the importance of renewable energy. Especially solar energy. Therefore established a subsidiary to operate solar cell production and distribution business, the details are as follows;

(1) **Ekarat Solar Co., Ltd.** has a registered capital 1,000 million baht. The Company holds 99.99% of shares. It was established on April 9, 2004 to operate solar cell and solar cell business. By the solar cell factory located at Amata City Industrial Estate, Rayong Province and the solar cell production plant is located at Bangpakong, Chachoengsao Province. The Board of Directors is jointly managed by the Company with 3 members, namely Mr. Wiwat Sangthian, Mr. Danucha Noichaiboon and Ms. Rompissri Noichaiboon, to manage their duties in accordance with the stated core business plan.

At the present, the asset of Ekarat Solar Co., Ltd. have been sold to the Company in order to continue using solar energy business.

(2) **EKARAT ENERGY Co., Ltd.** has a registered capital 10 million baht. The Company holds 50.99% of shares. It was established on 22 April 2015 to operate solar energy business. By having 3 executive directors together with the Company namely, Mr. Danucha Noichaiboon, Miss Rompissri Noichaiboon and Ms. Urawee Kanokpruk.

As of December 31, 2022, the Company has a diagram of the shareholding structure of the Group as follows:



Investment Policy in Subsidiaries

The investment policy in the Company's various businesses, including new investments, expansion or increase of existing production, purchasing shares or acquiring business. The Company considers many factors such as business expansion trends, value-added investment and to increase the Company's competitiveness etc., in order to diversify the investment risks and has considered that the solar power business has good growth prospects in the future. The Company has a policy to set core operating guidelines for its subsidiaries and the designation of the executive directors to be directors in subsidiaries, to supervise and manage the business operations of the subsidiaries to be in line with the Company's policies and strategies. At present, the Company has no plan to invest in other subsidiaries.

1.3.2 Person with a potential conflict of interest

- None -

1.3.3 Relationship with major shareholders' business

The Company's core business operations are not related to other business of the major shareholders.

1.3.4 Shareholders

List of top 10 major shareholders as of December 31, 2022

Shareholders' Name	Number of held shares	Porportion of total shares (%)
1. KV assets Co., Ltd.*	170,000,000	11.553
2. Mr. Kongkrai Kanokpruk	156,358,300	10.626
3. Miss Teeraya Kanokpruk	101,200,000	6.877
4. Mr. Wanchai Poolsap	63,280,000	4.300
5. Mr. Chayaphol Kanokpruk	39,500,000	2.684
6. Miss Urawee Kanokpruk	31,000,000	2.107
7. Mrs. Paradee Chiamchanya	24,000,000	1.631
8. Miss Chompicha Noichai boon	22,474,680	1.527
9. Mr. Poompat Numpaisarn	21,875,400	1.487
10. Thai NVDR Company Limited	21,467,799	1.459
Total	651,156,179	44.250

Data from Thailand Securities Depository Co., Ltd. for the depositor

* Remarks : * List of KV Asset Co., Ltd. Shareholders

Shareholders' Name	Number of held shares	Porportion of total shares (%)
1. Miss Rompissri Noichai boon	99,275	18.05
2. Mr. Wornpahol Sangtian	41,250	7.50
3. Miss Pimolwan Sangtian	41,250	7.50
4. Miss Wanravee Topongkasame	17,188	3.13
5. Mrs. Daranee Kantamara	27,500	5.00
6. Mr. Danucha Noichai boon	48,125	8.75
7. Mr. Daroonwat Noichai boon	27,500	5.00
8. Miss Chompicha Noichai boon	99,275	18.05
9. Mr. Ruengrat Noichai boon	17,188	3.13
10. Mr. Visitsak Noichai boon	17,187	3.12
11. Miss Peerayachan Noichai boon	97,075	17.65
12. Miss Khanittha Topongkasame	17,187	3.12
Total	550,000	100.00

Number of Company's Stock holding by the Board of Directors

Name	Position	Shareholding				
		December 31, 2021		December 31, 2022		Variant
		Share	(%)	Share	(%)	Share
Mr.Vichit Yamboonruang	Independent Director Chairman of the Board	2,509,922	0.171	3,168,722	0.215	658,800
Mr.Vinai Vittawasgarnvej	Independent Director Chairman of Audit Committee	-	-	-	-	-
Mr.Aroon Sricharoon	Independent Director Audit Committee	210,000	0.014	210,000	0.014	
Mr.Wara Tongprasit	Independent Director Audit Committee Chairman of Nomination and Remuneration Committee	39	0.000	39	0.000	
Mr.Chatrit Siripanichkorn	Independent Director Nomination and Remuneration Committee	-	-	-	-	
Mr.Thunya Sritorn	Independent Director Chairman of Risk Management Committee	-	-	-	-	
Miss Urawee Kanokpruk	Director Nomination and Remuneration Committee	31,000,000	2.107	31,000,000	2.107	
Mr.Danucha Noichai boon	Director Nomination and Remuneration Committee	-	-	-	-	
Mr.Wiwat Sangtian	Director	170,000	0.012	170,000	0.012	
Miss Rompissri Noichai boon	Director Risk Management Committee Managing Director	1,171,724	0.080	1,171,724	0.080	
Total		35,061,685	2.383	35,720,485	2.427	658,800

1.4 Amounts of registered capital and paid-up capital

1.4.1 Ordinary Share

The Company has a registered capital of 1,177,226,284.80 Baht, of which 1,177,226,284.80 Baht is paid up, divided into 1,471,532,865 shares at 0.80 Baht per share with the right to vote 1 share 1 vote.

1.5 Issuance of other securities

1.5.1 Convertible Securities

2022 No convertible securities are issued.

2019 At the 2019 Annual General Meeting of Shareholders, it was resolved to approve the Company issued warrants to purchase ordinary shares of the Company No. 1 (AKR-W1) with details as follows:

• Allocated to the existing shareholders	2 existing ordinary shares for 1 unit of Warrant
• Offering price per unit	0 Baht (allocation free of charge)
• Issuance date	May 31, 2019
• Expiration date	May 28, 2021 (2 years)
• Issuance amount	671,571,134 units
• Number of the newly issued ordinary shares	671,571,134 shares
• Exercise ratio	1 unit of Warrant: 1 ordinary share
• Exercise price Baht	1 per share

As of December 31, 2020, the remaining amount of AKR-W1 is 671,571,134 units. Because in the past, there was no person who expressed their intention to exercise the rights to purchase the Company's ordinary shares.

On May 28, 2021 was the last exercise date and the warrants expire on May 29, 2021, there were 128,243,452 warrant holders to purchase ordinary shares of the Company in the amount of 128,243,452 shares, totaling 128,243,452 baht, with the remaining shares issued and supported for the exercise of 543,401,250 shares.

1.5.2 Debt Securities

- None -

1.6 Dividend Policy

Dividend Payment Policy of the Company

The Company and the subsidiary have the dividend policy to pay the dividend to the shareholders about 50% of Net profit after corporate income tax and legal reserve each year. Therefore, the Board of Directors is able to acts inappropriate with this policy time by time under the condition to use the profit in the best interest for shareholders like pay back the loan, use for investment or other subject related to the Company operation. However, the dividend payment must approve by the Annual General Meeting and approved by the Board of Directors.

The 2022 Annual General Meeting of Shareholders held on April 29, 2022 resolved to approve the Company the dividend payment for the year 2021 to the shareholders whose names appeared on the record date on May 12, 2022 for total number of ordinary shares 1,471,532,856 shares at the rate of 0.03 baht per share, total amount 44,145,985.68 baht, dividend payment scheduled on May 27, 2022.

Interim dividend payment

Board of Directors Meeting No. 8/2022 held on September 15, 2022 resolved to approve the interim dividend payment for the period ended June 30, 2022 at the rate of 0.015 baht per share for ordinary shares totaling 1,471,532,856 shares, total amount 22,072,992.84 baht with dividend payment on November 17, 2022

Dividend payment information from 2019-2021

Year	2019	2020	2021
Earning per share (Baht)	0.062	0.073	0.063
Dividend per share (baht)	-	-	0.03
Dividend to earnings ratio (%)	N/A	N/A	50.37

Dividend Payment Policy of Subsidiaries

The Board of Directors of both subsidiaries has a policy to pay dividends according to the performance, financial position and investment plans. without specifying the exact dividend payment rate, but will consider the performance of each year.

2. Risk Management

2.1 Risk management policy and plan

The Company is aware of the important of risk management of the organization which is an essential component of every business process and connection at all levels. Therefore, the Company has continuously managed the risks. The Risk Management Committee is responsible for assessing potential risks to formulate strategies in accordance with the Company's objectives and goals. Including setting the risk management policy that all employees must follow.

2.2 Risk factors on business operation

2.2.1 Distribution Transformer Business Risk

- Risk related to relying on specific Distribution Transformer's customer

Most of the Company's revenue came from the sale of Distribution Transformer. In 2020, 2021 and 2022, the Company had the revenue from sales of Distribution Transformer to the Metropolitan Electric Authority and the Provincial Electric Authority were 22.58%, 15.02% and 23.60% respectively. It was found that the proportion of revenue of government agencies in 2022 increased by 8.58% from 2021. Revenue from sales of transformers to government agencies is uncertain and depends on many factors that the Company cannot control, both the government's annual budget and the competition in the transformer auction.

- Risk related to the unstable of Distribution Transformer's raw materials price

In 2022, the Company had the major revenue from the sale of Distribution Transformer. In the production of Distribution Transformer used the local raw material and imported material likes Silicon steel, Copper wire, Transformer oil, etc. The Company was greatly affected by the fluctuation of raw material prices in the world market and it affected the total cost of transformer production. Therefore, the Company had to adjust the selling price to be in line with the increased cost. However, we continue to improve and develop in order to reduce costs and plans to procure new raw materials and reserve of raw materials for use in production for about 3-6 months.

- Risk related to the quality of the Distribution Transformer's raw material

Distribution Transformer is a very important part in the electricity system. If the transformer malfunctions the effect will cause the damage of the industry and resident. Therefore, we need to select the raw material likes Silicon steel, Copper wire, Copper plate, Insulator paper, transformer oil, and transformer tank, in the production of high quality distribution transformer. To avoid the risk from low quality of raw material, the Company has the procedure follow ISO 9001 standard which comprise with design, assign the characteristic of raw materials, monitoring and testing. Determine the properties of raw materials used in the production of transformers with examination, testing, selection of suppliers, raw material inspection to ensure that the raw materials were ordered by the Company, according to the specified properties with standard quality

- Risk related to relying on skilled staffs in the production of DistributionTransformer

In 2022, 87.67% of the revenue from sales of goods and services came from the sale of Distribution Transformer which requires experienced, knowledgeable and skilled personnel. Therefore, the skilled staffs in specialized knowledge are important to the production of Distribution Transformers and operation of the Company. Anyway, with the good operation system awarded ISO 9001, ISO standard has the operating manual, training and operation process. If there is a new employee, it will help to understand the work process. This will enable employees to perform their work quickly.

The Company has succession plan for the important positions and has the training program to develop the staff continuously. The Company also awarded the benefit or has the policy to stimulate the staffs. For example, Provident Fund, Bonuses, Loyalty awards, this will reduce the turn over rate of the staffs

2.2.2 Solar Energy Business Risk

- Risk related to the government power purchasing policy

In 2023, the government has a policy and promotion of the production electricity with many solar cell projects connect from the previous year, both Solar Roof and Solar Farm as follows:

- Risk related Anti-Dumping Law

Risk related Anti-Dumping Law's the Europe Union and the United States about Solar Cell from China. Chinese entrepreneurs have set up factories to produce cells and solar cells in Thailand more than past, in order to avoid that law and to get the Certificate of Origin. That make higher competition in Solar Cell. The Company had to find ways to reduce the operating cost to be competitive

- Risks from purchasing energy of the government sector

In 2023, the Office of Investment Promotion (BOI) announced the benefits for general entrepreneurs who have installed the Solar Rooftop system for internal use. Therefore, which was another channel that the Company can join to work.

- Power Development Plan of Thailand (PDP)

From the Power Development Plan since 2018-2037 to increase the use of solar energy for about 10,000 MW (500 MW per year), divided by the government sector ratio of about 400 MW / year. Solar Rooftop of the public sector is about 100 MW / year. That is a great opportunity for the Company to expand the customer base

2.2.3 Financial Risk

- Risk from interest rate fluctuations

The Company has the risk from the uncertainty of the interest rate in the market due to the Company had credit facilities in a commercial bank. The bank code the interest rate according to the nature and purpose of the amount used as follows:

1. Facilities limit, which the rate of MLR per year.
2. L/C and/or T/R and/or short term loan or L/G, if the loan is Baht currency, the rate is MOR per year.

The current global economy, although the COVID-19 crisis has eased, there is still a crisis of the Russian-Ukrainian War. This results in higher inflation around the world. The bank increased the interest rate in 2022; (KBANK) MLR from 5.47% to 5.97% per annum and MOR from 5.84% to 6.34% per annum.

- Foreign exchange rate risk

The Company order the material to produce the Distribution Transformer from overseas likes Silicon steel, Coil Cast Resin. The bidding and payment of raw materials will be mainly used in US dollars. However, the exchange rate has been closely monitored. In the event that the exchange rate tends to weaken, the Company will make a forward contract. Along with considering other factors to reduce the risk of exchange rate fluctuations and increase efficiency in financial management.

2.2.4 Economy and Political Risk

In 2022, the economy began to expand due to political changes and the Kovic-19 situation has a better direction, resulting in GDP for the year 2022 according to the announcement of the National Economic and Social Development Council was 3-3.5%. The Company estimates that in 2023 there will be public investment in large-scale public utilities and the expansion of renewable energy mainly. If the public investment project can speed up the operation in the first half of the year, the economy will expand according to the target. However, the upcoming election in the second quarter may affect the aforementioned policy making.

3. Business Sustainability Development

3.1 Policy and objectives of sustainable management

The Company operates its business under good corporate governance, in accordance with the direction and strategic plans in order to create sustainability for the organization on Economic, Social and Environmental Responsibility. The Company has established a corporate sustainability policy and publicly announced for both the organization and all stakeholders as a guideline to drive the organization to achieve its vision in a transparent and efficient manner by defining 3 important issues as follows:

Environment

Committed to operate business in environmentally friendly. Reduce the impact on the ecosystem caused by all aspects of the production process and use resources cost-effectively. Create understanding and awareness of environmental conservation to employees, in order to jointly develop the organization to grow in harmony with the good environment.

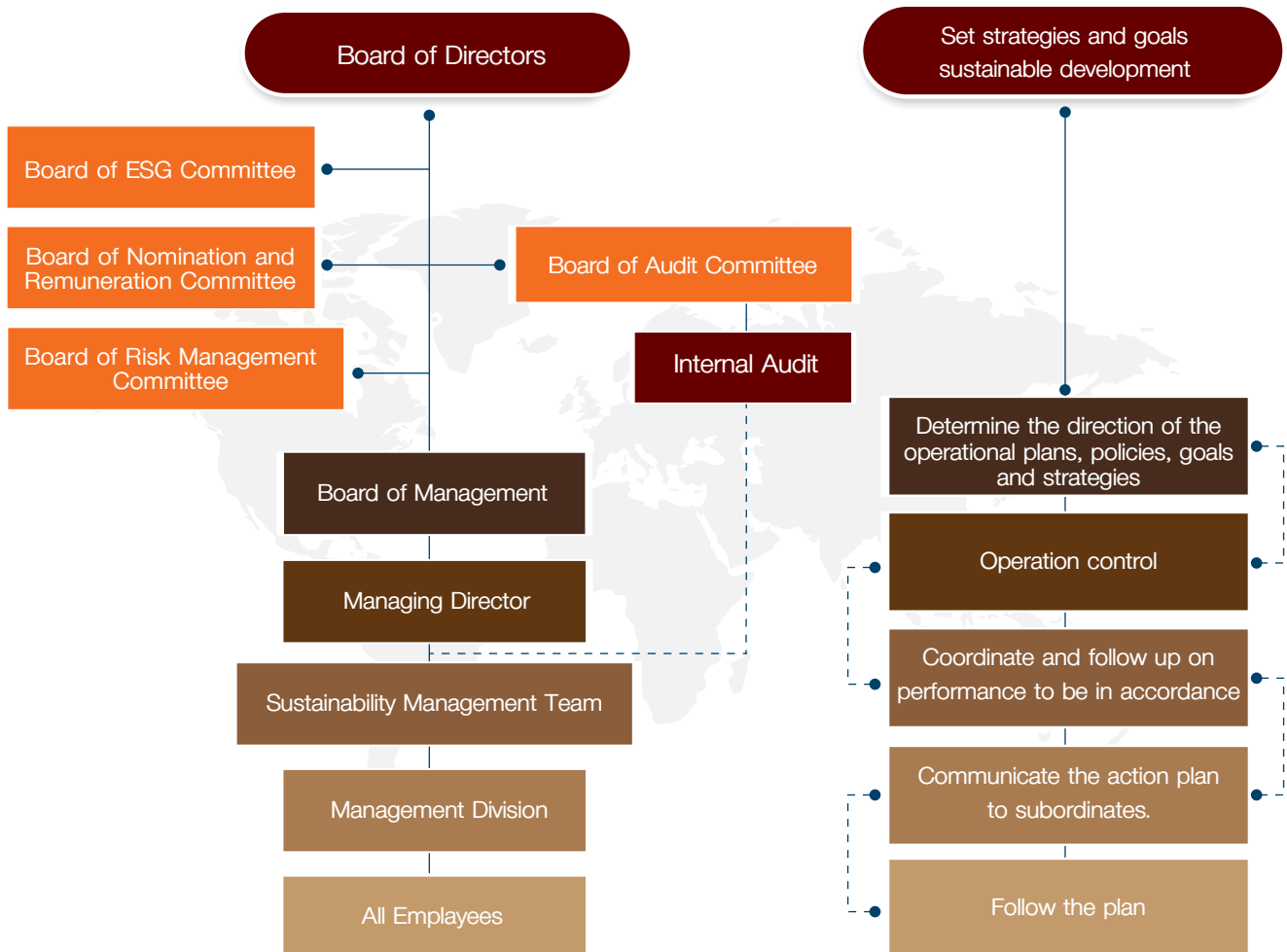
Society

Operate the business with regard to the principles of human rights, fairness and equality of employees and focus on developing the knowledge and competence of employees. As well as promoting the development of communities and society for sustainable coexistence.

Corporate Governance

Adhering to compliance with good corporate governance principles, conduct business with transparency, accountability, ethics, taking into account both internal and external stakeholders by managing risks to control and reduce the impact of operations throughout the value chain. Including the search for business opportunities that can satisfy all groups of stakeholders by focusing on creating new innovations for sustainable growth of the organization.

Sustainability Governance Structure



The scope of the report

The Sustainability Performance Year 2022 presented the Company's performance only the transformer manufacturing factory at Chachoengsao Province in economic, social and environmental aspects for continuous and sustainable development of the organization

Sustainability Management Target

The Company's vision is to be a leading organization in the quality of renewable energy transformers by setting the direction for business operations according to the mission and operating philosophy "Adherence to quality and honesty to customers" in order to create maximum returns for all stakeholders and grow sustainably. In 2022, the Company set strategies and goals for sustainable development as a guideline for operations in the midst of constant changes, the details are as follows;

ESG	Strategic Direction	Goal	Outcome
Environment	<ul style="list-style-type: none"> Environmentally-friendly business operation 	<ul style="list-style-type: none"> Prepare a report on the amount of greenhouse gas emissions of the organization for verification and certification by the Thailand Greenhouse Gas Management Organization (Public organization) Reduce the greenhouse gas emissions by 5% compared the business-as-usual scenarios by 2031 	<ul style="list-style-type: none"> The Carbon Footprint for Organization (CFO) has already been certified by TGO.
Social	<ul style="list-style-type: none"> Promote good and safe working environment 	<ul style="list-style-type: none"> Renovate the buildings at the factory both inside and outside to be beautiful and modern due to old and dilapidated conditions. Reduce the number of work-related accidents by 50% from year 2021 	<ul style="list-style-type: none"> Renovate the building at the factory about 70% of the plan. The number of work-related accidents decreased by 25% from year 2021
Corporate Governance	<ul style="list-style-type: none"> Comply with the principles of good corporate governance and business ethics 	<ul style="list-style-type: none"> Established the Environment, Social and Governance (ESG) Committee 	<ul style="list-style-type: none"> Established an ESG Committee and assigned responsibilities in December 2022.

Remark : The sustainability policy can be found at www.ekarat.co.th

3.2 Management of impacts on stakeholders in the business value chain

3.2.1 Business value chain

The Company is aware of the expectations of stakeholders towards the business operations of the organization. Therefore, it engages with internal and external stakeholders to identify the interests, expectations, concerns and success factors that can influence business performance from each stakeholder to assess key issues that affect sustainable business operations.

The Company's business operations are divided into 5 main activities, each of which has a relationship with each group of stakeholders as follows:



1

Sale & Marketing

1. Promotional plans and marketing activities.
2. Fair and competitive prices.
3. Communicate information to target customers.

Raw Material & Procurement

1. Sourcing raw materials from various trading partners and taking into account the quality and reasonable price.
2. Efficiency of delivering on time.
3. Raw material control and storage system.

2



3

Manufacturing & Development

1. Standard production.
2. Inspect and test product quality.
3. Product development to meet customer needs.

Delivery

1. Efficient logistics management with safe and on-time cargo.
2. Transport system that has the least impact on the community and the environment.

4



5

Maintenance & Service

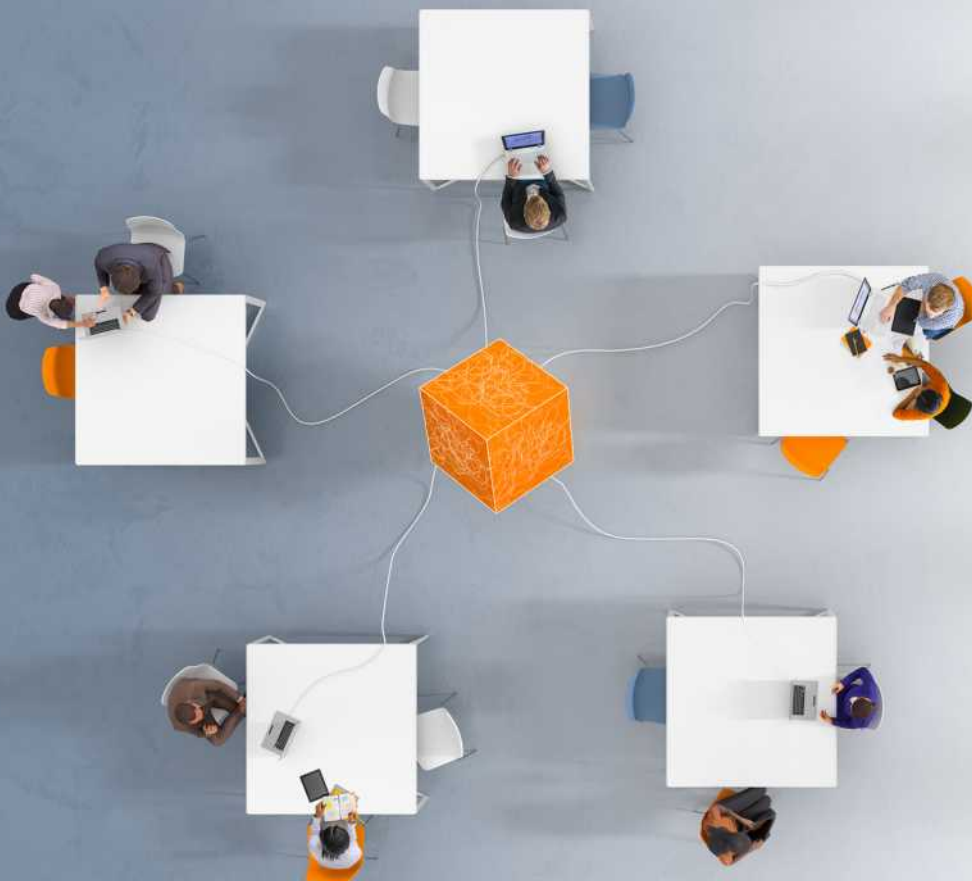
1. Product warranty and after sales service.
2. Survey customer satisfaction after using the product.
3. Follow up on continuous maintenance service.
4. Provide fast, timely and efficient service.

3.2.2 Analysis of stakeholders in the business value chain

The Company recognizes the importance of all stakeholders in the business value chain that may affect our operations. Therefore, a sustainability working group was established with representatives from all departments to consider and analyze groups of stakeholders both inside and outside the organization. By analyzing the value chain of each line and identifying affected stakeholders or affect the operation of each mission or activity which gathered 8 key groups of stakeholders as follows:

Stakeholder Value Chain Analysis Result

Stakeholder	Sale & Marketing	Raw Material	Manufacturing	Delivery	Maintenance Service	Support Activities
Customer	✓		✓	✓	✓	✓
Employee	✓	✓	✓	✓	✓	✓
Supplier	✓	✓	✓	✓	✓	✓
Investor			✓	✓		✓
Payable	✓	✓	✓			✓
Community&Social			✓	✓	✓	✓
Competitor	✓	✓				✓
Government Officials			✓	✓		✓



Work with Stakeholders

The Company has compiled stakeholder needs, expectations and concerns into a business plan to analyze and prioritize issues of importance to stakeholders. Then build relationships with stakeholders to respond to issues that stakeholders focus on to improve the Company's operations.

Stakeholder	Expectation Survey Methods	Expectation	The Organization's Response
Employee	<ul style="list-style-type: none"> • Quarterly in-house journal • Listening to employee opinions and complaints • Annual Labor Welfare Committee Meeting • Executives visit employees. 	<ul style="list-style-type: none"> • Appropriate welfare • Knowledge development training • Appropriate compensation • Work safety 	<ul style="list-style-type: none"> • Safety Environmental management pursuant to the standards • Modify wage payment and performance assessment systems • Situational assistance program • Internal and external training program
Shareholder	<ul style="list-style-type: none"> • News via SET • Annual meetings of shareholders • Registered companies meet investors • Invitations for investors to visit factories 	<ul style="list-style-type: none"> • Good returns • Stable business and continuous growth • Correct and complete Company's information • Good corporate governance 	<ul style="list-style-type: none"> • Dividend Payment • Transparent disclosure of information
Customer	<ul style="list-style-type: none"> • Customer satisfaction surveys • Meet-ups with customers • Organize seminars to educate • Product exhibitions • Technical knowledge provision to customers • Business visits and tours. 	<ul style="list-style-type: none"> • Receive quality products • Fair price • Warranty for products and services • After sales service is good and fast. • Acquire technical knowledge 	<ul style="list-style-type: none"> • Quality products that meet the needs of customers • Total quality management pursuant to ISO9001
Competitor	<ul style="list-style-type: none"> • News and information • Group member meetings • Meetings and conversations 	<ul style="list-style-type: none"> • Fair and transparent trade competition • Help each other when encountering problems in business • Exchanges of information about products and process 	<ul style="list-style-type: none"> • Operate business fairly and transparently • Collaborate to develop business.
Creditor	<ul style="list-style-type: none"> • Meetings and conversations • Discussion performance 	<ul style="list-style-type: none"> • Ability to comply with contract terms and agreements • Have a stable action plan • Reliability and transparency in operations 	<ul style="list-style-type: none"> • Strict compliance with terms and agreements in contracts • Discuss Company's performance
Supplier	<ul style="list-style-type: none"> • Selection and assessment of partners • Meeting with the supplier to check raw material quality. • Partner Satisfaction Survey 	<ul style="list-style-type: none"> • Transparency in bending and evaluating • Comply with the terms and conditions of payment • Fair price competition 	<ul style="list-style-type: none"> • Procurement policy fairly and transparently • Anti-corruption policies
Community	<ul style="list-style-type: none"> • Organizing activities with communities • Annual Community polls • Hold a public hearing 	<ul style="list-style-type: none"> • Received support for community activities • Help the community from the impact of the epidemic. • Peaceful coexistence • No negative safety and environmental impacts on communities and society 	<ul style="list-style-type: none"> • Support for community activities • Human rights policies • Environmental management with ISO14001 standards
Public Sector	<ul style="list-style-type: none"> • Rules and regulations • Meeting and discussions • Participation in government activities 	<ul style="list-style-type: none"> • Ability to comply with related laws • Support government projects 	<ul style="list-style-type: none"> • Comply with rules and regulations prescribed by law • Participate in public service activities

Assessing Key Issues for Sustainable Business Operations

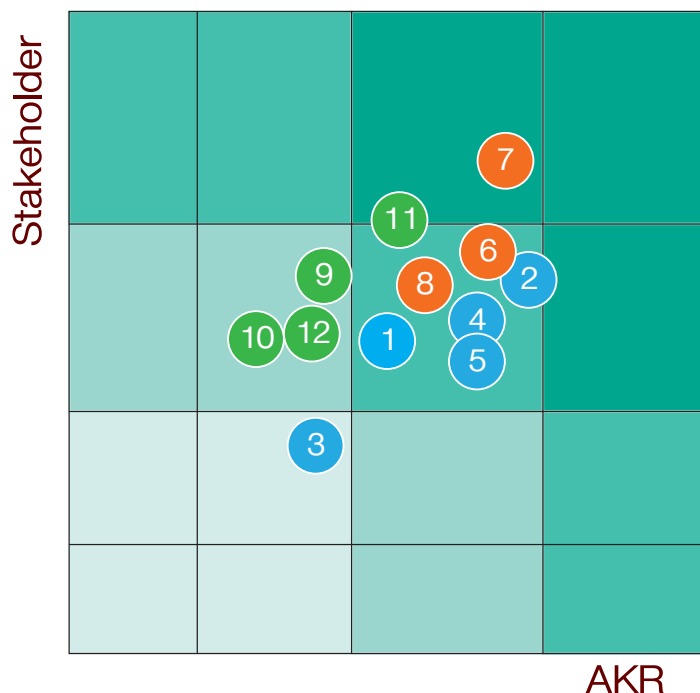
The Company collected and identified key issues from all stakeholders and important trends that may occur in the future that affect business operations both in the short and long term such as the epidemic situation, cyber security, climate change, etc. In order to consider with the organization's risk management, sustainability policy and business strategies as well as analyze and review the operating results of the past year to bring those issues to prioritize business and set management guidelines. The Company will assess the key issues every year, to review changes in the issues and stakeholders, then lead to efficient and balanced management. The key sustainability issues were assessed as follows:

1. Issue Identification

Selecting sustainability issues together with various agencies internal and external stakeholders based on relevant requirements, standards, and guidelines. The needs and expectations of stakeholders that affect operations throughout the organization's value chain, including alignment with the organization's sustainability management strategy.

2. Priority Assessment

Prioritize sustainability issues in terms of opportunities and impacts to create value for the organization and stakeholders. The group of issues will be divided according to the level of importance, namely high level, medium level and low level, then selecting the important issues to enter the strategy formulation and management process to be effective.



Issues in each dimension of ESG		
Corporate Governance	Society	Environment
1. Corporate Governance 2. Risk Management 3. Supply Chain Management 4. Responsibility for Products and Services 5. Innovation and Technology	6. Human rights and Fair Labor Practice 7. Occupational Health and Safety 8. Social Responsibility	9. Water Management 10. Waste Management 11. Climate Change 12. Energy Management

Materiality Assessment

Key Issues	Detail	Stakeholders
Occupational Health and Safety	<ul style="list-style-type: none"> Occupational Health and safety that causes injuries/ illness to employees Production process safety 	Employee, Supplier, Competitor, Community, Public Sector
Climate Change	<ul style="list-style-type: none"> The management of greenhouse gas Use of renewable energy in production process. 	All groups
Human Rights	<ul style="list-style-type: none"> Respecting human rights Legal Employment Employee potential development 	All groups
Risk Management	<ul style="list-style-type: none"> Managing various corporate risks 	All groups
Social Responsibility	<ul style="list-style-type: none"> Participation with the community to lift their quality of life through community activities Conservation of natural resources and the environment 	All groups
Responsibility for Products and Services	<ul style="list-style-type: none"> Production Standard Service standard Customer Relationship Management 	Employee, Customer, Supplier, Competitor
Corporate Governance	<ul style="list-style-type: none"> Conducting business with fairness in accordance with governance and transparency Anti Corruption 	All groups
Innovation and Technology	<ul style="list-style-type: none"> Innovation promotion and technology application for the production of goods and service Cyber security 	Employee, Customer, Supplier, Public Sector
Water Management	<ul style="list-style-type: none"> Responsible management of wastewater Efficient water consumption 	Employee, Community, Public Sector
Waste Management	<ul style="list-style-type: none"> Management of hazardous waste from production process 	Employee, Community, Public Sector
Supply Chain Management	<ul style="list-style-type: none"> Procurement guideline following the procurement policy and the code of conduct of business partners Risk Management from the procurement process and the suppliers' operation 	Employee, Supplier, Community

3.3 Management of environmental sustainability

The Company is determined to operate with adherence to quality and honesty, creating value and engaging with stakeholders to grow stably and sustainably according to ESG, namely environmental, social, governance by analyzing internal and external factors to identify various sustainability issues both are risks and opportunities that may affect both positively and negatively. In 2022, 12 key sustainability issues were analyzed and guided in the formulation of corporate strategies. The details include strategies and operational indicators, short-term and long-term goals as well as the duties and responsibilities of the relevant agencies.

Sustainability Management in Environmental Dimensions

The Company sets policies and plans to conserve energy and the environment as part of its business operations. By focusing on the quality of production and realizing the importance of the environment and energy conservation. Therefore, the energy management system has been applied to every step of the business with goals and objectives to promote energy efficiency and maximum benefits, as well as comply with laws and other requirements related. It is considered the responsibility of the management and employees at all levels to cooperate in complying with the specified measures and communicated and publicized the said policy to all internal and external stakeholders.

In this regard, we have implemented the energy and environmental conservation policy (more details can be found at the Company's website <https://www.ekarat.co.th>) as follows:

- **Energy conservation** by designing energy-saving products develop appropriate and continuous energy management systems. Improve energy efficiency in the production process and the technology used.

- The design of the transformer that has a lower loss than normal, according to the draft of the Green Label, which will reduce losses in the power supply system that occurs during use. can reduce the electricity bill.

- **Saving resources** by reusing and wasting from the production process, such as bringing wood chips, unused pallets or steel structures to be used as a cabinet or table for placing and providing a recreational corner for employees to sit and read. Using recycled paper to reduce the use of paper for internal work, etc. The Board of Directors had a policy to promote efficient use of resources by setting off the lights and air conditioning during the lunch break for 1 hour and providing training on environmental knowledge to the employees according to ISO 14001 standard.

- **Pollution prevention** by controlling and choosing appropriate chemicals, reduce pollution to the environment and harm the production process, control wastewater quality before being released to the public. Including preventing interference with the surrounding communities, both noise and vibration from the following manufacturing processes.

- The use of transformer oil without substance Polychlorinated Biphenyls (PCBs) which are difficult to decompose chemicals and can accumulate in both living organisms and the environment. Causing various symptoms such as chronic bronchial liver cancer Impaired nervous system, etc.

- The use of silica gel that is plated from natural organic substances instead of Crystal Violet plated from Cobalt Chloride, which is a banned substance in the product.

- The use of plastics that do not contain heavy metals.
- The use of water colors to reduce the impact on the environment by using water as an ingredient instead of oil paint that must be used thinner as solvent.
- The use of varnish without heavy metal.
- Using hand washing powder to wash oil stains in maintenance work.
- Use an environmentally friendly oil stain remover.
- Change the lighting bulb in the factory to be an energy-saving LED bulb, saving 3,312 kW-h of electricity per month, or reducing electricity costs by approximately 162,950 baht per year and the amount of greenhouse gas that is reduced by 10.30%.
- Installed 851.26 kW solar power generation system (Grid connected System) on the factory roof, allowing the Company to save electricity by 330,791.37 Baht per year and have income from selling electricity 59,736.48 Baht per month.
- Reduce the amount of oil used in the forklift by 5% per year. There were cost of forklift oil costs reduced by 5,039.26 baht per month and resulting in reduced greenhouse gas volume too.

The management and the energy management working group will review and improve policies, goals, performance and action plans annually to be in line with the ever-changing situation and environment. To conduct business with social responsibility and to promote, disseminate, publicize various energy conservation activities to the organization, government agencies and society.

Environmental operating results

Climate Change

Thailand is one of the most impacted by climate change in the world, causing widespread damage to the economy and likely to intensify in the future. Climate change is caused by the amount of greenhouse gases being converted into the atmosphere beyond the ability of nature to absorb. It consists of Carbon Dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O). The continued increase in greenhouse gas emissions has increased the concentration of CO₂ in the Earth's atmosphere. Resulting in higher global warming and global climate change.

The Company is aware of these problems by striving to manage and reduce greenhouse gas problems arising from the production process at the transformer manufacturing plant and promote the use of clean energy according to Thailand's power generation development plan 2018-2037.

In 2017, the Company participated in the "Supply Chain De-carbonization Project" organized by the National Productivity Institute which aims to promote the industrial sector to realize the importance of Greenhouse Gas Reduction. This is the key sustainability strategic area and helps improve performance, enhance the management of the business value chain, used to communicate to customers and stakeholders in a transparent manner in accordance with the needs of society with increased environmental awareness and respond to sustainable management strategies with a green economy. The project implementation period is from November 2016 to August 2017, whereby the Company can reduced CO₂ by 48,963.6 tons CO₂-eq per year and reduced electricity costs by 344,043 baht per year.

After the completion of the said project, the Company did not continue operating in the following years due to several unfavorable factors, including the availability of personnel of the responsible agencies was insufficient.

However, in 2021, the Company has started to review and plan the management to reduce greenhouse gas problems mainly caused by the operating processes at the factory. Then communicate with personnel in the organization to understand and realize the importance of greenhouse gas problems that affect the environment, including the benefits that will receive. Employees must work together to implement the plan in order to achieve the objectives.

In 2022, the Company started implementing the Carbon Footprint for Organization (CFO) project by collecting data on greenhouse gas emission activities both directly and indirectly during the period from 1 January - 31 December 2021 to assess the amount of emissions and consider ways to reduce greenhouse gas emissions efficiently. Established the working team and action plans to communicate to relevant parties about the objectives and guidelines for collecting data to accurately and completely calculate greenhouse gas emissions according to the carbon footprint calculation and reporting requirements of organization 8th edition (6th revision, July 2022) by Thailand Greenhouse Gas Management Organization (Public Organization). All departments in the organization must cooperate in gathering relevant information and attend meetings to know the guidelines.

In this regard, the Company was certified TGO Guidance of the Carbon Footprint for Organization from Thailand Greenhouse Gas Management Organization (Public Organization) on November 29, 2022 and announced to employees through the Company's intranet system.

Management of Material Issues

Objective: Transform into a green organization by reducing greenhouse gas emissions and promoting clean energy use.

Short/Long-term Indicators	Performance
<p>Short-term Indicators</p> <ul style="list-style-type: none"> Started collecting data on the amount of greenhouse gas emissions in the factory Promote environmentally friendly products <p>Long-term Indicators</p> <ul style="list-style-type: none"> Limit the amount of greenhouse gas emissions by reducing greenhouse gas emissions by 10% in 2031. 	<ul style="list-style-type: none"> The Company was certified TGO Guidance of the Carbon Footprint for Organization from Thailand Greenhouse Gas Management Organization (Public Organization) Environmental organization management according to ISO 14001 Started to control the amount of greenhouse gas emissions in the factory area by using the data of 2021 as the base year (first year).

Key Performance

Carbon Footprint Management

In 2022, the Company started preparing a report on the amount of greenhouse gas emissions of the organization (Carbon Footprint for Organization: CFO) with the scope of the organization and details as follows:

Organization information: : Transformer Factory of Ekarat Engineering Public Company Limited
 Certification Type: : Limited Assurance Level
 Confidence level: : 5%
 Period: : January 1, 2021 – December 31, 2021
 Advisor: : Thailand Environment Institute Foundation
 Verification agency: : Thailand Greenhouse Gas Management Organization (public organization)
 Certification date: : November 29, 2022

The Company's direct and indirect greenhouse gas emissions (first year)

Performance Data	GHGS (tCO ₂ e/yr)	%
Scope 1	670.00	5.70
Scope 2	701.00	5.97
Scope 3	10,375.00	88.33
Total	11,746.00	100.00



Environmental organization management according to ISO14001

The Company is well aware of the importance of the environment and has clearly formulated policies and goals regarding energy conservation and reviewing for continuous improvement annually. The Company has been certified with the environmental management standard or ISO14001 since 2001. We aim to implement, maintain and continually improve as well as increasing the efficiency of environmental operations in accordance with various laws and regulations.



Water Management

The Company mainly uses tap water both in the head office and the factory for consumption within the office, without using water in the transformer manufacturing process. The wastewater will be treated properly before being released to the outside. Water quality analysis is carried out regularly.

Target : Reduce water consumption within the factory by at least 5% from the base year 2021

Year	2020	2021	2022
Water Consumption (CMB)	5,849	5,551	8,369
Water Supply (baht)	193,006	183,004	278,410

In 2022, the Company had an increase in water consumption of 2,818 cubic meters or 50.77% and increased in water costs of 95,406.55 baht or 52.13% compared to the year 2021, which did not meet the target. Because the Company has increased the production of transformers causing overtime work in the evenings and weekends, including the leakage of underground water pipes.

Wastewater Management

The Company had the water withdrawal management system through wastewater treatment processes such as prefabricated septic tanks and aerated grease traps before being released to the outside.

In 2022, the amount of treated effluent was 6,701.60 cubic meters, or 80% of the total amount of effluent.

Examples of physical, chemical and biological quality measurements of wastewater-effluent

- Measurement area : Cooling water, Radiator Fin and Box department



- Measurement area : water before entering the sewer



- Measurement area : Water from the sewer



Waste and Garbage Management

Disposal of waste and residual materials in the factory caused by the production process both dangerous and harmless. If the waste and garbage disposal operator does not comply with the standards set by the Department of Factory, it will be major problem that severely affects the environment and nearby communities.

Therefore, the Company attaches great importance to the disposal of waste and other waste materials from the production process. There were regulations on waste management from classification, storage, handling and transportation, solid waste disposal and proper utilization for each type of waste in accordance with relevant laws and the least impact on the environment. To be disposed of properly and to reduce waste disposal by landfill especially hazardous waste, recycled waste, waste that can be sold, etc.

The Company has communicated and created awareness of waste separation for everyone in the organization to know and implement it correctly. There are garbage bins separated by type of waste in many areas for the convenience of employees.

Key Performance

Garbage Disposal

The Company has control of solid waste management from classification, storage, loading and transportation, waste disposal and proper utilization for each type of waste in accordance with relevant laws and environmental impacts. Solid waste can be divided into 3 types: general waste, recyclable waste and hazardous waste.

The Company has hired a waste or unused waste sorting contractor which has been registered with the Department of Industrial Works only to carry out the collection, segregation of various wastes to be disposed of properly. Especially the waste that is contaminated with dangerous chemicals that may be toxic to the environment around the factory.

At the head office, mainly separate general waste and recyclable waste because there was no hazardous waste. The juristic person of the UM Tower building charges a monthly general waste disposal fee.

As for the factory, the Company disposes of general waste by hiring an external agency on a monthly basis with no limit on the amount of waste. It costs 72,000 baht per year.

Target : Reduce the amount of hazardous waste by at least 10% from the base year 2021.

The amount of waste generated from the production process

Garbage type	Amount of waste (kg)		
	2563	2564	2565
Recycle waste	127,677	8,859	81,540
Hazardous waste	30,941	61,250	32,725

In 2022, the Company had a volume of Recycle waste more than the year 2021 amounting to 72,681 kg, due to the separation of residual materials from the production process and sell it more and the amount of hazardous waste decreased from the previous year by 28,525 kg or 46.57%. **The Company can reduce the amount of hazardous waste according to the target.**

Waste disposal by landfill method

In 2022, the Company did not dispose of hazardous waste from the production process by landfill.

Complaint Management on the disposal of factory waste from communities in the surrounding area of the factory

The Company has an annual survey of complaints from communities surrounding the factory by preparing an inquiry letter to the Tha Sa-an Subdistrict Municipality Office, Tha Sa-an District, Chachoengsao and Industry of Chachoengsao Province. Along with send representatives to meet and inquire the residents of the communities nearby the factory to know the problems and dissatisfaction caused by the disposal of waste or waste from the factory, suggestions and comments to improve and prevent such problems from occurring.

In 2022, there were no complaints about waste disposal from communities in the factory area.



Electric power

Target : Electricity consumption within the factory increased by no more than 10% from the base year 2021

Year	2020	2021	2022
Energy Consumption (kilowatt-hour)	2,228,864	2,009,349	2,075,770
Electricity purchased from PEA (baht)	6,648,449	5,983,249	7,062,002

From the table showing the amount of electricity, it was found that in 2022, the amount of electricity consumption increased from the previous year by 66,421 kilowatt-hours or increase of 3.31%, **the performance achieved the target**. Because the Company has increased the production of transformers, resulting in overtime operations after work and on holidays.

Using natural clean energy

According to the Company that manufactures, sells and installs solar power generation systems. We understand and recognize the importance of using natural energy which is not toxic to the environment. It helps to reduce the amount of greenhouse gas generated by the use of electricity in the factory. Therefore, we have installed Solar Rooftop on the roof of the transformer factory in Chachoengsao Province, 2 places, size 27 kWp and 501.18 kWp, totaling 528.18 kWp to produce electricity for use within the factory since 2018. There was a working team to survey the area, design, assemble the solar panels and carry out the installation. The generated electricity will be connected to the Main Breaker to distribute electricity throughout the plant, thus reducing the electricity consumption from the Provincial Electricity Authority.

The amount of electricity generated from the Solar Rooftop at the factory

Year	2020	2021	2022
Solar Rooftop (kWp)	528.18	528.18	528.18
Amount of electricity generated (kWh)	632,684	608,309	606,910

In 2022, the amount of electricity generated from Solar Rooftop slightly decreased from the previous year by 1,399 kWh or 0.23%. The amount of electricity produced depends on climate and sunlight intensity as the main factors.

Compare the electricity cost at the factory in 2020-2022

Unit : baht

Year	2020	2021	2022
Electricity purchased from PEA	6,648,449	5,983,249	7,062,002
Solar Cell	2,636,917	2,597,378	2,901,907
Total	9,285,366	8,580,628	9,963,909
Save electricity from Solar Cell	28.40%	30.27%	29.12%

When comparing the electricity costs at the factories, the electricity costs in 2022 increased from the previous year by 1,078,753 baht or increased by 18.03%. We were able to save electricity purchased from the Provincial Electricity Authority in the amount of 2,901,907 baht, equivalent to 29.12% of the total electricity bill.

In addition, there was a survey of the working conditions of the machines, electrical appliances, electric wires, electric bulbs that have been used for a long time regularly because it may be damaged or use a lot of electricity. The Company has switched to use energy-saving products, such as changing the incandescent lamp to LED instead of installing solar-powered walkway lamps, etc.

The Company has organized a campaign for employees to cooperate in saving electricity and water by placing warning signs in various places. To make employees aware of the importance of saving electricity which is one of the major expenses of running business and to reduce the amount of electricity used to meet the target.

Social Sustainability Management

The Company places importance on labor practices and fair human rights respect, equality and non-discrimination, comply with the regulations of labor law in terms of employment compensation, promotion development and training without discrimination of gender, age, race, religion, as well as supporting employment for the disadvantaged, both the disabled and the elderly. Which is part of the goals of the sustainable business plan.

The Company set policies and guidelines for labor management according to the labor law in order to develop to the potential business. The Company has applied for Thai labor standard certification TLS 8001: 2020 (basic level) with the Office of Labor Protection and Welfare, Chachoengsao Province. On August 5, 2022, the staff of the Office of Labor Protection and Welfare has audited for the certification.



Safety and occupational health

The Company has established the Safety, Occupational Health and Working Environment Policy. The executives and employees at all levels collaborate to implement the policy continuously and efficiently. Also appointed the Safety, Occupational Health and Working Environment Committee which consists of executives and representatives of employees at all levels. In order to ensure the compliance with the ISO 14001 environmental management system standards. The employees participated in the decision on the safety and occupational health, safety policies and plans.

Management of Material Issues

Objective : Appropriate occupational health safety and adaptation of work environments that cause injury or illness to employees.

Short/Long-term Indicators	Performance
<u>Short term Indicators</u>	
• The number of work-related accidents has decreased by 50% from year 2021.	• The number of work-related accidents in 2022 was 6 times, decreased by 25% from year 2021.
• Prevent COVID-19 Outbreaks in the establishment	• COVID- 19 infection rate in the organization increased from the year 2021 more than 100%
<u>Long term Indicators</u>	
• Control the number of work-related accidents to zero in 2031	• Annually improve work environments that are at risk of working and employees have been trained on work safety continuously.

Key Performance

Accident at work

In 2022, there were 6 employees who suffered accidents and injured from work; lost time accident 3 time and minor injuries 3 times. **The number of accidents decreased from year 2021 by 25%, less than target.** However, the Company is still committed to instilling safety awareness for employees regularly.

Comparison of the Company's workplace accident statistics in 2020-2022

Severity Level	Number of times per year		
	2020	2021	2022
Minor injuries	5	7	3
Lost time accident	9	1	3
Total	14	8	6

Most accidents are caused by employees who lack skills or 22.22% of all accidents. The Safety and Occupational Health Committee, Safety Officer and employees, have jointly reviewed and assessed workplace safety risks. Along with finding ways to prevent it from happening again by training to create awareness and be careful in working for the safety of employees. The supervisors have assigned to take care of subordinates to comply with the Company's safety regulations, including strict disciplinary punishment.

Occupational Safety Training

The Company regularly provides training on safety at work for employees every year to create knowledge and understanding of safety regulations, to raise awareness of work and awareness of potential hazards which must cooperate with all parts of the organization. In order to prevent accidents for oneself, co-workers, and the Company's assets. All new employees must be trained on work regulations, organizational, product, occupational safety and health and working environment.

In 2022, there are important training workshops as follows:

- Safety in Electrical Works Course
- Safety in Working at Height Course
- Safety in Working with Cranes Course
- Safety in Working with Forklift Course
- Basic Fire Fighting and Evacuation Fire Drill Training, at the factory, by speakers from the Disaster Prevention and Mitigation Department, Tha Sa-an Subdistrict Municipality, Chachoengsao on December 2022



- The Head Office, by the juristic person, UM Tower on June 2022.



In addition, the Company also participated in the activity "On the 8th day of the 8th month, Jor Por. 8 Riew, reduce work-related hazards" organized by Chachoengsao Province Labor Protection Welfare. To instill safety values by creating a campaign slogan to prevent accidents in the Company throughout August 2022.



Occupational health

Annual health check

The Company recognizes the importance of employee health, which is an important factor in business operations. The annual health check-up is arranged continuously once a year for the head office, the factory and service center by hiring a standardized hospital and comprehensive health check-up program according to the law.

The Company has organized an annual health check-up for personnel in the head office on March 14, 2022 and in the factory on January 17, 2022 by doctors and staff from Kasemrad International Hospital Rattana Thibet.

Drug and alcohol testing

The Company has a drug prevention and suppression system within the factory according to the Company's regulations on prohibiting the use of alcohol or intoxicants in the workplace or working while intoxicated or causing abandonment of duty. It is strictly forbidden to smoke / consume / bring intoxicating substances or beverages that cause intoxication, including marijuana and kratom into the Company premises. If found violated, it will be considered a serious offense and may be terminated without paying any compensation.

The Company conducts random, unannounced drug and alcohol testing twice a year. All new employees are required to undergo a drug test before starting work in accordance with our regulations. To prevent and solve drug problems in the workplace according to the standard criteria for the prevention and solution of drug problems in the workplace of Chachoengsao Province, which was certified on August 17, 2016.

On August 15, 2022, the Company randomly tested the urine of employees in the factory, and the results did not find any addictive substances.



Influenza Vaccination

The Company has taken steps to ensure that employees are vaccinated against influenza annually to reduce the severity of the disease if infected with influenza. At the same time, during the epidemic situation of COVID-19, it also helps to increase the clarity of diagnosis for doctors as well as providing treatment. It can also reduce severe complications from influenza.

In 2022, the Company did not find any employees who were sick with influenza.

Measurement to prevent Covid-19 Pandemic

In 2022, the situation of the Covid-19 epidemic will improve and the government's preventive measures are becoming more relaxed. But the Company still attaches great importance to safety in the organization and has continued to control and monitor COVID-19 both in the factory and the head office by communicating to employees to strictly follow via E-mail and posting announcements at the public relations board. Without company visit, limited the number of customers to view production and product presentations of suppliers They must be vaccinated and have ATK test result of COVID-19 before entering the factory area and impose penalties in the event that employees violate or conceal information that is at risk of causing an outbreak in the organization.

In addition, the Company also provides regular testing for covid-19 for factory employees to ensure that all were safe.

In 2022, total of 351 person in the organization were found infected with COVID-19, There were 182 employees at the factory and 169 employees at the head office and service centers, representing 51.85% of the total number of employees and increased from the previous year with 26 employees infected. Although the Company has strict control measures, it has not been able to reduce the spread of COVID-19 within the workplaces. Due to various external factors, the operating results did not achieve the target.

Health Activities

The Company has arranged various sports and recreational facilities that are beneficial to employees' mental and physical health such as football fields, table tennis, reading rooms, etc., so that employees can exercise during their free time from work, foster unity within the organization and also help reduce the problem of drug addiction.

Working environment improvement

The Company provides the safe working environment to prevent hazards and reduce risks from work processes or working environments by measuring the quality of the environment in the factory once a year. In 2022, it was found that the quality standards of air, smell, sound and light were within the normal range as required by law.



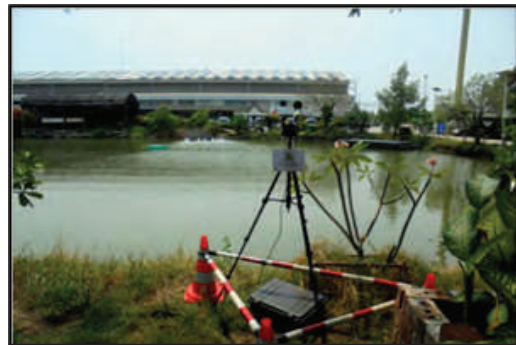
Measurement of pollutants
in the working area



Measuring the amount of accumulated
noise with employees



Average 8 hrs. of noise measurement
in the working area



Average 24 hrs. of sound level and noise
level measurement around the factory



Thermal measurement
in the working area



Light intensity measurement
in the working area

Employee Engagement

The Company has an annual employee satisfaction survey on November. It aims to systematically and comprehensively explore the factors affecting employee satisfaction and motivation and to identify problems and their causes. The Company will analyze and improve the development of personnel management processes because of work satisfaction will affect the efficiency of the employees.

Year	2020	2021	2022
Turn over rate (person)	51	59	77
Compared to all employees (%)	7.27	8.90	11.38

In 2022, there were the turn over rate employees more than the previous year by 2.48%.

The Company conducted a survey of employee satisfaction, the results are as follows:

- Employee satisfaction towards the organization was 69.82%.
- Employee satisfaction in the services of the Human Resources Department was 73%.

The assessment of employee engagement with the organization was 69.90%.

The Company has established a strategic plan for human resource management that is linked to the organizational strategy on employee engagement as follows:

- Caring for new employees Project / Mentoring program to reduce the turnover rate of new employees in 1 year.
- Organization of relationship building activities such as sporting events or parties, etc., to create unity and cooperation in working between departments.

Human rights and fair treatment for labor

The Company operates on the basis of respect for human rights. No discrimination for reasons of nationality, race, religion, language, age, gender, social status. No human rights abuses. Do not hire child labor. Do not commit or encourage forced labor in all forms.

Operations on human rights

The Company focuses on encouraging employees to realize the importance and understanding of human rights. By organizing training to educate both existing and new employees about the Company's human rights practices and complaint channels at the Internal Audit Department, E-mail: nuttavit@ekarat.co.th. Including giving importance to the human rights of all stakeholders who are at risk of affecting the organization. **In 2022, the Company has not received any complaints about human rights violations in its business operations.**

The Company does not employ foreign workers and most of the employees at the factory are residents of the community nearby the factory. It is our policy to promote the creation of jobs and careers for society and communities to live together sustainably.

The Company has complied with the Thai labor law in the care of various benefits which employees should receive. Whether it is a Social Security Fund and Provident Fund by creating a manual on the management of Thai labor standards TLS 8001-2003 on labor protection, labor relations welfare safety, occupational health and working environment. Which the Company has implemented and continuously improved with the opportunity for employees to make complaints and improve about matters that are perceived to be violating their rights. In accordance with the process steps set out in the operation regulations, the Company has a booth to receive comments, complaints or suggestions. Then, summarize, collect and send to Human Resources Department to check and improve. In the event that there are comments or complaints that cannot be concluded. They will present to the executive meeting to consider.

Support for Disabled Individuals Program

The Company supports and promotes disabled group of individuals to have stable careers and jobs by giving fairness and security to all levels of employees with the opportunity for disabled workers to work with the Company according to the individual's ability. At the present, there are 7 disabled individuals working for AKR Group or 1.04% of total full-time employees.

	2020		2021		2022	
	Male	Female	Male	Female	Male	Female
Full-time employees	433	269	407	256	420	257
Number of disabled employees	6	1	6	1	6	1
Percentage	1.39	0.38	1.48	0.39	1.43	0.39

Employee Development Policy

It is the Company's policy to increase the standard of quality and capabilities of its work force through its development and training programs and also to prepare for more competitive environment in the future. The Company has established an organization responsible particularly for employee development and training. Budget is appropriately and sufficiently allocated for development and training in accordance with objectives of each department. Thus, development and training schemes are determined as follows;

1. Internal Training: The Internal training will be carried out by inviting instructors with expertise from external domestic or overseas organizations, to consecutively provide knowledge to employee in each level every year. Training to improve the skills of the employees by the experts within the Company continuously every year.
2. External Training: The Company will let employees participate in training arranged by external organizations and institutes, regarding technical issues, administration, management, language and occupational safety health and environment to improve the skills of the employees.
3. Oversea Training: To enhance readiness and to provide employees with opportunities to learn new know-how and techniques, the Company will send staffs to attend meetings, seminars or training of international course.

In 2022, the Company provided both internal and external training in total training hours of the year 5,407 hours, the average training hours was 8.81 hours per staff. That's below the target of 12 hours per person per year. Due to the situation of the COVID-19 epidemic that affects the management of training both inside and outside the organization.

	2020	2021	2022
Average number of training hours for employees (hour/person/year)	7.30	6.04	8.81
Training expenses (Baht)	478,241	281,736	586,290

The Company has established rank and position determination regulation in order to clarify career path and criteria for performance appraisal (KPI) of each position to increase employee morale in every level. The Company will motivate, encourage and support employee to obtain career competencies and opportunities to grow and progress through career path in correlation with their knowledge, competencies and experiences.

Employee compensation

The Company has revised the salary structure to be in line with the competitive labor market conditions and in accordance with the law by surveying the salary rates of other entrepreneurs in the same area to ensure fairness to employees. Using KPIs to assess the performance of employees twice a year to adjust the level and the annual salary. The Company has various benefits including social security funds, provident funds, accident insurance and others such as uniform, overtime payment, the shuttle bus for employees, support sports venues and equipment, etc. (see more details of employee compensation in Part 2, item 7.5).

Labor dispute in year 2022

- None -

Responsibility to product and service

Transformer is the main factor that brings power to nourish every business. When choosing a transformer, it is necessary to select the best one. Because if the business is stumbled due to the breakdown of the transformer, may cause enormous damage.

The Company adheres to the policy to produce transformers with the highest quality. It is durable in all conditions of use and resistant to accidents that will happen to the transformer and lowest rate of damage. We guarantee the quality of the transformer for up to 10 years. In addition, information technology is also used in conjunction with transformers to provide greater convenience for customers.

In terms of service, the Company attaches great importance to service personnel who must be trained and learn to work proficiently. To build confidence to customers in the efficiency of transformer maintenance work.

Management of Material Issues

Objective : Customer satisfaction from quality products and safety to make confidence in the product.

Short/Long-term Indicators	Performance
<u>Short-term Indicators</u>	
<ul style="list-style-type: none"> • The customer satisfaction in products and services in 2022 at good level, not less than year 2021. • Ability to Manage Customer Complaints in the Area of Goods and Services - Performance Goal: 100% 	<ul style="list-style-type: none"> • The level of customer satisfaction on the transformer in 2022 was 93.25%. • The level of customer satisfaction on service and maintenance in 2022 was 98%. • The number of customer complaints about transformers in 2022 was 0 items.
<u>Long-term Indicators</u>	
<u>Year 2025</u>	
<ul style="list-style-type: none"> • Fulfill customer needs and create maximum customer satisfaction 	<ul style="list-style-type: none"> • Improve and prevent problems from complaints in the past year from happening again, along with developing products and services to meet the customers' needs.

Standard quality products

“Ekarat” transformer has received various technologies from leading companies around the world such as Starkstrom-Geratebau GmbH in Germany, Westing House Co.,Ltd. in the United States and Elco Co.,Ltd. in Israel. Our personnel have expertise and experience in distribution transformers from knowledge training. We can design and manufacture all kinds of transformers according to international standards or customer requirements. Transformers must be quality tested in an accredited testing laboratory, TIS 17025-2017, before being delivered to the customer with 10-year warranty after installation.



The Company has been certified with various standards in terms of quality, environmental, occupational health and safety, etc. By focusing on every production process from design, development, testing, transportation, installation, and even the last step of transformer maintenance to made customers' confidence in products and services that meet international quality standards, safety, durability and low environmental impact, the details of standard items were as follows;

Accredited Standards	Accrediting Agency	Accreditation No.	Remarks
IEC 60076	TISI	N/A	Transformer product standard
ISO 9001:2015	SGS	TH98/4911.00	Quality Management System Standards
ISO 14001:2015	SGS	TH19/12054	Environmental Management System Standards
ISO/IEC 17025:2017	TISI	Calibration 0043 Test 0599	Laboratory Calibration Quality System Standards
ISO 45001:2018	SGS	TH19/12055	Occupational Health and Safety Management System Standards
ISO 50001	SGS	ENMS717624	Energy Management System Standards
ISO/IEC 27001-2013	BSI	IS 741368	Information Security Standards System
PPA	MEA	N/A	Product quality certification
CSR-DIW 2021	Department of Industrial Works	10240000125245	Industrial Social Responsibility Standards
Green Industry Level 4	Ministry of Industry	4-142/2559	Environmentally friendly business
Made in Thailand (MIT)	FTI	N/A	Products made in Thailand
Green Label	TEI	GL2019/054 GL2020/043	Products that reduce pollution and have a low impact on the environment.
TGO Guidance of the Carbon Footprint for Organization	Thailand Greenhouse Gas Management Organization	TGO CFO FY23-02-070	Certification of the carbon footprint of the organization

In 2022, 76 of our transformers were certified Made in Thailand standard, ensuring that AKR transformers are manufactured in Thailand with high quality standards.

Our transformers have been tested and certified by reliable and reputable institutions abroad.



Type Test Certificate of Short - Circuit Performance
By KEMA High Power Laboratory, Germany



Routine Tests Before Short – Circuit Tests, Short - Circuit Tests,
Routine Tests After Short – Circuit Tests By CESI Centro
Elettrotecnico Sperimentale Italiano, Italy

Product development for safety and health of customers

The Company is committed to developing products that reduce pollution and have the least impact on the environment in terms of noise, air and heat generated from the operation of transformers, which may cause pollution to the health of customers and the surrounding environment. Our transformers are certified Green Label products or Green Label products that have less impact on the environment. The production process is controlled from the selection of raw materials with standard quality, monitor the transportation process and production process. It is important to verify the performance of the transformer in accordance with the specified criteria before delivery to the customer to build more confidence for the customer in making a purchase decision.



Information of products and services

After the product has been delivered to the customer, the Company will send the product quality assurance card to the customer by post with various details to notify customers of usage instructions, warranty period, warranty scope and phone number to contact the service department. To facilitate customers to contact, inquire or report problems or complain about products through the Call Center and Line Official at any time, 24 hours a day, or leave a message on our website www.ekarat.co.th. The staff will be in touch quickly to coordinate the problem and monitor progress continuously.

In this regard, customers can view our products and services information or any promotions at our website or via [Facebook : Ekarat Engineering PCL.](#)

Product Warranty

The Company guarantees our transformer for 10 years. The customer will receive a product warranty card. The customer will receive a product warranty card with details of instructions for use, warranty period, warranty scope and telephone number to contact the service department. In the event that the transformer has a problem during the first 3 years from the purchase date, We will be responsible for repairing or replacing the new device for the customer free of charge. Depending on the severity of such problems, which must be considered on a case-by-case basis in accordance with our conditions. After the 4th year onwards, we provide maintenance services for transformers by making an annual service contract to monitor and check the operation of the transformers for safety and to prevent unexpected events that may occur such as transformer explosion. This will cause damage to the customer's business from power outages or fires. The Company takes into account the importance of this, so we have a backup transformer for customers to use while waiting for the transformer to be repaired.



Key Performance

Customer satisfaction is important

The customer is important, we are committed to solving any problems arising from goods and services in order to be able to meet the needs of customers as much as possible by survey satisfaction and customer complaints through various communication channels such as telephone interviews, meeting customers, Line Application, E-mail, the Company's website, seminars or trade shows. To gather various issues to consider and find solutions to improve and prevent them from happening again in the future.

The Marketing and Public Relations Department conducts a quarterly customer satisfaction survey for transformers and maintenance services and collect the average annual survey results. There are four levels of satisfaction assessment criteria as follows:

Score range 3.26 – 4.00 points	Satisfaction level Very Good
Score range 2.51 – 3.25 points	Satisfaction level Good
Score range 1.76 – 2.50 points	Satisfaction level Should be improved
Score range 1.00 – 1.75 points	Satisfaction level Should be greatly improved

From the past customer satisfaction statistics since 2007, the Company is more aware of the needs of the customers and uses the opinions of the customers to improve the products and services to be more efficient and meet the needs of customers as much as possible. The marketing team will summarize the survey results and publish them internally on a quarterly basis and presenting complaints with low scores to the management for acknowledgment.

In 2022, there were customer satisfaction survey results as follows:

Customer Satisfaction	2020	2021	2022
Transformer	92.8%	93%	93.25%
Service and Maintenance	96.3%	98.5%	98%

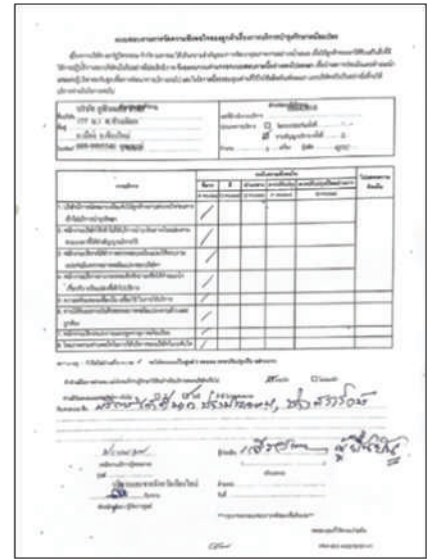
In 2022, it was found that the average annual customer satisfaction in our transformers was 93.25%, increased by 0.25% from 2021, thus achieved the target set.

As for the satisfaction of customers in the service and maintenance of transformers was 98%, decreased by 0.5% from the previous year, not achieved the target.

Complaint Management

As the Company had variety of channels to receive complaints about products or services to maintain fairness for consumers under the Consumer Protection Act. There are plans to solve problems and manage complaints that are clear, fast and have staff tracking the progress until the process is completed.

In 2022, the Company did not receive any complaint from customers in the field of transformer maintenance services. Most of the customers are satisfied and appreciate the work of the service staff on a regular basis which was our great pride.



As for the complaints received, most of them were about transformers. The quality control department is responsible for receiving those complaints and presenting them to meetings in the production department to jointly improve the problems. The details are as follows.

	2020	2021	2022
Number of complaints from customers	1	2	0
Complaint Management	100%	100%	0

In 2022, the Company received complaints from 0 customer, achieved the target.

The production department will collect and summarizes any problems reported by customers in order to improve the production process. Including follow-up after correction and prevent it from happening again in the future.

We care about the security

AKR continually delivers transformers every day and serve 24 hours only in Thailand. In the situation of the epidemic of Covid-19 for the safety of customers and employees, It is our policy that all transport and service staff must pass COVID-19 testing, wear masks and PPE suits, and strictly follow preventive measures when installing transformers or service in the customer's areas.

Corporate Social Responsibility

The Company is committed to conducting business with social responsibility, environment and good governance. Under the operating philosophy "Adhering to quality and integrity for customers" important both product quality and quality in corporate management. By striving to develop the potential of personnel in the organization improve the development of quality products, create better quality for society, and create a sustainable return for shareholders. So that the organization can live happily with the community and society. As well as elevating the progress of all stakeholders together. Starting from controlling and improving internal business processes (CSR in Process) that may affect society and the environment to a minimum, according to guidelines on "Social Responsibility" of the Stock Exchange of Thailand and participation with social communities to jointly develop sustainable quality of life.

The Company has adopted the corporate Social Responsibility (CSR) to be a part of the operation continuously. In the year 2022, the Company received awards for conducting corporate social responsibility activities as follows:

- The Company received the CSR-DIW Continuous Award 2022, Corporate Social Responsibility Standard from the Department of Industrial Works. Ministry of Industry, which the company has operated continuously since 2015.
- Award for the establishment that has passed the environmental assessment criteria for the fiscal year 2022 at the Chachoengsao Provincial Industry Office.

Management of Material Issues

Objective : Participation with community and society to improve quality of life through community activities and conservation of natural resources and the environment.

Short/Long-term Indicators	Performance
<u>Short-term Indicators</u>	
• The number of complaints from communities surrounding the factory was zero.	• In 2022, there were no complaints from the community in the factory area.
• Participation in activities to help and develop social community Increase from the year 2021	• The Company has provided assistance to nearby communities and societies and participated in other activities total of 30 times, increased from the year 2021.
<u>Long-term Indicators</u>	
• Develop communities to grow while conserving natural resources and the environment around the factory area.	• Conduct a continuous survey of opinions and needs of the communities surrounding the factory area according to the CSR-Continuous project to meet the needs and improve the quality of life of the community.

Key Performance

Community Complaint Management

The Company conducted a survey of the communities in the vicinity of the factory by submitting a questionnaire to the Tha Sa-an Municipality, Chachoengsao Province. Our personnel visit the area to meet with people to find out about any issues which arising from the production process that affect the environment and livelihoods of those communities. Acknowledge needs and suggestions to participate in improving or developing their communities, then collect important issues and present them to the management acknowledgment, cause analysis, solving problems plan and improve operations and continually monitor and follow up on the corrective action results.

In 2022, no complaints from communities in the vicinity of the factory achieved as targeted.



บริษัท เอกอริศวิศวกรรม จำกัด (มหาชน) EKARAT ENGINEERING PUBLIC COMPANY LIMITED	
เรื่อง: การประชุมหารือเกี่ยวกับโครงการพัฒนาคุณภาพชีวิตของชุมชนในพื้นที่โครงการ	วันที่: 2 พฤศจิกายน 2565
จาก: นายวิชาญ จันทร์ดี	Ref:
ถึง: ผู้จัดการโครงการพัฒนาคุณภาพชีวิตของชุมชนในพื้นที่โครงการ	Page 1 of 1
<p>จากการประชุมหารือเกี่ยวกับโครงการพัฒนาคุณภาพชีวิตของชุมชนในพื้นที่โครงการ เมื่อวันที่ 2 พฤศจิกายน 2565 ณ ห้องประชุม 303 อาคาร 30 ชั้น บริษัท เอกอริศวิศวกรรม จำกัด (มหาชน) โดยมีวัตถุประสงค์เพื่อหารือเกี่ยวกับโครงการพัฒนาคุณภาพชีวิตของชุมชนในพื้นที่โครงการ และเพื่อรับฟังความคิดเห็นของชุมชนเกี่ยวกับโครงการดังกล่าว</p> <p>1. วัตถุประสงค์ของโครงการ</p> <p>2. วัตถุประสงค์ของโครงการ</p> <p>3. วัตถุประสงค์ของโครงการ</p> <p>จึงเรียนมาเพื่อโปรดทราบ</p> <p>นายวิชาญ จันทร์ดี ผู้จัดการโครงการพัฒนาคุณภาพชีวิตของชุมชนในพื้นที่โครงการ</p>	

Development of the quality of life of the community

The Company attaches importance to employment by selecting those in the area first to generate income and develop knowledge and create work skills. In order to improve the quality of life of people, resulting in community development along with the growth of the Company.

Environmental, Social and Community Development Project

In addition to the control and improvement of internal business operations (CSR in Process) that may affect society and the environment. The Company is involved in the development of the well-being of the community and outside society in order to live together happily by participating in various activities.

Aquaculture Conservation Project

- Join the project "Release the aquarium to maintain the ecosystem to increase fertility" at the Kwai Reservoir, Ban Wang Khu, Sanam Chai District, Chachoengsao Province, organized by the Chachoengsao Environmental Conservation Association on Friday 14 January 2022.



• Join the project "Rehabilitation of the Ecosystem Release the Sea Crab for Bang Pakong River No.3" organized by the Chachoengsao Environment Conservation Association. By releasing 3,000 crabs on Thursday 17 March 2022 at Sanam Chan Temple, Ban Pho District, Chachoengsao Province.



• Participate in activities and support the budget on the National Canal River Conservation and Development Day (Sai Nam Gratitude Day) Tuesday, September 20, 2022, with the release of lobster and freshwater fish species to preserve the natural environment and ecosystem of the river to support the habitat of aquatic animals, aquatic plants, other creatures and residents in nearby areas at Sanam Chan Temple, Ban Pho District Chachoengsao, organized by Chachoengsao Environmental Conservation Association.

Donation transformer

Donate transformer to Ban Hong Vocational College, Ban Hong District, Lamphun for teaching to students in the field of electrical installation outside the building.



Donate transformer to Phithak Siam Foundation, which will establish a monk office and a temple in the future for dharma practice at Nong Yai Sub-district, Nong Yai District, Chonburi to be installed for public use for the monks, Dharma practitioners and relatives.

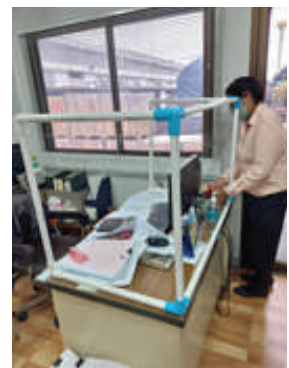
Donate 100 used paint buckets or glue buckets, size 20 liters, to Tha Sa-an Subdistrict Municipality for distribution to people in Tha Sa-an Municipality to make organic trash for every household in the Wet Trash Reduction Global Warming Project.



Supporting scholarships and giving gifts on National Children's Day 2022 to Lad Nam Khao Mosque School (Preng Prachasan), Wat Khao Din School, Wat Sukharam School and Chan Charoen School.



Made a multi-purpose cart for Wat Panitaram on February 8, 2022.



Set up partitions for employees who are at risk of being in close contact with COVID-19 infected people so that they can work safely in the production line without affecting other employees.

Providing drinking water to make merit in the royal cremation ceremony of Phra Dhammamangkalajarn (Luang Pu Prayong Piyawanno), former abbot of Wat Sothon Wararam Worawihan Chachoengsao Province on March 18, 2022

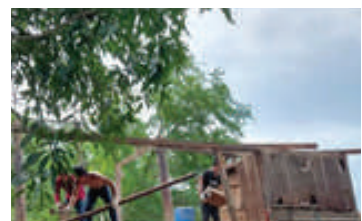


Employees cooperate to donate blood at Bang Pakong District together with the Chachoengsao Provincial Red Cross Chapter and the Bang Pakong District Red Cross Branch, who invited believers to donate blood at the Bang Pakong District Auditorium, Tha Sa-an Subdistrict, Bang Pakong District, Chachoengsao Province.



Repairing Houses, Fulfilling Dreams, Sharing Kindness Project

The company participated in the project "Repairing houses, fulfilling dreams, sharing kindness" by joining in repairing and building broken houses for the poor in Chachoengsao communities with the Amity Bike Club to purchase home construction equipment and electrical installation equipment. The members of the club, local residents and our employees who are club members participated in the construction and installation of electrical equipment this time.





The Company and employees jointly make merit with Wat Phra Bat Namphu, Lop Buri Province by donating consumer items to Phra Ratchawisuddhiprachanat.

We are a learning organization for new generation from over 41 years of experience in transformer manufacturing. Therefore, our idea is to disseminate knowledge about the design and construction of transformers to students, engineers, including those who are interested in transformers....



Reforestation Project 600,000 trees (to reduce carbon)

Toyota Motor Thailand Co., Ltd. celebrates its 60th anniversary in 2022, it has organized a project to plant 600,000 trees to reduce carbon and the Company has been invited to take part in making this history on August 28, 2022, in front of Toyota Motor Thailand Company Limited, Ban Pho Subdistrict, Chachoengsao Province.



Religious Mission and help the hospital foundation

The Company recognizes the importance of religious landmarks which is the mental dependence of everyone especially Buddhism, both temples and monks who have suffered from the Covid-19 situation. The Company made merit in religious ceremonies for 11 temples.

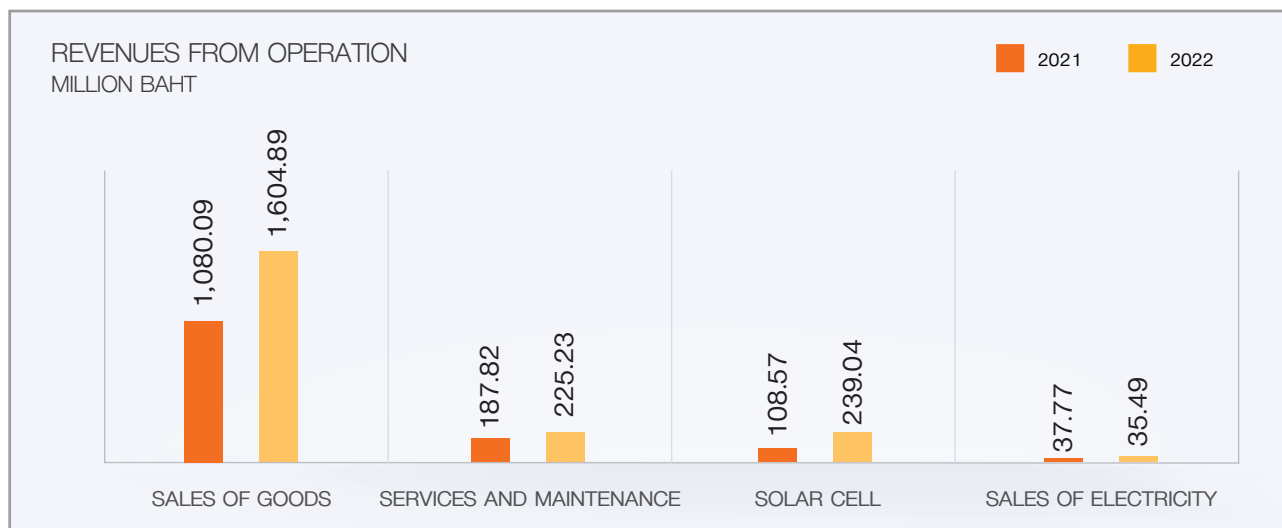
In addition, the company also provides assistance to various hospitals by donating money to the foundations of 4 hospitals to be used within the hospital.

4. Management Discussion and Analysis

4.1 Analysis of the Company's performance and its subsidiaries in 2022

Performance comparison between fiscal years 2022 and 2021

	2022	2021	Variance	
			MTHB	%
Total revenue from operation	2,104.65	1,414.26	690.39	48.82
- Revenue from sales of goods	1,604.89	1,080.09	524.80	48.59
- Revenue from services and maintenance	225.23	187.82	37.41	19.92
- Revenue from service of installing a solar panel	239.04	108.57	130.47	120.17
- Revenue from sales of electricity current	35.49	37.77	(2.29)	(6.06)
Total cost from operation	1,627.74	1,068.64	559.10	52.32
- Cost of goods sold	1,253.43	833.04	420.39	50.46
- Cost of services and maintenance	122.41	101.79	20.62	20.26
- Cost from installation of solar electric generating system	230.76	105.48	125.28	118.77
- Cost of electricity current sales	19.32	18.78	0.54	2.88
- Reversed loss on devaluation of goods	1.82	9.54	(7.73)	(80.97)
Gross profit	476.91	345.62	131.28	37.98
Other incomes	16.31	11.30	5.01	44.34
Reversal of (loss on) assets impairment	0.13	5.99	(5.86)	(97.83)
Distribution costs	109.48	88.55	20.93	23.64
Administrative expenses	160.75	140.54	20.21	14.38
Profit from operating activities	222.86	121.85	101.01	82.90
Financial cost	22.52	12.77	9.75	76.36
Profit before income tax expenses	200.34	109.08	91.26	83.66
Tax expense	39.85	19.27	20.58	106.80
Profit for the year	160.49	89.81	70.68	78.70
Non-controlling interests	(0.03)	(0.08)	(0.05)	(62.50)
Profit attributable to equity holders of the parent	160.52	89.89	70.63	78.57
Earnings per share (Baht/share)	0.109	0.063	0.046	73.02



Summary of past performance

After the relaxation of lockdown measurement and control of tourism, Thai economy began to recover slowly since the beginning of 2022, although it was faced with inflation but still managed to expand by 3.2%. Government agencies and the private sector have begun to invest more, resulting in our revenue increasing from 2021. The interest rate hike to hedge against high inflation risk in the United States, causing exchange rate volatility. As a result, the Company's raw material costs imported from abroad increased. Including the problem of the Russian-Ukrainian war, causing an energy crisis, affecting the supplier chain.

The Company had a guideline to drive its business towards sustainability by managing the efficient use of resources and managing waste, planning Zero Defect Work, adapting to the impact of climate change, and planning to prevent various risks. The operating results of the company in 2022 are as follows:

Revenues

The Company had the revenues comprised in 4 activities was Sales of Distribution Transformers, Services and maintenances, Service of installing a solar panel and Sales of electricity current.

1. The revenue from sales of goods in year 2022 and 2021 was 1,604.89 million baht and 1,080.09 million baht, respectively or increased 48.59%, from delivering transformers to many major private customers.

2. The revenue from services and maintenances in year 2022 and 2021 was 225.23 million baht and 187.82 million baht, respectively or increased 19.92%. Most of them increased from contract work due to the better situation of Covid-19, the Company was able to provide more maintenance services for transformers to customers.

3. The revenue from service of installing a solar panel in year 2022 and 2021 was 239.04 million baht and 108.57 million baht, respectively or increased 120.17% from the recognition of revenue from the major project of installation of solar power generation system of a private customer as continuous work since 2021.

4. The revenue from sales of electricity current in year 2022 and 2021 was 35.49 million baht and 37.77 million baht, respectively or decreased 6.06% because the amount of electricity generated from Solar Farm Phase 2 and Phase 3 decreased.

Cost

1. The Company had the cost of goods sold in year 2022 and 2021 of 1,253.43 million baht and 833.04 million baht, respectively or increased 50.46%, according to the revenue increased. The proportion of cost of goods sold to the revenue from goods sold in year 2022 and 2021 was 78.10% and 77.13%, respectively, its increased when compare to year 2021 about 0.97%.

2. The Cost of services and maintenances in year 2022 and 2021 was 122.41 million baht and 101.79 million baht, respectively or increased 20.26%, according to the revenue increase. The proportion of cost of services and maintenances to the revenue from services and maintenances in year 2022 and 2020 was 54.35% and 54.19% or increased 0.16%.

3. The Cost of service of installing a solar panel in year 2022 and 2021 was 230.76 million baht and 105.48 million baht, respectively or increased 118.77% according to the revenue decreased. The proportion of cost of installing a solar panel to the revenue from installing a solar panel in 2022 was 96.54% higher than year 2020 which was 97.15% or decreased 0.61%.

4. The Cost of electricity sold in year 2022 and 2021 was 19.32 million baht and 18.78 million baht, respectively or increased 2.88%. It was relatively stable depreciation of solar panels. The proportion of Cost of electricity sold to the revenue from sales of electricity current in year 2022 and 2021 about 54.45% and 49.73%, respectively or increased 4.72%.

Loss on devaluation of goods

The loss on devaluation of goods in year 2022 and 2021 was 1.82 million baht and 9.54 million baht, respectively or decreased 7.72 million baht or 80.97% because the provision for depreciation is less than the previous year.

Loss on assets impairment

The Company had loss on assets impairment in year 2022 and 2021 was 0.13 million baht and 5.99 million baht or decreased 5.86 million baht or 97.85%. It was the provision for impairment of transformers for show in the amount of 0.13 million baht.

Distribution costs

The Company had the distribution costs in year 2022 and 2021 of 109.48 million baht and 88.55 million baht respectively, increase 23.64% from year 2021. The proportion of the distribution costs to total revenues in year 2022 and 2021 was 5.16% and 6.21, respectively or decreased 1.05%. Most of the expenses are related to the reduction of transformer sales, such as transportation costs, vehicle cost etc.

Administration Expenses

The Company had the administration expenses in year 2022 and 2021 of 160.75 million baht and 140.54 million baht respectively, increase 14.38% from last year. The increase was mainly due to foreign exchange losses and trust receipts arising from conversion at the end of the period, bonus payments, utility expenses. The proportion of the administration expenses to total revenues in year 2022 and 2021 is 7.58% and 9.86%, respectively or decreased 2.28%.

Gross Profit

The Company had the gross profit margin from the sale of goods in year 2022 and 2021 was 21.90% and 22.87%, respectively. The gross profit margin from services and maintenances in year 2022 and 2021 was 45.65% and 45.81%, respectively. The gross profit margin from service of installing a solar panel in year 2022 and 2021 was 3.46% and 2.85%, respectively. The gross profit margin from the sales of electricity current in year 2022 and 2021 was 45.56% and 50.27%, respectively.

In 2022, Most of gross profit margin was decreased from last year, except for the revenue from the service of installing a solar panel because the Company plans to purchase raw materials in reserve before the price increases.

Tax expense

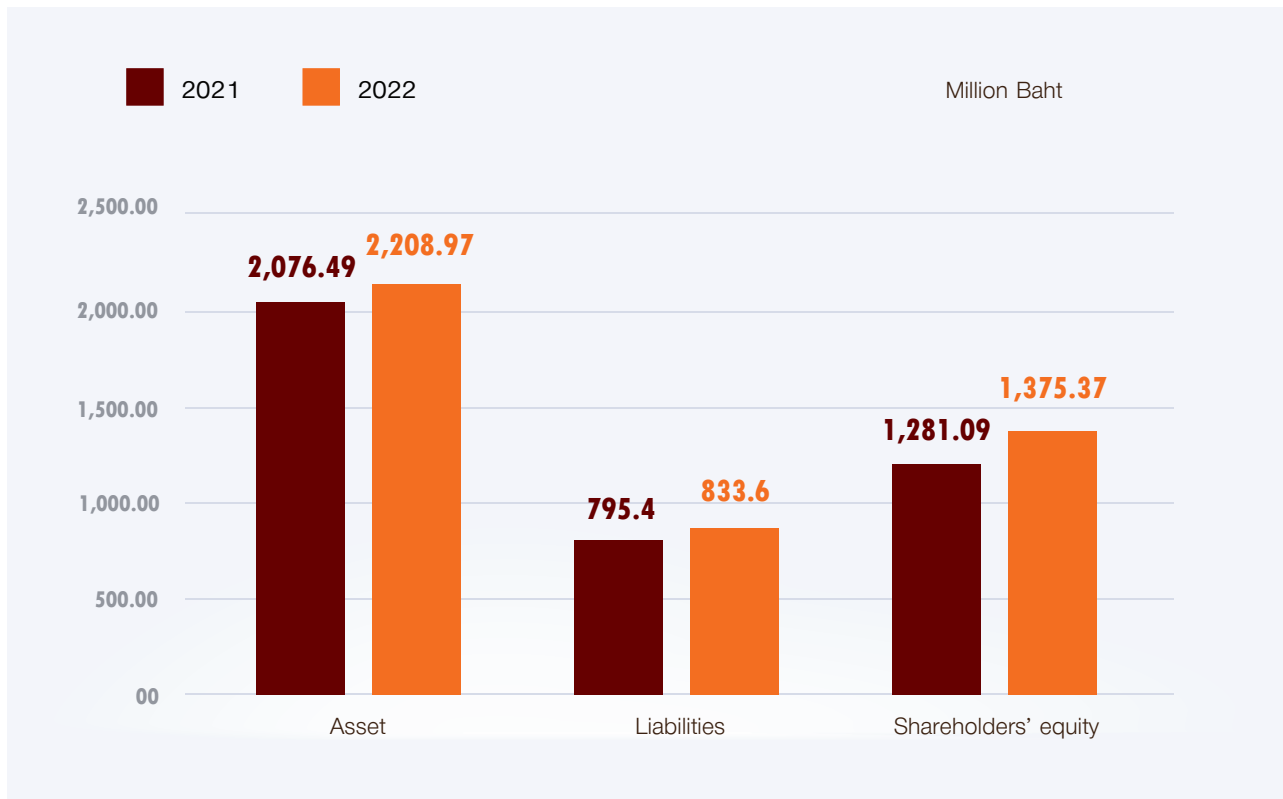
The Company has tax expenses in year 2022 of 39.85 million baht, increased 20.58 million baht or 106.80% when compared to year 2021 according to the operating results. The proportion of tax expenses to total revenues in year 2022 and 2021 is 1.88 % and 1.35%, respectively or increased 0.53%.

Net Profit of the year

The Company has Net Profit in year 2022 and 2021 of 160.49 million baht and 89.81 million baht, respectively, increased 70.68 million baht or 78.70% when compared to last year.

Summary of financial position between year 2022 and 2021

Unit : Million Baht	2022	2021	Variance	
			MTHB	%
Asset				
- Cash and cash equivalents	89.09	126.88	(37.79)	(29.78)
- Trade and other receivables	394.91	289.05	105.86	36.62
- Inventories	965.34	888.16	77.18	8.69
Total current assets	1,470.96	1,338.85	132.12	9.87
- Property, plant and equipment	554.44	551.33	3.12	0.57
- Right-of-use assets	75.55	80.60	(5.05)	(6.26)
- Deferred tax assets	70.77	77.55	(6.78)	(8.74)
Total non-current assets	738.01	737.65	0.36	0.05
Total assets	2,208.97	2,076.49	132.48	6.38
Liabilities				
- Short-term loans from financial institutions	210.79	221.60	(10.80)	(4.88)
- Trade and other payables	247.63	250.60	(2.97)	(1.18)
- Advance received for goods and services	68.35	78.05	(9.70)	(12.43)
Total current liabilities	666.41	619.67	46.73	7.54
- Long-term loans from financial institutions	16.21	38.09	(21.87)	(57.43)
- Lease liabilities	52.25	53.75	(1.49)	(2.78)
- Non-current provisions for employee benefit	80.12	78.25	1.87	2.39
Total non-current liabilities	167.20	175.73	(8.53)	(4.86)
Total liabilities	833.60	795.40	38.20	4.80
Shareholders' equity	1,375.37	1,281.09	94.28	7.36
Total liabilities and shareholders' equity	2,208.97	2,076.49	132.48	6.38



Asset

As at December 31, 2022 and 2021, the Company had the total assets of 2,208.97 million baht and 2,076.49 million baht, respectively or increased 132.48 million baht or 6.38%. Most of the increased assets were trade receivables and inventories such as raw materials for the production of additional transformers and work in process for making standard size transformers to prepare for sale for private and government customers.

Trade and Others receivable

As at December 31, 2022 and 2021, the Company had trade and others receivable after deducted allowance for doubtful debt of 394.91 million baht and 289.05 million baht, respectively or increased 105.86 million baht or 36.62%. Most of them were private transformer receivables, which increased from the previous year, while receivables from installation of solar power systems decreased from receiving payments from ongoing projects.

The Company had the credit terms for the customer about 30-90 days. The average collection days in year 2022 and 2021 was 59 and 72 days, respectively. It found that the Company could collect debt from customers faster from last year.

Inventories

The Company had the Inventories (Net) after deducted the allowance for devaluation of inventories at December 31, 2022 and 2021 of 965.34 million baht and 888.16 million baht, respectively. In 2022, the price of raw materials for transformer production tends to continue to rise. Therefore, the Company plans to prepare raw materials to support the work that has already been ordered, which will delivery next year and work in process for making standard size transformers to prepare for sale for private and government customers.

The Inventories comprise of Finished goods deducted the allowance for devaluation of inventories 100.17 million baht, Work in process 210.85 million baht, Raw Material 593.58 million baht, Supplies 6.04 million baht, and Materials in transit 54.71 million baht. The inventories turnover ratio in year 2022 and 2021 was 1.75 and 1.67 times.

Property, plant and equipment

As at December 31, 2022 and 2021, the Company had property, plant and equipment of 554.44 million baht and 551.33 million baht, respectively or increased 3.12 million baht or 0.57%. Increased from the purchase of steel cutting machines from foreign countries in the amount of 24.25 million baht and the purchase of other assets in the amount of 14.16 million baht and work in progress and installation of 2 Solar Rooftop projects. and depreciation during the period of 62.64 million baht.

Right-of-use assets

As at December 31, 2022 and 2021, the Company had right-of-use assets of 75.55 million baht and 80.60 million baht, respectively or decreased 6.26%. This was due to the depreciation expense during the period of 13.59 million baht and the increase in vehicle hire purchase contracts of 10.24 million baht to replace the old contract that expired.

Deferred tax assets

As at December 31, 2022 and 2021, the Company had deferred tax assets of 70.77 million baht and 77.55 million baht, respectively or decreased 6.78 million baht or 8.74%. This is mainly due to the difference in depreciation and allowance for impairment of accounting and tax assets 6.78 million baht.

Liabilities

As at December 31, 2022 and 2021, the Company had the liabilities of 833.60 million baht and 795.40 million baht, respectively or increased 38.20 million baht or 4.80%. The reason for the increase in liabilities were estimated bonus payable in the amount of 30.13 million baht and corporate tax payable.

Trade and Other Payable

As at December 31, 2022 and 2021, the Company recorded trade and other payables of 247.63 million baht and 250.60 million baht, respectively or increased 2.97 million baht or 1.18% because the Company paid debts to foreign trade creditors in the amount of 33.30 million baht and ordered more raw materials from domestic trade creditors in the amount of 26.61 million baht.

The Company received the credit terms from the creditor about 30-60 days. The average repayment days of year 2022 and 2021 are 56 and 62 days, respectively. The rate of payment payable was slower than last year.

Short-term and Long-term loans from financial institutions

As at December 31, 2022 and 2021, the Company had short-term loans from financial institutions of 210.79 million baht and 221.60 million baht, respectively or increased 10.80 million baht or 4.88% which arises from creditors of trust receipts and promissory notes.

The Company had long-term loans from financial institutions of 16.21 million baht and 38.09 million baht, respectively or decreased 21.87 million baht or 57.43% because the Company has paid both short-term and long-term loans during the year.

Advance received for goods and services

As at December 31, 2022 and 2021, the Company had advance received for goods and services of 68.35 million baht and 78.05 million baht, respectively or decreased 9.70 million baht or 12.43% from revenue recognition upon completion of the solar PV system installation projects of private customers which was an ongoing project in the amount of 49.36 million baht.

Shareholders' Equity

As at December 31, 2022 and 2021, the Company shareholders' equity was 1,375.37 million baht and 1,281.09 million baht, respectively or increased 94.28 million baht or 7.36% because the Company had Net profit from operation in the consolidated financial statements of 160.49 million baht. The remaining unappropriated retained earnings amounted to 136.17 million baht, including the premium on ordinary shares of 25.65 million baht.

Capital Structure Suitability

The Company's Debt to Equity (D/E) ratio at December 31, 2022 and 2021 was 0.61 times and 0.62 times, respectively. Increased from the previous year as the Company had more liabilities than shareholders' equity.

4.2 Factors that may affect to the operations results

The Company has assessed factors or events that may significantly affect the financial position or operations in the future. Both external factors (economic, social and environmental) and internal factors (the production process, management, corporate policies and strategies) can be summarized as follows:

1. Reduction of the transformer purchasing budget of the Electricity Authority

The budget for transformer auction from the Metropolitan Electricity Authority and the Provincial Electricity Authority has decreased significantly. This will affect the revenue from government agencies by more than 15-20%.

2. The trend of raw material prices is rising

The price of major raw materials in transformer production increased by more than 20-50%, such as silicon steel, copper, transformer oil, etc. As a result, the production cost is higher and the company has to adjust the selling price higher. Therefore, may be less product sales.

3. Problems and obstacles in the transportation of raw materials

Logistics, supply chain problems and the shortage of containers. As a result, the cost of transporting raw materials ordered from abroad is higher and delayed. It will affect the delivery of the products to the customers accordingly.

4. Inflation and recession

The spread of the COVID-19 virus may result in a global recession in 2023 and Thailand may not be able to recover much economically, although it is open to tourists and has money flowing from tourism. In the future, if Thailand has higher inflation will affect interest rates and foreign exchange rates, causing the Company to have higher expenses.

5. The problem of the epidemic

Although the situation of the spread of the COVID-19 virus has improved and more relaxed control of the epidemic. But still need to be vigilant to prevent new outbreaks and other epidemics may occur again. Therefore, the Company must prepare plans to support other epidemics that may occur in the future in order to prevent any impact on the operations.

4.3 Important financial information

The presented financial position and operating results consist of the operating results from the financial statements for the year ended December 31, 2022, which have been audited by the certified public accountant, ANS Audit Company Limited. By comparing the financial position and operating results from the financial statements for the year ended 31 December 2021 and for the year ended 31 December 2020.

Statement of Financial Position

Unit : Thousand Baht	2020	2021	2022
Current Assets			
Cash and cash equivalents	61,207	126,879	89,089
Trade and other current receivables - net	267,416	289,045	394,906
Inventories - net	380,083	881,162	965,343
Deposit and advance payment for goods	7,161	22,073	14,729
Other current assets	1,401	12,686	6,895
Total current assets	717,267	1,338,845	1,470,962
Non-current assets			
Non-current financial assets - net	19,650	19,650	19,650
Investment properties - net	1,632	1,632	1,632
Assets for rent - net	4,431	5,189	3,338
Property, plant and equipment - net	599,428	551,329	554,444
Right-of-use assets - net	-	80,604	75,555
Intangible assets - net	387	296	11,351
Deferred tax assets	82,611	77,547	70,772
Withholding tax	10,934	550	619
Other non-current assets	882	852	647
Total non-current assets	812,260	737,649	738,007
Total assets	1,529,527	2,076,494	2,208,970

Unit : Thousand Baht	2020	2021	2022
Current liabilities			
Short-term loans from financial institutions	38,234	221,598	210,794
Trade and other current payables	110,265	250,598	247,629
Accrued expenses	24,479	29,265	64,210
Advance received for goods and services	26,350	78,053	68,354
Current portion of loans from financial institutions	27,965	21,807	21,874
Current portion of lease liabilities	12,931	12,186	11,445
Current portion of other financial liability	-	-	3,166
Accrued corporate income tax	5,845	3,309	19,217
Derivative liabilities	-	-	1,203
Other current liabilities	8,480	2,857	18,514
Total current liabilities	254,549	619,673	666,405
Non-current liabilities			
Long-term loans from financial institutions - net	59,892	38,085	16,211
Lease liabilities - net	63,641	53,748	52,254
Other financial liability - net	-	-	13,133
Non-current provisions for employee benefit	82,911	78,249	80,121
Other non-current liabilities	5,499	5,650	5,478
Total non-current liabilities	211,943	175,732	167,197
Total liabilities	466,492	795,405	833,602
Shareholder's equity			
Shares Capital Authorized	1,611,947	1,611,947	1,177,226
Shares Capital Issued and paid-up	1,074,632	1,074,632	1,177,226
Premium on shares capital	-	25,649	25,649
Surplus on change of proportion interest in subsidiary	364	364	364
Retained earnings (deficit) -Legal reserve	25,182	27,840	35,658
Retained earnings (deficit) -Unappropriated	(37,557)	49,677	136,168
Total equity of the parent company	1,063,034	1,280,757	1,375,066
Non-controlling interests	413	333	302
Total shareholders' equity	1,063,034	1,281,090	1,375,367
Total liabilities and shareholders' equity	1,529,527	2,079,494	2,208,970

STATEMENTS OF FINANCIAL POSITION

Unit : Thousand Baht	2020	2021	2022
Revenues			
Revenue from sales of goods	1,145,097	1,080,093	1,604,894
Revenue from services and maintenance	223,269	187,822	225,227
Revenue from service of installing a solar panel	75,561	108,570	239,038
Revenue from sales of electricity	43,616	37,775	35,487
Other income	15,948	11,305	16,313
Total revenues	1,503,491	1,425,566	2,120,960
Costs			
Cost of goods sold	903,056	833,044	1,253,429
Cost of services and maintenance	118,974	101,786	122,406
Cost from service of installing a solar panel	70,269	105,480	230,764
Cost of electricity sold	19,676	18,785	19,325
Loss on devaluation of goods	1,116	9,543	1,816
Total costs	1,113,541	1,068,637	1,627,740
Gross profit	374,002	345,624	476,906
Reversal of (loss on) assets impairment	1,100	(5,985)	(129)
Distribution costs	99,136	88,551	109,481
Administrative expenses	150,122	140,540	160,749
Finance cost	19,690	12,767	22,516
Profit before income tax expenses	122,102	109,085	200,345
Income tax expenses	24,444	19,273	39,853
Profit for the year	97,658	89,812	160,492

STATEMENTS OF CASH FLOWS

Unit : Thousand Baht	2020	2021	2022
Cash flows from operating activities	259,538	(186,573)	116,046
Cash flows from investing activities	(19,029)	(17,310)	(60,064)
Cash flows from financing activities	(220,675)	269,555	(93,772)
Net cash and cash equivalents increase (decrease) - net	19,834	65,672	(37,790)
Cash and cash equivalents at the ending of the year	61,207	126,879	89,089

Financial Ratios

	2020	2021	2022
Liquidity Ratio			
Current Ratio (time)	2.82	2.16	2.21
Receivable Turnover (time)	4.30	5.08	6.15
Average Receivable Collection Period (day)	85	72	59
Inventory Turnover (time)	2.75	1.67	1.75
Average Inventory Procession Period (day)	133	218	208
Payables Turnover (time)	7.36	5.87	6.53
Payables Payment Period (day)	49	62	56
Cash Cycle (day)	168	228	211
Profitability Ratio			
Gross Profit Margin (%)	25.22	25.11	22.75
Operating Profit Margin (%)	9.43	8.55	10.51
Net Profit Margin (%)	6.50	6.30	7.57
Return on Equity (%)	9.67	7.67	12.09
Efficiency Ratio			
Return on Assets (%)	8.74	6.76	10.40
Total Asset Turnover (time)	0.93	0.79	0.99
Financial Ratio			
Total Debt to Equity Ratio (time)	0.44	0.62	0.61

5. General information and other material facts

5.1 General information

Company Name	EKARAT ENGINEERING PUBLIC COMPANY LIMITED
Symbol	AKR
Nature of Business	<ul style="list-style-type: none"> ● Production and distribution of distribution transformers (Distribution Transformer) with power from 1 kVA to 30,000 kVA, maximum voltage not exceeding 36 kV ● Electrical maintenance and repair services, design, installation and maintenance of electrical systems and construction of substation ● Manufacture and sell solar cells and solar panels which can produce solar panels from 60 watts to 500 watts, including the design, construction, installation, maintenance of electricity systems from solar cells
Registration No.	0107537002711
Registered Capital and Paid up Capital	1,177,226,284.80 baht, consists of ordinary shares 1,471,532,856 shares, par value 0.80 baht
Proportion of Free Float	The number of Free Float as of March 18, 2022 was 9,540 persons, representing 68.07% of Shareholders.

Address 9/291, UM Tower, 28th Floor, Ramkhamhaeng Road, Suan Luang
Subdistrict, Suan Luang District, Bangkok 10250

Website <http://www.ekarat.co.th>

Telephone No. +662-719-8777

Fax No. +662-719-8760

Line Official @ekaratengineering

E-mail marketing@ekarat.co.th



Service Center	Location
1. Bangkok Center	1068/1 Soi Sukhumvit 101/1, Bang Chak Subdistrict, Phra Khanong District, Bangkok 10260 Tel. +662-393-0437, +662-746-3840-1, Fax +662-398-2903
2. Chachoengsao Center	260/6 Moo 6, Tha Sa-An Subdistrict, Bang Pakong District, Chachoengsao 24130 Tel. +6638-530-213 Fax +6638-530-214
3. Ayutthaya Center	26/7 Moo 2, Asia Rd. (Bang Pa-in - Nakhon Sawan), Thanu Subdistrict, Uthai District, Ayutthaya 13000 Tel. +6635-345-078 Fax +6635-345-020
4. Nakhon Pathom Center	470 Phetkasem Rd., Phra Prathon Subdistrict, Muang District, Nakhonpathom 73000 Tel. +6634-244-045-6 Fax +6634-244-047
5. Klonkaen Center	324/80 Moo 6, Mittraphap Rd., Sila Subdistrict, Mueang District, KhonKaen 40000 Tel. +6643 -465-276 Fax +6643-364-277
6. Nakhon Ratchasima Center	2175/2 Moo 6, Suebsiri Rd., Nai Mueang Subdistrict, Mueang District Nakhon Ratchasima 30000 Tel. +6644-277-279 Fax +6644-277-050
7. Chiang Mai Center	92/9 Moo 4, Tha Sala Subdistrict, Mueang District, Chiang Mai 50000 Tel. +6653-128-039 Fax +6653-128-040
8. Songkhla Center	1496 Moo 3 Sanam Bin-Lop Buri Road, Laem Set, Khuan Lang Subdistrict Hat Yai District, Songkhla 90110 Tel. +6674-250-648 Fax +6674-250-649
9. Surat Thani Center	54/2, Moo 5, Leam Muang Road, Makham Tia Subdistrict, Mueang District, Surat Thani 84000 Tel. +6677-295-488 Fax +6677-295-489
10. Phuket Center	101/220 Moo 6, Ratsada Subdistrict, Mueang District, Phuket 83000 Tel. +6676-307-570 Fax +6676-307-571
11. Phitsanulok Center	343/4 Samo Khae Subdistrict, Mueang District, Phitsanulok 65000 Tel. +6655-307-770 Fax +6655-307-778

Information of Subsidiaries

Company Name	EKARAT SOLAR COMPANY LIMITED (Proportion of Shares 99.99%)
Nature of Business	Production and assembly of solar panels, tools and equipment in all solar power generation systems. Including the design, construction, installation, maintenance of electricity systems from solar cells and other renewable energy and consulting on energy conservation.
Address	9/291, UM Tower, 28th Floor, Ramkhamhaeng Road, Suan Luang Subdistrict, Suan Luang District, Bangkok 10250
Phone No.	+662-719-8777
Fax No.	+662-719-8760
Website	http://www.ekarat.co.th

Company Name	EKARAT ENERGY COMPANY LIMITED (Proportion of Shares 50.99%)
Nature of Business	Operate in all energy business, including investment advisory, engineering and management services, a distributor investing in the energy business industry both inside and outside the country, producing and selling electricity from solar cells.
Address	9/291, UM Tower, 28th Floor, Ramkhamhaeng Road, Suan Luang Subdistrict, Suan Luang District, Bangkok 10250
Phone No.	+662-719-8777
Fax No.	+662-719-8760
Website	http://www.ekarat.co.th

Reference information

Securities Registrar	
Company Name	THAILAND SECURITIES DEPOSITORY COMPANY LIMITED
Address	93 Ratchadaphisek Road, Dindaeng Subdistrict, Dindaeng District, Bangkok 10400
Phone No.	+662-009-9000
Fax No.	+662-009-9991

Auditor

Company Name	ANS Audit Company Limited
Address	100/72, 16th Floor, 100/2 Vongvanij Building B, Rama 9 Road, Huaykwang, Bangkok, 10320
Phone No.	+662-645-0109
Fax No.	+662-645-0110

Internal Auditor

Company Name	AMT Solution Company Limited
Address	18th Floor, Park Van Park Ventures Ecoplex, 57 Wireless Road, Lumpini, Pathumwan, Bangkok 10330
Phone No.	+662-309-3550
Fax No.	+662-393-3086

Legal Counsel

Company Name	THEPNITI LAW OFFICE COMPANY LIMITED
Address	1845/11 Phaholyothin Road, Ladyao Subdistrict, Chatuchak District, Bangkok 10900
Phone No.	+662-512-1353, +662-513-5450
Fax No.	+662-939-7156

5.2 Other material fact

Foreign Holding Limit

According to the Company's Articles of Association, the Company's shares are free to transfer unless otherwise such transfer cause the alien being shareholder of AKR more than 49% of the total number of shares sold. Any transfer of shares that will cause the proportion of shares held by Aliens exceeding the above ratio, the Company has the right to refuse such transfer of shares.

As of December 31, 2022, the Company's shareholding proportion by foreigners for approximately 0.04% of the total issued shares.

5.3 Legal dispute

In 2022, the Company and its subsidiaries do not have any lawsuits or disputes that may affect the assets or business operations of the Company and its subsidiaries significantly.



Part 2

Corporate Governance



6. Corporate Governance Policy

6.1 Overview of the Policy and Guidelines

The Company recognized the importance of the operation principles. The Company has policies on business ethics and business ethics of the Board of Directors, the Board of Management and staffs according to the good corporate governance system as practice guidelines standard in the Company's Articles of Association. The Company have policy to behave under the best practices for the director which conducted from Code of Best Practices for Directors of Listed Company that governed by The Stock Exchange of Thailand. The assigned principles must able to do practically. In addition, the Company has adopted the Good Corporate Governance to develop the policies which will increase the ability to the competition, management, and operation for the value added and efficiency of the Company which will give the security and confidential to the stakeholders.

In addition, the Company annually revises its CGR policy and manual to comply with the changing laws, economic and social conditions, along with requiring directors, executives and employees at all levels to acknowledge and abide as part of the work.

6.1.1 Policy and Guidelines for the Board

The Board of Directors consists of individuals who have the knowledge and experience beneficial to the business operations. The Board of Directors has a duty and responsibility to set the strategic direction of the business operations in accordance with the principles of good corporate governance through the definition of the policy, strategy, goals, vision and mission, and plays a crucial role in supervising and monitoring the implementation of the management to ensure compliance with the policy and defined strategies. The Board of Directors must act with competence, knowledge, integrity, transparency for the optimum benefits of the Company.

Board Composition

Directors are appointed as per the resolution of the AGM as proposed by the Nomination and Remuneration Committee and the Board of Directors, respectively, according to the Company's AOA, the Board of Directors must consist of at least 5 directors who have knowledge and experience about the business of the Company. The Company set a policy for the Board's diversity in genders, skills, professions, and specializations, namely, industrial, engineering, financial, business management, economic, legal, political science and security.

Independence of the Board

The Company recognizes the importance of the independence of the Board of Directors. The Board shall consider, express opinion on and vote for the activities under their authority. Therefore, it is necessary to have the freedom to express opinions freely and not under the control of the management or major shareholders and related persons or close relatives of such persons in order to protect the Company and the stakeholders.

Authority and Responsibilities of Director

The Board of Directors has authority and responsibility to oversee the Company's operations to be strictly in line with the objectives and resolutions of the AGM without violations of the laws, rules, regulations, good corporate governance principles and best practices for directors of companies listed in the SET. The Board of Directors has authority and responsibilities to approve various matters.

Board of Directors Meeting

Board of Directors Meetings are scheduled ahead of the fiscal year at least 3 months per meeting and special meetings called as necessary with a clear agenda item and a follow up round to evaluate performance on a regular basis. The Company Secretary will send an invitation letter along with agenda items and supporting documents to each director in advance, thus giving him/her adequate time to study on the information before attending the meeting and must have at least half of the total number of directors, therefore will be a quorum.

Non-executive directors can hold meetings without the participation of management as necessary and appropriate. The Company Secretary is the coordinator and notifies the meeting results to executive directors.

Evaluation of the performance of the Board

The Board shall evaluate its performance annually to be jointly consider the results and improve the performance in accordance with the policy, review the problems and obstacles that occurred in the past year.

Remuneration of Directors and the management

The Company had set a policy for remuneration for directors and executives fairly and reasonably. The Nomination and Remuneration Committee will consider and scrutinize as appropriate for each position. In accordance with the financial status of the company and compared with other companies in the same business group. The remuneration was allowance and bonus which has already approved by the shareholder's meeting every year. (More detail in 7.4.2)

Succession Plan

The Company focuses on recruiting personnel who will hold senior management positions, such as Managing Director and Deputy Managing Director in various fields. Therefore, formulated succession plan by defining policies and guidelines for management development to prepare personnel to take up replacement positions when there are vacancies.

Directors' Development

The Company holds an orientation for new Directors by presenting the Company's information, aviation business, shareholding structure, related rules and regulations including privileges of the Directors, to allow the Directors to receive related information beneficial for managing the Company. In addition, the Directors are encouraged to attend training courses organized by the Thai Institute of Directors (IOD) to develop, support and promote the performance of the Board of Directors.

Company Secretary

To comply with the principles of good corporate governance of listed companies and the Securities and Exchange Act. The Board appoint a Company Secretary, responsible for arranging Board's meeting and the shareholder's meeting to ensure that they are recognized in a transparent way and in a compliance with applicable law and regulation.

Monitoring of Associated Companies

To supervise the operations of Subsidiaries, the Company as a shareholder has sent representatives to supervise the interests as well as coordinated cooperation between Subsidiaries. The Company's representatives are those who have been approved by the Management and the Executive Board or the Board of Directors to take positions as Directors in two Subsidiaries.

In a major policy, the representatives of the Company obtain the policy of the Company before offering an opinion at the meeting of Subsidiaries, such as allocation of profit, dividend or submission of state revenue, the election of replaced Directors who expired from term of office, the increase - decrease capital, termination - merger. The Company's representative must report information within the given time to the management and the Board of Directors.

In addition, the Company has arranged analysis, monitoring, and report on the performance of Subsidiaries, on a quarterly or yearly basis to allow the management and the Board of Directors to use the information in making decisions and determining direction and guidance to regulate investment Subsidiaries.

The details of the policies are in the Good Corporate Governance and Business Ethics Manual on the Company's website: https://www.ekarat.co.th/ir_index.php

6.1.2 Policies and practices relating to shareholders and stakeholders

Section 1 Right of Shareholders

The Company recognizes the importance of shareholders and their rights. The Company has implemented policies to protect the basic rights of its shareholders which include the right to purchase, sell or transfer the Company's shares or receive a share in the Company's profits, receive sufficient and timely the information, participate in the Annual General Shareholders' Meeting AGM, give proxy to vote on shareholder's behalf, make inquiries during the AGM, have rights to submit the issues for meeting agenda and be able to nominate the appropriate individuals for consideration to be appointed to Board of Directors. Shareholders shall also have the right to participate in important decisions such as electing directors of the Company, approving transactions that bear effect on the direction of the business, and making amendments to the Memorandum of Association and the Articles of Association.

Annual General Shareholders' Meeting

The Company held the AGM according to the Public Limited Companies Act B.E. 2535 (1992), in accordance with the guidelines of the SET and the Thai Institute of Directors (IOD) and monitored that the AGM was fully complied with the requirements stated in the Annual General Meeting Checklist (AGM Checklist) based on the assessment of AGM of listed companies by the Thai Investors Association, the Thai Listed Companies Association and the SEC to raise the quality of the Company's AGM as follows:

- **Date, Time and Venue to hold the AGM**

The Company convened one annual general meeting of shareholders within 4 months from the end of fiscal year. In the urgent event that need to propose special agenda which its subject to impact or related to the interests of shareholders or relating to conditions or rules, applicable laws that must be approved by shareholders. The Company will call an Extraordinary General Meeting of Shareholders to be the case.

At the Board of Directors' meeting 2/2022 held on February 24, 2022, resolved to hold the 2022 AGM on April 29, 2022 at Parichart Room, Golden Tulip Sovereign Hotel, Rama 9 Road, Huay Kwang, Bangkok. The Company has chosen a location that was convenient for shareholders and not far from the head office location, including strictly following Covid 19 infection prevention measures, with appropriate spacing and meeting room sizes.

In 2022, the Company didn't call an Extraordinary General Meeting of Shareholders.

Meeting invitations in advance

The Company disclosed the Board of Director's resolutions, AGM dates and agenda by made available through the Stock Exchange of Thailand to shareholders in advance on the date of the Board of Director's meeting. The Thailand Securities Depository Co., Ltd. (TSD) is the Company's securities registrar, will deliver the invitation letter with details of the meeting agenda, importance information, opinion of the Board of Director, Minutes of the previous meeting, Annual Report and documents required for proxy which clearly specify the method used by the Company.

The invitation will be send to shareholders in advance more than 21 days before AGM date. The Invitation Letter sent out on April 7, 2022 and published in newspapers continuously for 3 days during on April 18-20, 2022 to inform the shareholders of the meeting in advance and revealed on the Company's website in advance 30 days (since March 25, 2022).

- Day of the AGM

Information relevant to the AGM was also included in the information packet sent to shareholders along with the letter of invitation to attend the AGM to enable shareholders to have sufficient information to make sound decisions on the various issues proposed for consideration. Prior to commencing the AGM, the Chairman provided attendees with a summary of the Quorum and then Managing Director explained how to use the voting ballot, the voting procedure, the vote collection process and the vote counting process. After each vote count, the Chairman announced the results of voting for each agenda to the shareholders ensuring transparency of each vote counted. On each agenda for consideration, the Board of Directors and management were on hand to provide comprehensive response to queries and/or comments that shareholders might have. In regard to the voting and vote counting process.

In regard to the voting and vote counting process, the Company strictly adhered to the Company's AOA allowing one vote per share held. The resolutions of shareholders' meeting were passed by a simple majority vote of the shareholders attending the meeting and having voting rights. In the event of a tie vote, Chairman of the meeting shall have a casting vote. In counting votes for the general agenda, only disapprove and abstain from votes were counted and the rest was regarded as approve votes. For the agenda on election of Directors will allow shareholders to vote individually. The meeting was carried out as in the order set in the agenda without addition of any items.

If any director has a stake in or involved in any agenda, will not to attend the meeting and abstain from voting on that agenda.

The 2022 AGM was scheduled at 14.00 hrs. by registering at 12.00 hrs. There were total of 51 persons attended the meeting participants included 22 shareholders attended the meeting in person and 29 shareholders by proxy, with totaling 601,030,809 shares, accounted for 40.84% of the Company's paid-up capital which more than one-third of the total number of shares sold constituting a quorum in accordance with the regulations of the Company.

Disclosure of Resolutions

Resolutions reached at the AGM were disclosed to the general public via the SET's information channel within the period of the time at the end of the day after the meeting. Details regarding the approved/disapproved resolution and the vote counts (approve/disapprove/abstain/Voided Ballot) had been clearly indicated for each agenda item that was submitted for consideration. The detailed minutes to the AGM containing names of Board members and management attending the meeting along with the resulting resolutions and the vote count on agenda items posed for shareholders' consideration along with major issues posed by shareholders and the response made by the Company were submitted to the SET within 14 days and the minutes of the AGM had also been posted on Company's website in Thai and English to allow foreign shareholders to access information thoroughly, including video and picture of the meeting.

Section 2 Equitable Treatment of Shareholders

The Company's policy is to treat all shareholders equally, fairly and in accordance with legal requirements, including measures to prevent the directors, executives and employees from using inside information to benefit himself or his allies in unlawful manners. For example, take advantage of inside information (insider trading), disclose internal information to the person involved with directors or executives. In order to build confidence in investing with the Company.

The Company arranged for the shareholders to propose agenda items for the said meeting and/or nominate qualified persons for director election in advance during November 1-30, 2021 and so notified the shareholders through the SET. Moreover, the Company posted information on its website, giving details about the procedure and method of consideration in a clear and transparent manner. For the 2022 Annual General Meeting of Shareholders, none of the shareholders proposed agenda items for such meeting and/or nominated qualified candidates for director election which the Company Secretary has reported to the Board of Directors for acknowledgment.

The Company has facilitated all shareholders in accordance with the measures to prevent the spread of the Covid-19 virus, primarily for shareholders' convenience. There are registration officers and registration service points for shareholders and proxies attending the meeting appropriately and adequately. Applying technology to AGM, barcode was used in the registration and vote counting processes for time saving. The participating shareholders were treated for lunch, snacks and refreshments. The Company sent invitation letters and meeting documents in English to the foreign shareholders, allowance given to shareholders to appoint a proxy or one of Independent Director who have been specified in the proxy form to attend the meeting and vote on behalf of the shareholders without conditions. In addition, the Company has disclosed the invitation letter and the proxy form along with details and procedures on the Company's website 30 days in advance. Shareholders can ask for more information by phone or other channels such as website, e-mail etc.

Policies on Insider Information

The Company has the policies on insider information, prescribing that no Director, Executive and employee who knows or possesses inside information shall trade securities by resorting to inside information, which is material non-public information, in such a manner that it is likely to have an effect on the price or value of securities, and has known or possessed while holding a position or the line of work responsible for or capable of accessing inside information. Any actions, either for the benefit of oneself or other persons or to pass on such information to others, are prohibited. No Director, Executive and employee, and who has known or possessed inside information, shall trade securities during the period of 1 month prior to and 24 hours post the disclosure of the Company's financial statements. Including having policies and adhering to ethics and integrity in business operations to customers, business partners and shareholders. There are clear requirements and codes of conduct in case that employees or executives disclose company information or used for their own acts or transactions that may have conflict of interest. It is a serious offense and may be subject to disciplinary action. The Company had sent by e-mail to the staff and management were informed accordingly. Investor Relations has sent e-mails to notify directors, executives and employees in advance of such period. Along with clarifying knowledge and understanding about the information that affects the stock price to prevent information leakage and comply with regulations correctly.

Reporting Changes in Share Portfolios

The Company has informed the directors and executives including their spouses and children under legal age, must report any change in their AKR shares ownership to the SEC in accordance with Section 59 of the Securities and Exchange Act and send a copy of the report to the Company within 3 days of the date of purchase, sale, disposal or received of such shares. The Company will disclose reports of changes in shares ownership of the directors and executives to the monthly Board's meeting.

Conflict of Interest

The Company's Board of Directors has set up the policy on conflicts of interest based on the principle that any decision on business conduct must be made with respect to the highest interests of the Company only. Any action which might lead to conflicts of interest must be avoided. It is specified that any person relevant to or connected with the subject to be considered is obliged to acknowledge the Company of his/her relationship to or connection with the matter. He/She is not permitted to join the party which judges the case and does not have the power to authorize that particular transaction. No irregular conditions or regulations are specially set for such case. It is also stipulated that the Office of Internal Audit and the Audit Committee are responsible for taking care of and solving the conflicts of interest. However, to date, the Company has not experienced the problem related to conflicts of interest. The Audit Committee will report the carefully considered connected transaction matter and any matter containing a conflict of interest to the Board of Directors in compliance with the regulations of the SET. Such information is disclosed in 56-1 One Report.

Section 3 Roles of Stakeholders

The Company realizes the importance of all stakeholders, then set the practice guidelines to treat all stakeholders with equity based on the sustainable mutual benefits in enhancing the competitiveness and generating profits to the Company. The Company has conducted its business guided by the conscience of corporate social responsibility (CSR) reflecting international environmental standards minimizing pollution and waste resulting from undertaking business activities. Therefore, the Company's Good Corporate Governance and Ethics Code were drafted and distributed to the Company's directors, executives and employees reflecting the following guidelines:

- **Society and the General Public**

The Company realized the important of community and environment by assign the practical of working and awarded ISO 9001:2000, ISO 14001, ISO 50001:2011, and others certificates both development and negative impacts on the environment as prove of social responsibility such as participated in the Green Industry Project by committed to develop according to the objectives of the project according to the definition "Environmental friendly transformers". The Company is supportive of activities that are beneficial to the society or communities and cultivate employees to have a sense of responsibility to society, communities and the environment.

- **Shareholders**

The Company shall operate its business to generate satisfactory return for shareholders and ensure equitable treatment of all shareholders. The Company has the policy to acts with honestly and equally to the shareholder accordance with good corporate governance principles. Report the status of the organization regularly and completely according to reality and inform all shareholders equally. Including the opportunity for shareholders to suggestions and complaints through various channels of the Company.

- **Employees**

Employees are provided with fair and reasonable compensation and welfare strictly according to human rights principles. A safety workplace has been maintained to ensure security of employees' life and properties. The importance is given to employees' equal opportunity of knowledge, capability and skill development and practices that are not involved in human rights violations according to Thai labor standards.

- **Customers**

The Company has the policy to acts with honestly, equally, and responsible to the customers. Customers' confidential information is strictly treated and is not unethically used for personal benefit or for the benefit of any related party. Customers are provided with correct, adequate and up-to-date information about products and services, including monitor the satisfaction of customers for the improvement of products and services and promptly resolve problem, thus preventing losses of customers or competitors' intervention. Therefore, the customers can trust and confident to do business with the Company and for a long-term relationship.

- **Trade Competitors**

The Company abides by the fair competition rules, not seeking confidential information of competitors in a dishonest or inappropriate way and not damaging reputation of competitors by way of false allegation. The Company will not infringe the intellectual property rights or any other rights in relation to intellectual property of others

The Company has established procedures and measures to prevent any involvement in behavior that impedes competition while encouraging employees to realize the importance of complying with the law.

In 2022, the Company has no disputes or lawsuits with the competitors.

- **Business Partners and Creditors**

The Company has established a procurement policy with social responsibility systematically and clearly such as purchasing control, selection of procurement sources, monitoring, auditing and evaluating trading partners for sustainable business development. Perform duties with honesty and fairness and maintain good relations with trading partners. Support each other in terms of technology, safety, productivity, reduce environmental problems to step towards business stability. Mutually based on business relationships and fair returns to both parties. The Company will also avoid any situation which may cause a conflict of interest. The suppliers have to sign the Company's Supplier Sustainable Practice Guidelines and there must be an annual assessment of sustainable practices.

Last year, there were entrepreneurs from South Korea visiting the factory in Chachoengsao Province and local entrepreneurs visiting the solar power plant in Nonthaburi Province.



In 2023, when the situation of COVID-19 has been resolved, the company plans to organize activities to strengthen relationships with our partners, such as training seminars on new products, factory visits, technology knowledge exchanges to promote business development simultaneously.

For creditors, the Company has complied with the agreements or conditions agreed by both parties strictly, including taking care of the collateral under the relevant contracts, responsible and has not concealed information which will cause damages to the creditors. The Company reports statement of financial position to creditors regularly with accuracy and punctuality. In case of failure to fulfill its obligations in the agreement, the Company will notify the creditors immediately to find solutions including managing finances to build the appropriate structure to the Company' business operations, maintaining the confidence of creditors. Including not accepting or paying any benefits which dishonest with partners or creditors. Along with monitoring and evaluating partners to develop sustainable business operations in order to manage the supply chain in accordance with the direction of the organization taking into account the environmental, social and governance impacts

Intellectual Property practice

The Company recognizes the importance of protecting intellectual property; therefore, policies were set that both the procurement and deployment must not commit to infringement of intellectual property. Moreover, education and caution are implemented on employees to create awareness on such matters, including verification by both internal and external agencies.

Anti-Corruption

The Company has established a policy on anti-corruption under the business operation, using fair business strategy, transparency, adherence, good quality of the product is important and strictly abide by relevant laws. The Company is committed to anti-corruption by prohibiting the Board of Directors, executives and employees of the Company relating to any corruption. Giving and receiving all forms of direct and indirect such as a bribes reception, donation and political assistance calling or receiving any benefits or assets. That will lead to practice or refrain from performing their own responsibilities. Because the Company to lose benefits unless it is the case of laws, regulations, notifications, regulations, local customs or trade tradition can be done. In this regard, the Company has imposed penalties if employees fail to comply with the stated policies. The Company has posted public relations announcements for employees to acknowledge and notify in the internal journal at least once a year.

Section 4 Information Disclosures and Transparency

The Company gives priority to the principles of information disclosure and transparency according to the requirements set by the SET, and the SEC. Specific departments are set to oversee the disclosure of the financial and other information related to the Company's operations sufficiently, accurately, completely, timely and transparently in order to communicate with shareholders, investors, analysts and stakeholders from all sectors to ensure even distribution of information through various channels. The Company has set the following guidelines:

- **Disclosure of information through the involved agencies**

The Company disclosed the Company's information both financial and other important aspects to regulators, such as financial reporting and news that are essential to the investment of shareholders and investors to the SET, report of the Company's information through Annual Registration Statement (Form 56-1) and Annual Report (Form 56-2) to the SEC, report on financial information, directors and employee information including other information through Set Portal Straight Through.

The Company set up the Investor Relations Department to serving as a center for disclosing important information to investors and financial reporting process such as presentation of operating results, financial statements, information that is reported to the SET, Management Discussion and Analysis(MD&A) which show the status of the operating results and future prospects of the Company. In addition, investor relations are also responsible for promote a good relationship, communicate accurate and reliable information. Including implementing plans to ensure that all stakeholders are treated equally, have access to information and have a channel to communicate with the Company through various activities such as meeting, conference calls with executives, answering questions and providing information via phone and/or email and company visits

- **Disclosure of information through website**

The shareholders, investors or interested people to know the Company's information without delay through the website, <https://www.ekarat.co.th> including the Company's background, Board of Directors, product and services, news, operating results, financial statements, shareholder information, shareholders' meetings, minutes of shareholders' meetings, a list of major shareholders, operational statistics, good corporate governance, procurement reports, the Company's AOA, and information reported to SET, etc.

Section 5 Responsibilities of the Board of Directors

The Board of Directors has established policies and guidelines for good corporate governance in accordance with the Corporate Governance of the Office of the Securities and Exchange Commission to be adapted to suit the Company's business by adhering to transparency, accountability and fairness to all parties. Additionally, the Company also encourages and supports every director to attend directors training programs that will further develop their knowledge arranged by the Thai Institute of Directors Association (IOD) and other institutes on an ongoing basis, so as to increase their effectiveness and productivity in their capacity as the Director.

Separation of the Role and Responsibilities between the Board of Directors and the Management

The Company has separated the role and responsibilities between the Company's Board of Directors and the Management in a clear manner in their duties and decision-making powers in order to ensure the efficiency of the Company's operations. The Chairman of the Board will not be the management and will not be the same person as Managing Director, as well as will not participate in the management of the Company's business operations. Both positions must be qualified by the Board of Directors.

6.2 Business Code of Conduct

The Company has its written a business ethics for all directors, executives and employees to uphold and practice. The Company believes that Ethical guidelines are an essential tool for good performance and taking into account all stakeholders. Violators of the code are subject to disciplinary action. The essential aspects of the code are included below:

1. honest and reliable
2. Respect others regularly
3. Fair and undivided
4. Respect for intellectual properties including copyrights and patents
5. Confidentiality
6. Accuracy of the Company's record keeping
7. Insider Information and Securities Trading Information
8. Compliance with laws and regulations
9. Fair business competition
10. Responsible for shareholders

The detail of complete information on Corporate Governance and Code of Business Ethics are shown in https://www.irplus.in.th/Listed/AKR/pdf/Code_of_Conduct_on_business.pdf

The Company has organized training on work regulations (Employee Handbook) and business ethics for all new employees to complete 100% in order to create understanding and perform their duties correctly both in work and behavior.

In 2022, no executives or employees were found guilty of corporate ethics. There were only minor violations of the Company's rules, which were not serious offences.

6.3 Material changes and developments regarding policy, guidelines and corporate governance system in the preceding year.

In 2022, The Board of Directors has reviewed and improved the essence of the policies, guidelines and corporate governance system as follow;

- Appointing an ESG committee to supervise business operations for sustainable growth with regard to society, communities and the environment, in parallel with plans and goals covering all stakeholders.
- Review the vision, mission, policies and strategies of the organization that have been set to be suitable for the current situation and aligned in the same direction.
- Projects related to good corporate governance, business ethics and sustainable development, namely training on corporate governance, anti-corruption policies, managing climate change to reduce greenhouse gas emissions and preparation for sustainable development.

However, in 2022, there were issues in CGR which could not be covered. Details are as follows:

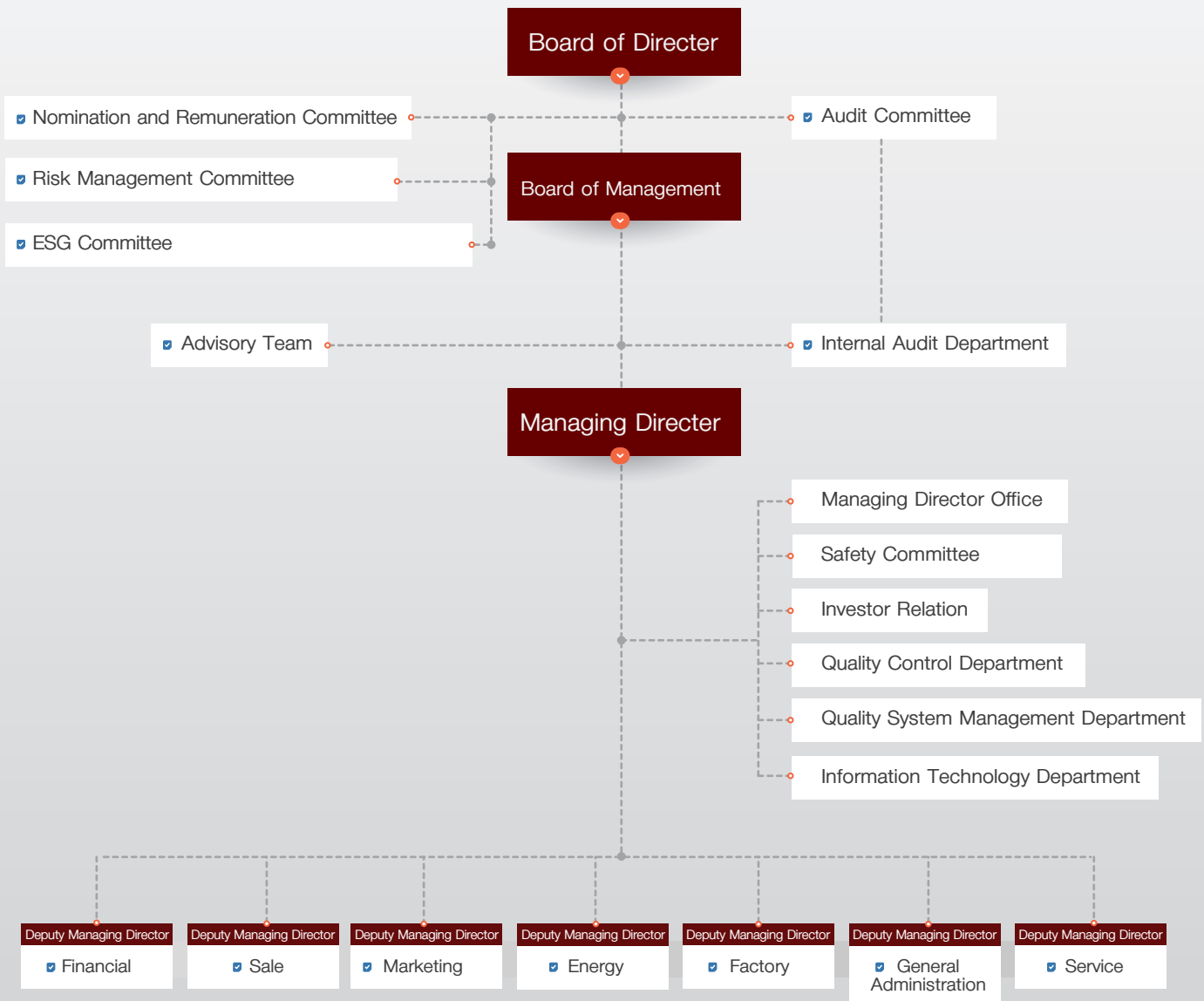
- The Company's policy didn't require a minimum quorum of at least 2/3 for board decisions. According to Article 24 of the Company's regulation only prescribes that the meeting of the Board of Directors, there must be not less than half of the total number of directors present to constitute a quorum.
- The Company cannot use Cumulative Voting as the procedure of voting for the Company's Directors. As Article 21 of the Company's regulation stipulates that one shareholder shall have one vote for each share. Each shareholder shall exercise all the votes he or she has, to select one or several persons to be directors but cannot divide the votes for any person to any extent.
- The Company has Independent Directors with terms of office exceeding 9 years in total from the initial date of appointment as an Independent Director. This is because the Company's requires Independent Directors, who are knowledgeable and understanding of the nature of the Company's business without benefits or interests whether directly or indirectly to the Company, its subsidiaries or shareholders. Including being independent in expressing opinions freely without being under the control of executives or major shareholders of the Company.

The Board of Directors has deemed it appropriate not to limit the number of years the tenure of Independent Directors of the Company not exceeding 9 years, according to the reason mentioned above. It was proposed to the shareholders' meeting to consider and approve the selection of those independent directors.

7. Governance Structure and significant information relates to the Board of Directors, Subcommittees, Executive, Employees and Others.

7.1 Corporate Governance Structure

The Company's management structure comprises of Board of Directors, Board of Management and 4 Subcommittees: Audit Committee, Nomination and Remuneration Committee, Risk Management Committee and ESG Committee. Managing Director is the top of executive who manages the Company's business through the Board of Management. The qualified of all directors and management are under Section 68 of the Public Limited Companies Act B.E. 2535.



7.2 Information on the Board of Directors

The Board of Directors has the ultimate responsibility for the administration of the Company's affairs under the Company's Articles of Association which requires that the Board consists at least 5 directors, and that no less than half of the Directors must reside in Thailand. At the Company's Annual General Meeting of Shareholders, one-third of the Directors are required to resign from their position, and new Directors are to be elected and the Directors who have resigned may be re-elected.

7.2.1 The composition of the Board of Directors

The Company has appointed the Directors and has a balance of non-executive directors, without giving any person or groups the sole decision-making power in order to create a mechanism for balance and effective management

As December 31, 2022, the Board consist of 10 directors who's appointed by the shareholder meeting as below:

- Executive Director 2 persons (20% of Board members)
- Non-Executive Director 8 persons (80% of Board members), which are as follows:
- Independent Director 6 persons (60% of Board members)
- Non-Executive Director 2 persons (20% of Board members)

In addition, in order to promote gender diversity according to human rights principles, the Board of Directors consists of;

- Male Director 8 persons (80% of Board members)
- Female Director 2 persons (20% of Board members)

The Board of Directors is diverse in terms of skills, knowledge and expertise according to the Board Skills Matrix table below;

Directors	Administration & Organization Management	Accounting & Finance	Risk Management	Economics	Security & Society	Engineering	Law	R&D
1. Mr. Vichit Yamboonruang	✓	✓	✓	✓	✓			
2. Mr. Vinai Vittawasgarvej	✓	✓	✓	✓	✓			
3. Mr. Wara Tongprasin	✓	✓	✓	✓	✓			
4. Mr. Aroon Sricharoon	✓		✓	✓	✓			
5. Mr. Chatri Siripanichkorn	✓	✓	✓	✓	✓		✓	
6. Mr. Thunya Siltorn	✓		✓	✓		✓		
7. Ms. Urawee Kanokpruk	✓	✓	✓	✓		✓		✓
8. Mr. Danucha Noichaiboon	✓	✓	✓	✓	✓			
9. Mr. Wiwat Sangtian	✓	✓	✓	✓		✓		
10. Ms. Rompissri Noichaiboon	✓	✓	✓	✓	✓	✓		

7.2.2 The Current Board of Director

The Board of Director as of December 31, 2022

Name	Position	Appointed Date
1. Mr. Vichit Yamboonruang	Independent Director Chairman of the Board	28 February 2011
2. Mr. Vinai Vittawasgarnvej	Independent Director Chairman of the Audit Committee	11 June 2012
3. Mr. Wara Tongprasit	Independent Director Chairman of the Nomination and Remuneration Committee Audit Committee	17 June 2009
4. Mr. Aroon Sricharoon	Independent Director Audit Committee	13 May 2019
5. Mr. Chatri Siripanichkorn	Independent Director Nomination and Remuneration Committee	12 July 2016
6. Mr. Thunya Siltorn	Independent Director Chairman of Risk Management Committee	30 June 2020
7. Ms. Urawee Kanokpruk	Director Nomination and Remuneration Committee	28 February 2011
8. Mr. Danucha Noichai boon	Director Nomination and Remuneration Committee	15 January 2011
9. Mr. Wiwat Sangtian	Director	25 June 2014
10. Ms. Rompissri Noichai boon	Director Risk Management Committee Managing Director	18 March 2021

List of directors who resigned/resigned during the year

There was no change in the Board of Directors in 2022.

Authorized Director

According to the Company's Articles of Association, the directors who are authorized to sign to bind the Company are the Chairman of the Board of Directors or Managing Director or both of them who shall jointly sign with the seal of the Company affixed.

7.2.3 Authorities, Duties and Responsibilities of the Board

The directors shall sincerely and faithfully perform their duties and carefully act in the best interest of the Company to be in accordance with the objectives, rules and regulations of the Company and the resolution of the shareholders' meeting and the matter legally required the approval of the shareholders' meeting. The conclusion of scope of power and duties of the Board of Directors are as follow:

1. Discharge their duties and supervise the operation of the Company to ensure strict compliance with laws, objectives, articles of association, and resolutions of the Annual General Meeting.

2. To consider specify details and give approval towards vision, business strategies, direction, policy, goals, business plan and budget of the Company as per details arranged by the Management Team. Such topics are to be reviewed annually so that they are appropriate for the circumstance, business potential, and be able to create sustainability to the business.

3. Establish a Corporate Governance and Business Code of Conduct Policy, Responsible to the Society and Environment, Anti-Corruption and strict observance of this policy must be required alongside the Company's articles of association in order to ensure fairness to all stakeholders.

4. Establish a Corporate Governance and Business Code of Conduct Policy, Responsible to the Society and Environment, Anti-Corruption and strict observance of this policy must be required alongside the Company's articles of association in order to ensure fairness to all stakeholders.

5. Institute systems for corporate accounting, financial reporting and auditing, and institute efficient and effective internal control and internal audit systems.

6. Provide a fair and transparent nomination system for individuals to assume Key Executive positions at level Deputy Managing Director or higher and arrange a suitable compensation system for the Executives of the Company.

7. Lead and be the role model of a performing and ethical individual in accordance with the Company's corporate governance policy.

8. Manage and resolve potential conflicts of interests and related transactions by reviewing significant transactions in order to ensure utmost benefit to the shareholders and stakeholders.

9. To consider and approve the acquisition or disposition of assets, investment in new business and any operations to be in accordance with relevant laws, notices and regulations.

10. Regularly evaluate one's own performance and discharge of duties, as well as those of the committee and the management team annually.

11. Ensure accurate, clear, transparent, reliable to disclosure of information according to relevant standards.

12. Arrange for appropriate channels of communication with each group of shareholders. Supervise disclosure of information in order to ensure correctness, coherence, transparency.

Furthermore, the power and authorities above are not including to others transaction that conduct by the company's rule and regulations which need the approval of shareholders' meeting.

- Matters required by law to be approved by the resolution of the shareholders' meeting.
- Connected transactions with a value exceeding 20 million baht or 3% of NTA, whichever is higher.
- Buying or selling assets in accordance with the principle of acquiring and disposing of assets with the size of the transaction according to the criteria of the Stock Exchange of Thailand required to be approved by shareholders.

The directors must have various qualifications in terms of skills, experiences, abilities and specific characteristics necessary to achieve the Company's main objectives and goals.



Duties and Responsibilities of Chairman of the Board

Chairman of the Board has power, duties and responsibility as follow:

1. The Chairman has the role of overseeing policy advocacy and strategic performing manner of the company's management including giving recommendation and support the operating of the company's management but this entitle shall not participate in the daily operation.
2. Ensure that the directors' participation in promoting an ethical corporate culture. and good corporate governance.
3. Strengthen the relationship between the executive and non-executive Directors and between the Board and Management.
4. Define the agenda for the Board of Directors meeting appropriate to the situation and urgent need. The Board receives information accurately, clearly and in a timely manner.
5. Control the meeting to be effective, allocate sufficient time for the management to present the information, support and provide opportunities for directors to ask questions and freely express opinions, control issues in discussion and conclude meeting resolutions.

Authorized Director to sign and bind the Company

According to the Company's Articles of Association, the directors whose signature are authorized to sign and bind the Company are Miss Rompissri Noichaiboon, Managing Director with Mr. Danucha Noichaiboon or Mr. Wiwat Sangtian jointly sign and affix the Company's seal.

Qualification of Directors

Directors must be qualified and not disqualified under the Companies Act, for example;

- Not more than 5 directors in listed companies in the Stock Exchange of Thailand.
- Never been sentenced by final judgment to imprisonment. Except for an offense committed through negligence or a petty offense.
- Must not be a political official, unless being a director in accordance with the law.
- Not holding any position in the political parties or officials of political parties.
- Never be fired or dismissed because of malpractice.

Term of Office of the Board of Directors

According to the Company's Articles of Association, at every Annual General Meeting of Shareholders, one-third of the directors who have the longest terms in office shall retire. Nevertheless, provided that the number of the directors is not a multiple of three, then the number nearest to one-third shall retire from office or 3 years for each full term of office. except those persons appointed as a replacement Director for an unexpected vacant directorship due to reasons other than the normal expiration of a term of office and required resignation, in such case, the replacement Director serves out the remaining period of the term of office; whereby the replacement Director may be re-elected as a Director for another full term.

Directorship in other companies

The Directors be appointed as directors in other listed companies up to a maximum of 5 and must notify the Board of Directors acknowledged. The Company Secretary will disclose the information in the Form 56-1 One Report. The Company prohibits the Director to holding the position of Managing Director, Manager or other position that has similar characteristics in the same business or being a competitor to the Company and subsidiaries. Exceptions would be joined as directors in government and the private organizations which established for public interest.

In 2022, no director holds directorship in more than 5 other listed companies. Details can be found in the profile of the Board of Directors in Attachment 1.

7.3 Subcommittees

The Board of Director appointed 4 sets of Committees to study and scrutinize specific matters as follows:

1) Audit Committee

Each Quarter the Audit Committee, together with Chief Financial Officer and the External Audit, review the Company's financial report. The Board is accountable the consolidate financial statement and the financial report which prepared under generally accepted accounting principles and are audited and certified by ANS Audit Co., Ltd.

As of December 31, 2022, the member of Audit Committee is as follow:

- | | | |
|--------------|-----------------|---------------------------------|
| 1. Mr. Vinai | Vittavasgarnvej | Chairman of the Audit Committee |
| 2. Mr. Wara | Tongprasin | Audit Committee |
| 3. Mr. Aroon | Sricharoon | Audit Committee |

Secretary of the Audit Committee is the manager of Internal Audit Department,

Qualifications of the members of the Audit Committee

The Audit Committee must have qualifications according to the criteria by the Stock Exchange of Thailand.

Two members of the Audit Committee are knowledgeable and experienced in reviewing reliability of Financial Statements, Mr. Vinai Vittavasgarnvej and Mr. Wara Tongprasin who graduated with a Bachelor's Degree in Accounting as well as work experience related to accounting.

Duties and Responsibilities of the Audit Committee

1. To review the Company's financial statements to ensure they are accurate, complete, and reliable.
2. To review the efficiency and effectiveness of the Company's Internal Controls and Internal Audit procedures by included the bellowing topics.
 - 2.1 Give the consent to appointed, rotated, layoff, and determine to reward the head of Internal Audit.
 - 2.2 Determine the independent of Internal Audit Division, in term of operation, reporting and structure.
3. To review the efficiency and effectiveness of the Company's risk management systems.
4. To review practices to ensure compliance with rules and regulations of the Stock Exchange of Thailand, and other related authorities.
5. Determine and selected to nominate and remunerate the Company auditor and considering the independent of Company auditor which might give the company other services.
6. Meeting with the Company auditor without the management for receive the comment from auditor at least once a year.

7. To review and submit an opinion on Internal Audit plans, practices of the Internal Audit group and coordinate with external auditors and report the performance of Audit Committee to the Board of Directors at least 4 times a year.

8. To consider disclosure of corporate information so it is reliable and adequate especially in the case of any related transactions or potential conflict of interest.

9. To prepare a report on corporate governance reviewed by the audit committee and signed by the Chairman of the Audit Committee for disclosure in the Company's annual report. The information including with:

9.1 The number of meetings and attendance of each member of the Audit Committee.

9.2 The opinion of the Audit Committee on the following issues:

- The accuracy, completion, and reliable of Company financial report.
- The adequacy of internal control system.
- To review practices to ensure compliance with rules and regulations of the Stock Exchange of Thailand, and other related authorities.
- The suitability of the external auditor
- Conflict of interest transactions.
- Opinions or comments received by applying follow the AC's charter.

10. To perform other tasks assigned by the Board of Directors and Audit committee approved.

Audit Committee Meeting are scheduled at least 4 times per year before the Board Meeting which has been defined and notified in advance.

The responsibility of the Audit Committee

The Audit Committee has the responsible in terms of the duties received from the Board but the responsibility in the activities which the Company get involve with other party is the Board of Directors obligation.

In the event that the duties of the Audit Committee are changed, the Company will notify the resolution of the change according to the form prescribed by the Stock Exchange of Thailand and submit it to the Stock Exchange of Thailand within 3 working days from the date of such change.

The Company arranges the Audit Committee meeting regularly before the Board of Directors meeting at least 4 times each year on a quarterly basis by reporting the results of auditing and reviewing various transactions to the Board of Directors for acknowledgment. Including having a meeting with the auditor and the accounting department to review the financial statements.

2) Nomination and Remuneration Committee

As of December 31, 2022, there were 4 members of the Nomination and Remuneration Committee as follow:

- | | | |
|----------------|----------------|---|
| 1. Mr. Wara | Tongprasit | Chairman of the Nomination and Remuneration Committee |
| 2. Ms. Urawee | Kanokpruk | Nomination and Remuneration Committee |
| 3. Mr. Danucha | Noichai boon | Nomination and Remuneration Committee |
| 4. Mr. Chatr | Siripanichkorn | Nomination and Remuneration Committee |

Qualifications of the Members of the Remuneration and Nomination Committee

Company director who has knowledge and ability to understand the nature of business and the roles and responsibilities of the Board of Directors and sub-committees, able to perform duties and express opinions independently. As well as being independent and impartial in recruiting and selecting suitable persons for nomination to be the Company's directors to replace those who have retired by rotation. The Remuneration and Nomination Committee consists of 2 independent directors or 50% of the members, namely Mr. Wara Thongprasit as Chairman and Mr. Chatr Siripanichkorn as Director.

Duties and Responsibilities

1. Assign the policies, qualification, and procedure for the nomination of the director and management level.
2. Determine the nomination policies for the benefit of the Company.
3. Nominate and select the qualified person follow the related rules and regulations and present to the Board of Directors for the appointment of Director or management level.
4. Control and monitor the suitable size and structure of the Board and adjust the size and structure to conform to the changing environment.
5. Present to the Board of Directors for the nomination of the directors replacing the resigned directors from the articles of association.
6. Give the proposal and evaluation of the management level.
7. To perform other tasks assigned by the Board of Directors.
8. Broach with the rules of Board of Directors compensation, Executive Board compensation, others committee, and the advisor of the Company to approve by the Board of Directors.

For the Managing Director, Deputy Managing Director or above positions, and Internal Audit Department Manager compensation is determined by the Nomination and Remuneration Committee and pass through the Board of Directors to approve.

9. Broach with the rules of Board of Directors annual compensation to approve by the Board of Directors before the shareholders' meeting approval.
10. Determine the employee's bonus to approve by the Board of Directors.
11. Determine the employee's annual adjusted salary to approve by the Board of Directors.
12. Determine the rules and regulations of the company that concern to the benefit of the employee by the order of the Board of Directors.

Nomination and Remuneration Committee Meeting are scheduled at least 2 times a year before the Board Meeting which has been defined and notified in advance.

3) Risk Management Committee

As of December 31, 2022, there were 8 members in the Risk Management Committee as follow:

- | | | |
|------------------|--------------------|---|
| 1. Mr. Thunya | Siltorn | Chairman of the Risk Management Committee |
| 2. Ms. Rompissri | Noichai boon | Risk Management Committee |
| 3. Mrs. Suwannee | Sujaritvanitchpong | Risk Management Committee |
| 4. Mr. Daroonwat | Noichai boon | Risk Management Committee |
| 5. Mr. Paitoon | Intrawisut | Risk Management Committee |
| 6. Mr. Surasak | Wachirapakorn | Risk Management Committee |
| 7. Mrs. Supaporn | Chansuroj | Risk Management Committee |
| 8. Mr. Somphong | Rob-loak | Risk Management Committee and Secretary |

Qualifications of the Members of the Risk Management Committee

Be a person with appropriate knowledge, experience and qualifications, able to dedicate time to perform duties adequately and efficiently, without prohibited characteristics according to the Public Company Act and other relevant laws. It consists of executives from various departments as an important mechanism in the operation.

Duties and Responsibilities

1. Evaluate, analyze, and develop the framework of risk management and the method of risk evaluation in the future.
2. Assign the policies of overall risk management of the Company which include any important type of risk likes business risk, competitive, production, procurement, credit risk, liquidity risk, and exchange rate risk.
3. Assign the conform strategies with the Company risk management policies which can be evaluate, monitor, and control the risk
4. Assign the sufficient policies and risk management including with the efficiency of the system and follow the policies.
5. Report the result of approach to the Board of Directors to modify direct to the policies and regulations of risk management and notice to the Audit Committee for the proper audit.

Risk Management Committee Meeting are scheduled at least 2 times a year before the Board Meeting which has been defined and notified in advance.

4) Environment Social and Governance Committee (ESG)

The Company established the Environment, Social and Governance (ESG) Committee on December 8, 2022 to create sustainable business growth and environmentally friendly. Responding to the needs of stakeholders and continually creating value for society along with effective corporate governance.

As of December 31, 2022, there were 6 members in the ESG Committee. The chairman is an independent director while the directors are 4 senior executives and Company Secretary as follow:

1. Mr. Thunya	Siltorn	Chairman of ESG Committee
2. Ms. Rompissri	Noichaiboon	ESG Committee
3. Mrs. Suwannee	Sujaritvanitchpong	ESG Committee
4. Mr. Daroonwat	Noichaiboon	ESG Committee
5. Mr. Somphong	Rob-loak	ESG Committee
6. Ms. Hansa	Buranajan	ESG Committee

Qualifications of the Members of the ESG Committee

Be a person with appropriate knowledge, experience and qualifications, able to dedicate time to perform duties adequately and efficiently which consists of executives from various departments as important operating mechanism in order to develop and improve the corporate governance process in all aspects.

Duties and Responsibilities

1. Environmental - Efficient use of resources, including the restoration of the environment that has been affected by business operations.
2. Social - Fair and equitable human resource management, community and social development continually.
3. Governance - Good corporate governance, risk management and anti-corruption.
4. Propose relevant issues that may affect stakeholders and the Company's operations or reputation to the Board of Directors, including recommendations for improvement of policies and operations.
5. Organize a meeting as deemed appropriate at least once a quarter.
6. Report on performance and perform other duties related to ESG operations as assigned by the Board of Directors.
7. Disclosure of information ESG that matters to the public.

7.4 Information on Executives

7.4.1 Board of Management

According to the organizational structure as of December 31, 2022, there were 4 members in the Management Board as follow:

- | | | |
|------------------|--------------------|---------------------------------------|
| 1. Ms. Rompissri | Noichaiboon | Managing Director |
| 2. Mrs. Suwannee | Sujaritvanitchpong | Chief Financial Officer |
| 3. Mr. Daroonwat | Noichaiboon | Deputy Managing Director of Marketing |
| 4. Mr. Paitoon | Intrarawisut | Deputy Managing Director of Factory |

Remark : the mananagment are "Management" under SEC's notification.

Duties and Responsibilities of Managing Director

According to the Company's regulations, The Managing Director has the authority and responsibility regarding the administration as approved by the Board of Directors as follows.

1. Bring forward the policies from the Board of Directors and Responsible for all of the management received.
2. Assign the strategies to meet the goal for operation and policies.
3. Approve the important investment that code in the annual budget which approved from the Board of Directors.
4. Approve the operation plan and the policies in each division, also monitor the operation of the company to conform to the plan and policies.
5. Issue orders, rules, notices, memo for the benefit of the company and the organization tidiness.

6. Approve to appoint, hire, transfer, and dismiss of the employee whose position below the Deputy Managing Director.

7. Assign the third party, by approval of Managing Director, to manage and operate for the Managing Director in the necessary matter and not above authorized financial amount.

8. Determine and bring forward the expenditure budget for the approval of the Board of Directors.

9. Conduct the employees to work with ethics, morals, laws, and cultural to the shareholders, customers and employees and related person.

10. Operated in the normal manner of the company, and in case of the important subject, Managing Director must present to the Board of Directors or the Management Board for the approval.

11. Support and develop the organization and employees in term of skill and the cultural of organization.

12. Support and encourage the education and develop new technology to increase the production and develop the business by using the resources in full capability.

13. Act with honest and care for the best of company.

In order that, the authorities give to Managing Director will act under the regulations, law and rules and regulation of the Company; In case of any actions which develop the conflict of interest to Chief Executive Officer or any related person (Notification from SEC).

The Management Board

As of December 31, 2022, there were 8 members in the Management Board as follow: (same as 2021)

1. Ms. Rompissri	Noichai boon	Managing Director
2. Mrs. Suwannee	Sujaritvanitchpong	Chief Financial Officer
3. Mr. Daroonwat	Noichai boon	Deputy Managing Director of Marketing
4. Mr. Paitoon	Intrarawisut	Deputy Managing Director of Factory
5. Mr. Surasak	Wachirapakorn	Senior Service and Sales Manager
6. Mr. Salaha	Oupraphat	Senior Sales Manager
7. Ms. Chompicha	Noichaiboon	Factory Manager
8. Ms. Hansa	Buranajan	Company Secretary

Duties and Responsibilities

The Management Board has the authority and responsibility for the management of the Company in regard to normal operations. By co-determining business policies, goals, operational plans, business strategy, budget, management structure to propose to the Board of Directors' meeting and/or the shareholders' meeting for approval before proceeding. Including checking and monitoring the Company's performance according to the policy. The current board of management has the authority as follows:

1. Report and present the business policies, Goals, operation plan, business strategies, and annual budgeting of the Company for the Board of Directors approval.

2. Control and monitor the Company's operation to go along with rules, regulations, business policies, business plan, and business strategies by the resolution of the Board of Directors and/or the resolution of the shareholders' meeting.

3. Determine and assign the Human Resource Management policies, IT Technology, expand the businesses, Personal Relations, and regulated the operation to meet the company's goal.

4. Determine and approve to bid in the project or be a contractor for the agencies or the person.

5. Approve the appoint, hire, dismiss, assign fees, compensation, bonus, and workfare for the employee and Management team, except for appoint, hire, transfer, and dismiss Internal Audit Department Manager and officer which need the approval of the Audit Committee. For the appointment, hire, transfer, and dismiss of Deputy Managing Director and higher positions and the advisors, the Remuneration Committee will be determine and pass the subject to the Board of Directors to approve. The Management Board is authorized to perform the financial transactions:

5.1 If conducted in the business plan or budget which is already approved, the Management Board can use in the line that already approved.

5.2 If not in concern with 5.1 above, the Management Board can approve the financial amount not over Baht 20 million and the amount mentioned is include with the financial transactions, capital expenditure and can approve for the financial obligations (Loan) in any kind of financial tools which not over Baht 20 million and the affiliate, when the transaction is finish, the Management Board need to report the conclusion to the Board of Director.

6. The Management Board has the power to authorize one or more than one person to perform an action for the Management Board which the action is under the control of the Management Board within the period of time and the Management Board can cancel or modify the authority or power.

7. Perform the tasks received from the Board of Directors.

In addition, the approval of the aforementioned items must not cause the Management Board or the authorized person from the Management Board able to approve items that he or someone may have conflicts, or may have other conflicts of interest (according to the Company's Articles of Association and The Securities and Exchange Commission Act) done with the Company or its subsidiaries, except for approval of transactions that are normal course of business with clear details.

In the case of any actions that have or may have an interest or stake in the management committee or persons who may have conflicts. The Management Committee shall propose that to the Audit Committee and the Board of Directors for approval. The directors and persons who may have conflict of interest shall not be entitled to vote at the meeting of the Board on such matters.

Board of Management Meeting

Board of Management Meetings are scheduled at least once a month which has been defined and notified in advance. The Board of Director had opinion that each management committee should not focus on just the time to attend the meetings. But should include sharing of opinions, advice, experience, and relationships in order to increase the benefits for the business of the Company. In 2022, there were a total of 34 meetings.

Succession Plan

In regard to top management succession planning, the Board of Directors has assigned Remuneration and Nomination Committee to set up criteria and procedures for the selection of qualified candidates for top management positions. It is required that such plan be annually reviewed and the results thereof be reported to the Board of Directors.

In 2022, Human Resources Department has prepared a succession plan for executives, continuing from the previous year, to present to the Nomination and Remuneration Committee for consideration of suitability before presenting to the Board of Directors.

The Company continuously develops the executives to have qualifications and to replace senior executives who will retire in the future by setting the succession plan for various positions as follows:

- Managing Director
- Deputy Managing Director

Appointment and Removal of Managing Director

The appointment of Managing Director, which is the Company's top management position, is made by the Nomination and Remuneration Committee who has authority to define criteria and methods for recruiting the qualified persons with ideal knowledge, abilities and experiences and without the restrictions as defined by the Standard Qualifications for Directors and Officials of State Enterprises Act B.E. 2518 (1975) and the amendment and other related laws to take the position of President. The names of the nominee will be proposed to the Board of Directors for further consideration. Including removal with a majority vote of the Board of Directors' meeting.

Managing Director of the Company, namely Miss Rompissri Noichai boon, was appointed by the Board of Directors' meeting on March 18, 2021. The scope of authority and duty is to manage the business operations of the Company to achieve the objectives and goals set by the Board of Directors.

Directorship in other companies of the Managing Director

The Board of Directors has set a policy limiting the number of directorships in other companies where Managing Director can hold office, Managing Director is able to hold no more than 5 positions in other listed companies by inform the Board of Director. The Company Secretary will disclose the information in Form 56-1 One Report. The Company prohibits Managing Director to holding the position of Managing Director, Manager or other position that has similar characteristics in the same business or being a competitor to the Company and subsidiaries. Exceptions would be joined as directors in government and the private organizations which established for public interest.

Managing Director's Performance Assessment

The Company executed Managing Director's Performance Assessment each year. The Nomination and Remuneration Committee is in charge of the annual performance assessment of the Managing Director. The Committee is to forward the assessment outcome to the Board for endorsement. Evaluate the performance of the Managing Director into two parts: financial success and management potential. In this regard, the assessment results of the Managing Director were in the criteria of excellent performance level.

Knowledge and Skill Development for the highest responsibility in finance and accounting (CFO) and the person supervising accounting.

As SEC and SET has defined the qualifications of the highest responsibility in finance and accounting (CFO) and the person supervising accounting, that required CFO and supervising accounting who has already taken up this position has to complete six hours of his/her continuing development course in accounting knowledge (refresh course) per year. The Company has complied with the above regulations as detailed below:

- **The highest responsibility in finance and accounting (CFO)**

The Company's CFO was Mrs. Suwannee Sujaritvanitchpong, Position: Chief Financial Officer. She has been appointed to the position on January 1, 2021.

She attended the training to prepare for accounting and finance (Orientation Course) according to the rules of the SEC Office, organized by the Capital Market Knowledge Development Center, the Stock Exchange of Thailand and the details are as follows:

Course name : CFO's Orientation for New IPOs (Class 5)
Training period : 12 hours

- **The person supervising accounting**

The person supervising accounting of the Company was Mrs.Somjit Phokabutr, Position: Accounting Manager. She has been appointed to the position since 2015 until now.

In 2022, She attended the training for continuously develop her knowledge of accounting standards, detailed as follow:

- "Update Accounting Standards for Bookkeepers 2022" organized by Dharmniti Seminar and Training Co., Ltd. for a period of 6 hours.
- "Planning and Improving Operational Processes for Quality Accounting" by Dharmniti Seminar and Training Co., Ltd. for a period of 6 hours.
- "Recording revenues and expenses affecting the calculation of net profit" by Dharmniti Seminar and Training Co., Ltd. for a period of 6 hours.

7.4.2 Remuneration policy for Executive Directors and Executives

Executive compensation policy is based on the Board of Directors and in accordance with the operating results of the Company. The Nomination and Remuneration Committee will consider the appropriate criteria and method of remuneration for top executives, both from the performance, which is directly proportional to the achievement of the company's strategic goals. As well as practices and standards of the same leading business groups under clear, transparent and fair rules which the salary increase rate and the annual bonus payment rate will be consistent with the results of the assessment of KPIs and the Company's annual performance.

Salary and Bonus

Executive compensation is based on duties, responsibilities, experience and skills, job performance and salary rates in the same industry and reviewed it annually.

Bonus is based on the achievement of goals according to the annual strategic plan and KPI assessment results and compared to remuneration in the same industry.

7.4.3 Total amount of the remunerations of Executives

The Company's management compose of 4 persons comprising Managing Director, Chief Financial Officer, Deputy Managing Director of Marketing, Deputy Managing Director of Factory by received remuneration as detailed below:

Year	Remuneration	Number	Amount (baht)
2020	Salary and Bonus	7	16,988,400
2021	Salary and Bonus	4	8,138,400
2022	Salary and Bonus	4	8,640,000

The provident fund of the Executives (only Managing Director)

Year	Remuneration	Number	Amount (baht)
2020	Provident fund	7	219,950
2021	Provident fund	1	71,574
2022	Provident fund	1	106,236

• Other Remuneration

For the Management team, in addition to salary compensation, bonuses and provident funds, there are other compensation such as car, fuel expense, and mobile expense.

7.5 Information of employees

The Company stresses the development of HR management system compatible with technological advancement. Employees are pivotal to increase competitiveness and drive the organization to sustainable growth.

As of December 31, 2022, the Company had a total number of 677 employees.

(Unit : person)

Department	2020	2021	2022
1. Managing Director Office	11	12	12
2. General Management	36	33	31
3. Financial and Accounting	29	30	30
4. Marketing and Corporate Communications	8	4	5
5. Sale Department	33	32	32
6. Service Department	136	127	126
7. Production Department	440	416	429
8. Internal Audit Department	3	2	2
9. Information Technology Department	6	7	8
Total	702	663	677

The remuneration of the employees

The remuneration to staff (Excluding the Managing Director and Senior Management) for the year 2020-2022 with details of the award;

Remuneration	2020	2021	2022
Monthly salary (baht)	211,845,343	184,292,250	188,427,840
Bonus (baht)	13,440,710	-	36,835,008
Provident Fund (baht)	4,951,245	6,124,642	6,339,595
Total	230,237,298	190,416,892	231,602,443

The Company sets the remuneration's employees bases on the short-term and long-term performance and strategy. The Consideration of salary increase of employees based on individual performance once a year by using Key Performance Indicators: KPIs were apply to manage employee performance evaluation, which would be accordingly reflected in their salary increases and benefits.

The Provident Fund

At present, there are employees of the Company participating in the provident fund which is managed by AIA Co., Ltd. of 609 persons or 89.96% of total employees in accordance with the Fund Act at the rate of 3% of the wages. However, the employees have the right to contribute 50% of the Company in the case of termination of membership after working with the Company for not less than 3 years and 100% in the case of working with the Company for at least 5 years.

The Fund engaged to investment with due regard for Environmental, Social, and Governance (ESG) factor and jointly with the companies sets a policy and assign them to invest in entitles with committed responsibility for all Stakeholders: shareholders, employees, customers, business partners and socialty. The Company defined CG criteria and apply its dicionion making process to ensure that the Fund makes the right investment in transparent business for the best benefit of fund members in the long term.

Other Remunerations

The Company has provided other welfare to employees in addition to salary, overtime and bonus such as giving the uniform to employees annually for orderliness, good image and to alleviate the burden on the cost of apparel, staff shuttle bus, donating money to help charitable for staff and members of their family.

The Company recognizes about the health of employees, therefore provided annual health check-up by creating a clear operating procedure according to the standards of the Ministry of Labor, including annual influenza vaccination for personnel.

In addition, as an incentive to employees who are willing to work, sacrifice, dedication and responsibility as well, the Company will grant a special award based on the annual performance evaluation.

Employee Development Policy

It is the Company's policy to increase the standard of quality and capabilities of its work force through its development and training programs and also to prepare for more competitive environment in the future. The Company has established an organization responsible particularly for employee development and training. Budget is appropriately and sufficiently allocated for development and training in accordance with objectives of each department. Thus, development and training schemes are determined as follows;

1. Internal Training: The Internal training will be carried out by inviting instructors with expertise from external domestic or overseas organizations, to consecutively provide knowledge to employee in each level every year. Training to improve the skills of the employees by the experts within the Company continuously every year.

2. External Training: The Company will let employees participate in training arranged by external organizations and institutes, regarding technical issues, administration, management, language and occupational safety health and environment to improve the skills of the employees.

3. Oversea Training: To enhance readiness and to provide employees with opportunities to learn new know-how and techniques, the Company will send staffs to attend meetings, seminars or training of international course.

In 2022, The Company has provided both internal and external training in total 5,507 hours or 8.81 hours/person/year, below the target in 12 hours/person/year due to the COVID-19 epidemic situation and no employees were sent to attend seminars abroad.

	2020	2021	2022
Training (hours/person/year)	7.30	6.04	8.81
Expense (baht)	478,241	281,736	586,290

Examples of training for employees at the factory, head office and online via Zoom in 2022.

Course for Management and Supervisor	Number of Trainees
• KPI goal setting and action plan preparation	90
• Electrical and communication systems for underground cables for development projects in capital cities and large cities	2
• High voltage substations: connection requirements, design, testing and implementation	2
• Energy storage System : ESS)	2
• Anzen Leader Training	9
• CFO's Orientation for New IPOs	1
• Leadership Development Program for Next Generation Leader	32



Course for Technicians	Number of Trainees
• Safety in electrical work and first aid	8
• Safety standards for working at height for service staffs	15
• Housing assembly of Cast Resin Transformer and installation of related equipment.	26



Production Staff Course	Number of Trainees
● Improve the skills of machine operators	2
● Review of crane work	75
● Proper and safe driving of a forklift	6
● Safe handling of chemicals	20
● High Place Work for Controller Training	3

General Course	Number of Trainees
● Work regulations (employee handbook), organization knowledge, products and occupational safety, health and working environment for new employees (total 40 times)	112
● Fire drill and escape for the year 2022	30
● Advanced Digital Marketing	3
● Technology and innovation for industrial and maintenance work.	3
● Investigation and analysis of occupational accidents or diseases	5

The Company has established rank and position determination regulation in order to clarify career path and criteria for performance appraisal increase employee morale in every level. The Company will motivate, encourage and support employee to obtain career competencies and opportunities to grow and progress through career path in correlation with their knowledge, competencies and experiences.

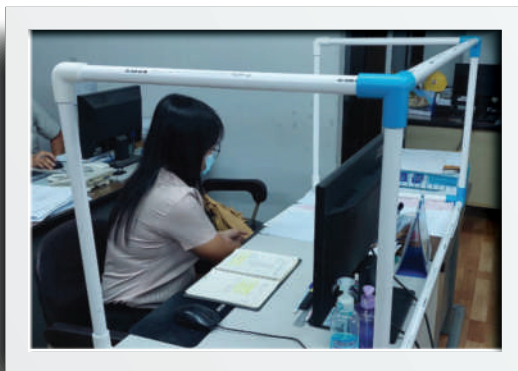
Fostering relationship between management and staff in search of common goal

The communication between management and staff comes in various forms. Needing to be aware of corporate business, obstacle and potential repercussions employee should be allowed to share their views and take part in business efficiency improvement. Through various channels such as

- The Company's quarterly journals to disseminate the news and information to all employees.
- The executives will meet the staff at the factory in Chachoengsao Province.
- A welfare committee has been set up consisting of representatives of employees from all departments together with the management to consider improving or solving problems related to welfare and employee benefits.
- Employee Satisfaction Survey by the Human Resources Department will allow employees to express their opinions or suggest their needs about work processes or welfare issues through a yearly questionnaire. In order for the Human Resources Department to summarize the opinions and suggestions presented to the management for acknowledgment and consideration as appropriate, then presented to the Board of Directors in the next order.

Labor Protection

The Company recognizes the importance of safety, occupational health and work environment of employees due to different job characteristics in each department. Therefore, the Committee on occupational safety, health and environment in the workplace was established by selecting the management and staff in various units together as directors in order to consider finding guidelines and proceeding correctly as required by law. Including supply of equipment and monitoring tools for convenient and maximum security to reduce accidents and hazards that may occur to the employees, such as setting up partitions for employees who are at risk of being in close contact with people infected with COVID-19 so that they can work safely and do not affect other employees, etc.



Responsible Political Involvement

The Company recognizes the importance of honest business operations, especially in political activities in all sectors; whether it is providing assistance or providing benefits that cause the power to control politics incorrectly. The Company has informed employees for acknowledgment and strict compliance.

Dispute in year 2022

- None -

7.6 Other significant information

The Company Secretary

The Board of Directors has appointed Miss Hansa Buranajan as a Company Secretary on January 1, 2021 replaced Miss Nuanchan Sirikul who retired to comply with the Securities and Exchange Act (No.4) B.E.2551.

The duties and responsibility of the Company Secretary

1. Preparing and keeping the following documents:
 - 1.1 A register of directors
 - 1.2 A notice calling directors' meeting, the minutes of the board of directors and an annual report of the Company
 - 1.3 A notice calling shareholders meeting and the minutes of the shareholders' meeting;
2. Keeping a report on conflict of interests, reported by a director or an executive.
3. Arrange the Board of Directors Meeting and Annual General Meeting of Shareholders.
4. Orientation and advising the new director.
5. Liaise with the regulatory agencies such as the Stock Exchange of Thailand.
6. Disclosure and information reporting to the regulatory agencies and public which comply with the law properly.
7. Operating any act that is abided by the Capital Market Supervisory Board and assigned by the Board of Directors.

The highest responsibility in finance and accounting (CFO)

The Company's CFO was Mrs. Suwannee Sujaritvanitchpong, position: Chief Financial Officer. she has been appointed to the position on January 1, 2021. (More profile detail appear in Executive Profile in Attachment 1)

The person supervising accounting

The person supervising accounting of the Company was Mrs. Somjit Phokabutr, position: Accounting Manager. She has been appointed to the position since 2015 until now. (More profile detail appear in Executive Profile in Attachment 1)

Head of Internal Audit

The Internal Audit Manager is by position assigned as Head of Internal Audit. Mr.Nuttavit Noisri, position: Internal Audit Division Manager is the present Head of Internal Audit. (More profile detail appear in 9. Internal Control and Connected Transactions and detail of head of Internal Audit profile in Attachment 3)

Investor Relation

Miss Wanngam Tipyawat was appoint Investor Relation and can be contacted at Tel : 02-719-8777, Email : wanngam@ekarat.co.th or www.ekarat.co.th

Compliance

Compliance is a part of the internal audit where the head of the internal audit unit is responsible for ensuring compliance with the Company's regulation or laws and assigned Investor Relations to be responsible for compliance according to the laws, rules and regulations of the SET and the SEC.

The remuneration of the auditor

- Audit fee

The Company paid audit fees to ANS Audit Co., Ltd., the auditor of the Company and its subsidiaries in the fiscal year 2022, in the total amount of 1,465,000 baht, consisting of the audit fee of the Company in the amount of 1,420,000 baht and the audit fee of 2 subsidiaries in the amount of 45,000 baht.

- Non-audit fee

- None -

8. Report on key operating results on corporate governance

8.1 Summary of duty performance of the Board of Directors in the past year

8.1.1 Selection, development and evaluation of duty performance of the Board of Directors

The Company has appointed the Nomination and Remuneration Committee to consider criteria and methods for recruiting qualified persons to serve as directors, which will be reviewed annually to be in line with the Company's strategy.

- Independent Director

The Company has criteria for selecting independent directors by considering the minimum qualifications in accordance with the regulations of the Securities and Exchange Commission. Also consider candidates with experience and ability to be able to provide opinions and suggestions that are beneficial to the operations of the company. Including be famous personalities who will enrich the image of the Company must not be beneficiary whether directly or indirectly with the Company, Related Companies, Subsidiaries and major shareholders. Including the freedom to express opinions freely, not under the control of the executive, major shareholders, related persons or close relatives of such persons.

The Company has 6 independent directors, representing 60% of the entire Board of Directors, namely Mr.Vichit Yamboonruang, Mr.Vinai Vittawasgarnvej, Mr.Wara Tongprasin, Mr.Aroon Sricharoon, Mr.Chattri Siripanichkorn and Mr.Thunya Siltorn.

The qualifications of Independent Directors as announced by the Capital Market Supervisory Board are as follows:

1. Must hold no more than 1 percent of the total outstanding voting shares of the Company, subsidiaries, associated companies, major shareholder or controlling person of the Company. Shareholding of the Independent Director includes shares held by persons related to that particular Director.

2. Is not or has never been a part of the management, staff, employee, consultant earning salary or controlling person of the Company, parent company, subsidiaries, associated companies or subsidiaries of the same level, major shareholder or controlling person of the Company unless the position has been terminated for over 2 years.

3. Is not related by blood or through legal bonding which includes father, mother, spouses, siblings, children, spouses of children, to other directors, management, major shareholder, controlling person of the Company or any person being nominated to the director, management or controlling position of the Company or its subsidiary.

4. Does not or never have business relationships with the Company, subsidiaries, associated companies, major shareholder or controlling person of the Company which may distract one's independent judgment. This also includes not having been a shareholder of significance or a controlling person of the entity having business relationship with the Company, parent company, subsidiaries, associated companies, major shareholder or controlling person of the Company unless the person's term has been terminated for at least 2 years.

5. Is not or has never been the auditor of the Company, subsidiaries, associated companies, major shareholder or controlling person of the Company, and is not a shareholder of significance, a controlling person or a partner of an audit firm where the auditor of the Company, parent company, subsidiaries, associated companies, major shareholder or controlling person of the Company is subject to, unless the position has been terminated for at least 2 years.

6. Is not or has never been a professional service provider that includes being a legal advisor or financial advisor receiving remuneration for over THB 2 million per annum from the Company, subsidiaries, associated companies, major shareholder or controlling person of the Company, and is not a shareholder of significance, a controlling person or a partner of a professional service provider of that type unless that position has been terminated for at least 2 years.

7. Is not an appointed director acting as the proxy of the Company's Board of Directors, major shareholder or shareholder as a related person to the major shareholder.

8. Must not operate or own a similar type of business that is a direct competitor to the Company or subsidiaries; is not a major partner in a limited partnership, a director with management authority, staff, employee, a consultant earning salary or holding more than 1 percent of total voting shares of other companies operating similar type of business and regarded as direct competitor to the Company or subsidiaries.

9. Have no other characteristics that would prevent the provision of independent point of view concerning the Company's operations.

Roles and Responsibility of Independent Director

1. Recommend essential and beneficial matters to the Company and minor shareholders to the Board.
2. Advocate roles and duties of the Board that should be performed.
3. Take other Board-assigned action provided that they do not compromise their independent.

Segregation of Chairman and Managing Director

The Chairman of the Board of Directors does not hold a management position but is an Independent Director and is not the same person holding the position of Managing Director. The Chairman of the Board has no relationship with other members of the Management. The Company has clearly separated the roles, duties and responsibilities of the Board of Directors and the management. The Company has written for the directors to perform their duties and evaluate the performance of the management effectively.

Selection of Directors and Chief Executives

Nomination of Directors

In the appointment of directors, the Nomination and Remuneration Committee has duty and responsibility for selecting and screening qualified persons as prescribed in the Company's Articles of Association with experience, knowledge and abilities that are beneficial to the Company based on the Board Skill Matrix. Including suitable for nature of business, future plans, structure and composition of the Board of Directors. The Company provides an opportunity for shareholders to participate in the nomination of qualified under the terms and conditions set out in the November 1 - 30, 2021 by considering the list of suitable persons from:

- (1) The person who is the former director who has expired to propose to the next position.
- (2) The shareholders' nomination (if any);
- (3) The nomination by the Chairman of the Board, Directors, etc;
- (4) The recruitment of the knowledgeable, skilful and experienced persons ideal for the Company.

The qualifications of the Directors being recruited as follow:

- (1) The qualified according to the Company's regulations, have knowledge and understanding of the Company's business, assigns the strategies and policies, and supervises for the effective practice of the strategies,
- (2) The recruited persons would be able to perform the director's duties with prudence, integrity, morals and responsibilities, and make decisions based on fact and logic,
- (3) No restrictions as defined by the other related laws, rules and regulations,
- (4) The independence of each Independent Director,
- (5) The director's ability to make time dedication: considering from the number of companies in which the director is holding a position, for example, so that they have enough time to join the Board Meeting regularly and are able to control and monitor the Company's operations.

The Nomination and Remuneration Committee considers and presents the list of candidates to the Board of Directors in order to propose to the shareholders' meeting for consideration and appointment.

The directors are appointed by the majority vote of the AGM based on the following criteria and methods:

1. One shareholder shall have one vote for each share;
2. Each shareholder shall exercise all the votes he or she has to elect one or several person(s) to be directors but cannot divide the votes for any person to any extent;
3. Persons receiving the most votes, in descending order, are those who are elected directors, to the number of directors who are to be elected. If there is a tie in the last to be elected and this would exceed the said number of directors, lots shall be drawn to meet the required number.

At every AGM, at least one-third or the closest number to one-third of the directors must retire. The directors to retire for the first year and second year following the Company registration shall be selected by means of the lucky draw. For the later years, the directors being at term for the longest period shall retire while the duly-retired directors can be re-elected into the position.

In the case that the director's positions are vacant from the other causes apart from the duly retirement when the term ends, the Board of Directors can elect any qualified persons having no restrictions according to the law to be the replacement directors in the next Board, except that the director's term remains less than 2 months, then the new replacement director shall be in the position for as long as the remaining period of that retired one in such term.

The AGM might resolve for any Director to retire before the term ends with the majority vote of at least three-fourths of all shareholders attending the meeting and holding the rights to vote and the combined share amount of not less than half of the share amount held by the shareholders attending the meeting and holding the rights to vote in such meeting.

In addition, the directors vacate office for these reasons.

- (1) died
- (2) Resign
- (3) Incomplete properties or having prohibited characteristics under the law on public limited companies
- (4) The shareholders' meeting passed a resolution to remove the director from office prior to the expiration of his/her term with a vote of not less than half of the number of shares by the shareholders attending the meeting and having the right to vote.
- (5) The court order to vacate office

In the case where a director position is vacant for other reasons than retirement by rotation, the Board shall elect a person who has qualifications and does not have any prohibited characteristics under the law to replace it at the next Board Meeting. Unless the remaining term of the Board of Directors is less than 2 months, the person who is appointed as a replacement director will remain in office for the remaining term.

In the event that the Board of Directors vacates office as a whole, to remain in the position to continue the company's business as necessary until the new committee takes over Unless the court orders otherwise, in the case of (5) and must hold a shareholders' meeting to elect a new committee within 1 month from the date of retirement The notice of the meeting must be sent to shareholders at least 14 days prior to the meeting.

In the event that the director's position becomes vacant and less than a quorum, the remaining directors may act on behalf of the Board for holding the shareholders' meeting to elect new directors only.

The meeting under the first paragraph shall be held within one month from the date that the number of members remaining less than the quorum and the person who is appointed as replacement director will hold office only for the remaining term of that director.

Nomination of Managing Director / Succession Planning

In regard to top management succession planning, The Company had set the succession plan to select and develop successors to create and develop potential personnel within the organization to become senior executives in the future through the recruitment process and develop continuously. By evaluating the level of readiness for positions using various tools, including assessing with all-around people to make Individual Development Plans (IDP), developing skills and experience for higher positions by delegating Jobs and training.

The appointment of Managing Director, which is the Company's top management position, is made by the Nomination and Remuneration Committee who has authority to define criteria and methods for recruiting the qualified persons with ideal knowledge, abilities and experiences and without the restrictions as defined by the Standard Qualifications for Directors and Officials of State Enterprises Act B.E. 2518 (1975) and the amendment and other related laws to take the position of President. The names of the nominee will be proposed to the Board of Directors for further consideration.

Knowledge and Skill Development for Director

The Board of Directors and Executives are encouraged to attend training courses, seminars and activities organized by the IOD, the SET, and the SEC in order to continuously enhance their knowledge and exchange experience in various fields related to the roles of Directors and Subcommittees.

In 2022, The Board of Directors did not attend the IOD training course.

Other training 2022

- Code of Ethics Training Program for Professional Accountants (only for certified public accountants) held by the Federation of Accounting Professions under the royal patronage.
- Course on revenue recognition and lease agreements with PAEs and NPAEs organized by Bangkok Suvarnabhumi University.
- Be aware of taxation and comply with financial reporting standards (TFRS 15 & TFRS for NPAEs) organized by Phureepark Co., Ltd.

Performance Evaluation of the Board of Directors

The Company has determined that the performance of the Board should be evaluated at least once a year, divided into 2 different assessments are as follows:

1. Board Evaluation
2. Self Assessment

The Board of Director jointly evaluate their performance and seek rectification and improvement measures. The Company has properly reviewed its Board self-assessment guidelines and criteria to be consistent with those of the Stock Exchange of Thailand comprised three sections:

1. Board structure and qualifications
2. Board meeting
3. Roles, duties and responsibilities of the Board

The Company Secretary send the Board members the self-assessment form to evaluate their performance. The evaluation result is reported to the Company's Board of Directors in the next time. Evaluation Criteria, the percentage of the total score for each item is greater than 85% = excellent, more than 75% = very good, more than 65% = good, more than 50% = fair, less than 50% = need improvement. The results of the assessment can be summarized as follows:

Summarize scores of performance assessment results of the Board of Directors

All criteria points have excellent average score, with a strong agreement or an excellent performance in that regard, reflecting the Board's performance of duties according to the good corporate governance principles at a well to excellent level.

Summary of performance assessment scores of individual committees

All criteria points have excellent average score, with a strong agreement or an excellent performance in that regard.

Orientation of New Directors

The Company holds an orientation for new directors by presenting the Company's information, aviation business, shareholding structure, related rules and regulations including privileges of the directors, to allow the directors to receive related information beneficial for management. In addition, the directors are encouraged to attend training courses organized by the Thai Institute of Directors (IOD) to develop, support and promote the performance of the Board of Directors.

In 2022, the Company did not appoint new directors.

8.1.2 Meeting Attendance and Dividual Directors' Compensation

The Board of Director Meeting

1. The meeting of the Board of Directors shall be scheduled in advance and at least once every quarter at the head office or branches or nearby provinces.
2. The director shall attend at least 75% of all the board meetings held during the year.
3. The quorum of not less than two-thirds of all Board members is eligible to vote at the meeting to pass a resolution.

4. Invitation, details of the meeting and supporting documents shall be sent to each director at least 7 days in advance of the meeting date.

5. The Company Secretary is responsible for preparing the minutes of meeting to be submitted to the Board of Directors for approval in the first agenda of the next meeting and shall be certified by Chairman of the Board.

In 2022, the Company held a total of 11 Board of Directors' meetings and the 2022 Annual General Meeting of Shareholders without calling for an Extraordinary General Meeting of Shareholders. Details of meeting attendance by the individual directors are as tabulated below:

Name	Position	The Meeting		
		Board of Director (11 times)	Non-Executive BOD (1 time)	AGM (1 time)
Mr.Vichit Yamboonruang	Chairman of the Board Independent Director	11 / 11	1 / 1	1 / 1
Mr.Vinai Vittawasgarnvej	Independent Director	11 / 11	1 / 1	1 / 1
Mr.Wara Tongprasin	Independent Director	11 / 11	1 / 1	1 / 1
Mr.Aroon Sricharoon	Independent Director	11 / 11	1 / 1	1 / 1
Mr.Chattri Siripanichkorn	Independent Director	11 / 11	1 / 1	1 / 1
Mr.Thunya Siltorn	Independent Director	11 / 11	1 / 1	1 / 1
Ms.Urawee Kanokpruk	Director	11 / 11	1 / 1	1 / 1
Mr.Danucha Noichaiboon	Director	11 / 11	-	1 / 1
Mr.Wiwat Sangtian	Director	11 / 11	1 / 1	1 / 1
Ms.Rompissri Noichaiboon	Director	11 / 11	-	1 / 1

Non-Executive Board of Directors

In 2022, there was a meeting of Non-Executive Board of Directors without the management on November 17, 2022 to consider the renewal of the employment contract for employees aged 60 years and over and the restructuring of the organization.

Remuneration of the Board of Directors

The Company had set a policy for remuneration for directors and executives fairly and reasonably. The Nomination and Remuneration Committee will consider and scrutinize as appropriate for each position. In accordance with the financial status of the Company and compared with other companies in the same business group. The remuneration was allowance and bonus which has already approved by the shareholder's meeting every year, the same rate as the year 2021, details are as follows;

Directors' remuneration

1. Directors' remuneration

1.1 Monthly Allowance

- Chairman of the Board Baht 44,000 per month
- Directors Baht 22,000 per month
- Chairman of the Audit Committee Baht 20,000 per month
- Audit Committees Baht 10,000 per month

1.2 Allowance for each meeting

- Chairman of Nomination and Remuneration Committee Baht 15,000 per meeting
- Nomination and Remuneration Committees Baht 10,000 per meeting
- Chairman of the Risk Management Committee Baht 15,000 per meeting
- Risk Management Committees (Director) Baht 10,000 per meeting
- Risk Management Committees (Non-Director) Baht 5,000 per meeting

2. Bonus

The Company determine the remuneration of the Board of Director as bonus in reasonable rate on the performance of each year at maximum limit of Baht 2,000,000 for the entire Board same rate as the last year.

The remuneration for Directors in 2022

Name	Remuneration's Director (Baht)					Total
	Board of Director	Audit Committees	Nomination and Remuneration Committees	Risk Management Committees	Bonus	
Mr.Vichit Yamboonruang	528,000	-	-	-	320,000	848,000
Mr.Vinai Vittawasgarnvej	264,000	240,000	-	-	210,000	714,000
Mr.Wara Tongprasin	264,000	120,000	60,000	-	210,000	654,000
Mr.Aroon Sricharoon	264,000	120,000	-	-	210,000	594,000
Mr.Chattri Siripanichkorn	264,000	-	40,000	-	210,000	514,000
Mr.Thunya Siltorn	264,000	-	-	75,000	210,000	549,000
Ms.Urawee Kanokpruk	264,000	-	40,000	-	210,000	514,000
Mr.Danucha Noichaiboon	264,000	-	40,000	-	210,000	514,000
Mr.Wiwat Sangtian	264,000	-	-	-	210,000	474,000
Ms.Rompissri Noichaiboon*	-	-	-	50,000	-	50,000

Remark - The executives did not receive any remuneration for holding the position of director.

3. Other Remuneration

For the Board of Directors have only compensation from meeting allowance and bonus without any additional compensation.

8.1.3 Supervision of subsidiaries and associated companies

To supervise the operations of Subsidiaries, the Company as a shareholder has sent representatives to supervise the interests as well as coordinated cooperation between Subsidiaries. The Company's representatives are those who have been approved by the Management and the Executive Board or the Board of Directors to take positions as Directors in two Subsidiaries. The representatives are either members of the Company's Board of directors or executive management total 3 persons who have knowledge and understanding of the business and can determine policies that are crucial to business operation, provide management guidelines that will benefit to the Company. Enhance knowledge and understanding of governance operations, risk management and internal control, governance of compliance with laws and corporate regulations, supervise the disclosure of financial position information and operating results, conducting transactions between the Company and connected persons, acquisition or disposition of assets or any other important transactions to ensure completeness and compliance with the law.

In a major policy, the representatives of the Company obtain the policy of the Company before offering an opinion at the meeting of Subsidiaries, such as allocation of profit, dividend or submission of state revenue, the election of replaced Directors who expired from term of office, the increase - decrease capital, termination - merger. The Company's representative must report information within the given time to the management and the Board of directors.

In addition, the Company has arranged analysis, monitoring, and report on the performance of Subsidiaries, on a quarterly or yearly basis to allow the management and the Board of Directors to use the information in making decisions and determining direction and guidance to regulate investment Subsidiaries.

8.1.4 Monitoring of compliance with the corporate governance policy and guidelines

(1) Prevention of conflicts of interest

According to the Company's business ethics, requires the Board of Directors, Executives and employees to disclose information related to their interests or connections which may have conflicts of interest with the Company. Such persons must notify the person responsible for such matters and not participate in the transaction. If employees do not comply, they will be in the nature of disciplinary offenses by consider the punishment according to the procedure and the severity of the act.

In transactions that may have conflicts of interest, the Board will carefully consider the suitability by taking into account the interests of the Company as the primary. There are transactions that may have conflicts of interest, the Company will propose to the Audit Committee for consideration and opinions on such items and presented to the Board for further consideration. The interested directors or executives will not be involved in the approval of such transactions.

In 2022, the Internal Audit Department examined the implementation of the guidelines and the disclosure of conflicts of interest. There was no misconduct in relation to conflicts of interest.

(2) Use of inside information to seek benefits

The Company has the policies on insider information, prescribing that no Director, Executive and employee who knows or possesses inside information shall trade securities by resorting to inside information, which is material non-public information, in such a manner that it is likely to have an effect on the price or value of securities, and has known or possessed while holding a position or the line of work responsible for or capable of accessing inside information. Any actions, either for the benefit of oneself or other persons or to pass on such information to others, are prohibited. No Director, Executive and employee, and who has known or possessed inside information, shall trade securities during the period of 1 month prior to and 24 hours post the disclosure of the Company's financial statements. In 2022, the Company has taken the following actions;

- Disseminating policies and guidelines through the Company's website and the internet system, which can be easily accessed throughout the organization. Along with posting an announcement to publicize the Black Out Period in advance of the announcement of quarterly and annual financial statements or disclosure of information that affects the price of the Company's securities.

- Clarify and understand the type of information that will affect the price of securities for everyone to know in order to comply with the rules correctly.

In 2022, It was not found the Directors, Executives or employees had trading in securities on the silence period. There was no comparison, fines or civil action from the SEC or SET regarding insider trading. In addition, the Company requires the directors and the first four executives to notify their intention to trade securities to the Company Secretary at least 1 business day and report their securities trading to the SEC within 3 business days from the trading date. The Company Secretary will report to the Board of Directors in the next meeting.

In 2022, Directors and Executives traded company shares total of 4 times in compliance with the Company's policy and reported trading to the SEC.

(3) Anti-corruption action

The Company has communicated policies and guidelines to employees at all levels. Including all related parties of the company. In the year 2022, the Company conducted the following activities;

- Publication and guidelines via the Company's website and the internet system within the Company which is easily accessible and throughout the organization along with closing the announcement to publicize to employees.

- All new employee orientation must be trained and understand the content of ethics in business operations, Work regulations, policies and guidelines for anti-corruption, penalties in case of violating the regulations of the Anti-Corruption Policy to prevent corruption from occurring within the organization. The employees have been trained at the rate of 100%.

- The Company conducted a survey and assessed the risks of corruption that may occur in the organization in order to acknowledge the possibility of corruption in the organization by the Internal Audit department through the assessment of internal control and proposing preventive measures. The Company will use the survey results to review the guidelines, internal control system and work processes that may have gaps. Then, improve the preventive and announcements for the implementation of the entire organization, such as rules of compliance trade competition connected transactions, etc. The Audit Committee will review the completeness and sufficiency of the preventive process annually.

In 2022, the Company did not find any issues related to fraud and corruption, and penalties or fines due to operations and violations of business ethics.

The Company gives importance to all stakeholders by listening to comments, suggestions for mutual benefits and provide opportunities for stakeholders to complain in the event that the stakeholders. Do not receive fairness or can report clues if witnessing behavior that indicates fraud corruption of individuals in the Company. The stakeholders can contact through various channels.

The Company has disclosed details of policies and actions to prevent any involvement with corruption on the Company's website <https://ekarat.co.th> on the topic of Corporate Governance.

(4) Whistleblowing

The Company has established a policy and guideline for whistle-blowing policy. In order to support and pay attention to all stakeholders, whether they are internal or external personnel. Third parties can report clues in cases of corruption or misconduct in business ethics or related regulations through the channels provided by the Company, via E-mail or telephone in order to help improve, correct or operate to be more accurate, appropriate, transparent and effective in business operations. The Audit Committee, which is independent of the management, will be consider and the Internal Audit Department is responsible for screening such clues and complaints.

The Company gives importance to all stakeholders by listening to comments, suggestions for mutual benefits and provide opportunities for stakeholders to complain in the event that the stakeholders. Do not receive fairness or can report clues if witnessing behavior that indicates fraud corruption of individuals in the Company. The stakeholders can contact through various channels as follows;

1. By E-mail : nuttavit@ekarat.co.th or hansabur@ekarat.co.th

2. Letter to the Chairman of Audit Committee / the Board of Directors / Company Secretary by sending to Ekarat Engineering PCL., 9/291 UM Tower, 28th Floor, Ramkhamhaeng Road, Suan Luang Subdistrict, Suan Luang District, Bangkok 10250

Procedures when receiving whistleblowing or complaints

The Company will investigate your complaints and suggestions and will contact you back as soon as possible by assigning the Internal Audit Department to gather relevant facts and consider screening information received from whistleblowers. In the event that it is found to be factual, the Internal Audit Department will present to the Audit Committee and the Board of Directors for acknowledgment and consideration of guidelines for conducting investigations and solutions, along with imposing penalties.

Measures to protect whistleblowers or complainants

The Company places importance on confidential information to protect and protect whistleblowers. There is no disclosure of personal information that can identify the informer and there are measures to protect the whistleblower or complainant in the event of trouble, damage or insecurity.

In 2022, the Company has not received any whistleblowing or complaints related to corruption or breach of business ethics or related regulations of the Company either from internal personnel or outsiders.

Violation of regulations of regulators

In the past year, the Company has not committed any offenses or violations of the rules and regulations of the SEC or the Stock Exchange of Thailand.



Mr. Vinai Vittawasgarnvej
Chairman of Audit Committee

8.2 Report on the results of duty performance of the Audit Committee in the past year

As of December 31, 2022, the Audit Committee consists of 3 independent directors. The Company regularly holds the Audit Committee meetings before the Board of Directors' meetings at least 4 times each year on a quarterly basis which has been set and notified in advance. From January 1, 2022 - December 31, 2022, there were 7 meetings of the Audit Committee, with details of meeting attendance as follows:

- | | | |
|------------------------------|-----------|------------------------------|
| 1. Mr. Vinai Vittawasgarnvej | Chairman | Attended the meeting 7 times |
| 2. Mr. Wara Tongprasin | Committee | Attended the meeting 7 times |
| 3. Mr. Aroon Sricharoon | Committee | Attended the meeting 7 times |

The Audit Committee members were not the executive or staff or related person with the Company. The Audit Committee carries out its duties in accordance with the scope of authority and responsibilities approved by the Board of Directors and as required by the Audit Committee Charter, in line with the regulations stipulated by the Office of the Securities and Exchange Commission (the "SEC") in verifying the accuracy of the financial reports, the adequacy and the effectiveness of both the internal control and the risk management systems, the Company's compliance with relevant rules, regulations and applicable laws, including the oversight of the work the Office of Internal Audit.

The Audit Committee has invited the management and/or the company's auditors to attend the meeting for discuss or inform the board as the agenda required. The Audit Committee's meeting considered the subjects as stipulated duties as follows:

Verification of financial reports

The Audit Committee verified the quarterly and the annual separated and consolidated financial statements for the fiscal year 2022. They also verified the information reviewed and audited by the external auditors as disclosed in notes to the financial statements. At the Audit Committee Meetings, the Committee together with the Company's management and the external auditors considered the estimates, the discretion in accounting issues and significant audit findings as shown in the report of the external auditors.

Verification of connected transactions, related party transactions or transactions that might cause conflicts of interest

The Audit Committee quarterly verified, oversaw and provided opinions on connected transactions, related party transactions or the transactions that might cause conflicts of interest of the Company and its subsidiaries based on the principles of due care, reasonableness, the benefits of the Company's stakeholders and sufficient information disclosure as required by normal business practice. The Committee is of the opinion that these transactions were reasonable and transparent; in addition, they were conducted for the optimum benefit of the Company and accurately disclosed in due time.

Nomination of the Company's auditors to propose for appointment and consideration on the audit fee for the Year 2023

The Audit Committee considered selecting and nominating external auditors for the Company by principally taking into account their audit knowledge, expertise, experiences, creditability, independence and work quality as well as the appropriateness of the audit fee. For the year 2023, the Committee resolved to approve nominating the auditors from ANS Audit Company Limited for the Board of Directors' consideration to further propose for the shareholders' meeting's approval to appoint them as the Company's auditors along with the fixing of the audit fee thereof.

Verification of internal control system

The Audit Committee verified the effectiveness and the adequacy of the Company's internal control system by considering the audit report that the Internal Audit Department has reviewed and assessed whether its' sufficiently concise. Comply with established regulations and guidelines, including information technology controls. The Committee provided recommendations and continually monitored significant corrective actions in order to ensure that the Company's work policies as well as work processes were in conformity with the Corporate Governance Code (CG Code) and the internal control was adequate and appropriate.

Supervision of internal audit

The Audit Committee verified the Company's operation to be in compliance with the Securities and Exchange Act, the rules and the regulations stipulated by the SEC and relevant laws. They also acknowledged changes in the rules and regulations that might affect the Company's business operation.

Verification of compliance with applicable laws, relevant rules and regulations

The Audit Committee and the management quarterly conducted the verification of the efficiency and the appropriateness of the Company's risk management processes, starting from risk management policy, risk management plans and means to cope with the situations that might affect the operating results of the Company with the management regularly every quarter.

The Audit Committee independently performed the duties assigned by the Board of Directors according to the specified plan by using knowledge, ability and careful caution. In summary, the Audit Committee is of the opinion that, the Company's financial statements were prepared accurately in compliance with both the generally accepted financial reporting standards and accounting principles; the entering into the connected transaction was reasonable and for the optimum benefit of the Company; the internal control and risk management systems were adequate and effective. Furthermore, in view of the Committee, the Company's operations were in compliance with the applicable laws and relevant regulations, in line with its good CG Code. No significant shortcomings were found.

Mr. Wara Tongprasin

Chairman of Nomination and Remuneration Committee



8.3 Summary of the results of duty performance of other Sub-committees

8.3.1 Report of the Nomination and Remuneration Committee

At December 31, 2022, the Nomination and Remuneration Committee consists of 4 directors which are 2 independent directors. From January 1, 2022 - December 31, 2022, there were 4 meetings of the Nomination and Remuneration Committee, with details of meeting attendance as follows:

1. Mr. Wara Tongprasin	Chairman Attended the meeting 4 times
2. Ms. Urawee Kanokpruk	Committee Attended the meeting 4 times
3. Mr. Danucha Noichaiboon	Committee Attended the meeting 4 times
4. Mr. Chatri Siripanichkorn	Committee Attended the meeting 4 times

The Nomination and Remuneration Committee has duties and responsibilities assigned by the Board of Directors, summary of key performance duties are as follows:

Nomination of director and management

- Nominated directors to replace those who were due to retired by rotation, based on various profession with suitable qualifications under applicable law and regulation, the Company's Articles of Association and the corporate governance code. Nominated candidates must be duly competent, skillful, diversity and composition of specialized knowledge that is required or absent follow the Board Skill Matrix. The names of qualified candidates were tables for the Board concurrence for appointment by the AGM.

In 2022, The Company provides an opportunity for shareholders to nominate a list of persons who are qualified to be considered for election as directors in advance according to the rules prescribed. No shareholder proposed any person to be considered for election as director.

- Nominated directors to replace those resigning during the year. The Committee carefully tabled qualified name along with their profiles to the Board for appointment.

- Nominated directors to specific Board Subcommittees, based on their composition, qualification, expertise, competencies related skill and suitability for the Board's appointment.

In 2022, the ESG committee was appointed, which consisted of 1 independent director and 5 executives of the Company and was approved by the Board of Directors.

- Nominated the executives to replace those resigning or retired, based on the eligibility of the specified Session Plan along with yearly performance by KPI guidelines as a tool to assess performance. Preparing for successor both of knowledge and leadership.

Remuneration

- Considered the 2022 remuneration of the Board and its subcommittee, based on the Company's performance result, guideline of the lists company of the same industry, along with Board's responsibilities and outcomes of Board assessment. The remuneration was tables for the Board's concurrence and subsequent for purpose to approval at the 2022 AGM.

- Review Managing Director's remuneration to suit the current situation and in accordance with the Company's performance by comparing with the compensation rate of other operators in the same industry.

- Review the operation of the Nomination and Remuneration Committee to be complete, appropriate to the current situation and in accordance with the principles of corporate governance.

For transparency, the Company disclosed the pay off all directors and subcommittee members together with the managements' pay in this 56-1 One Report.



Mr. Thunya Siltorn

Chairman of Risk Management Committee



8.3.2 Report of the Risk Management Committee

The Company values corporate risk management that may affect to the Company's business operations all the risk factors from inside and outside the corporation. Therefore, must be prepared to deal with various risks to reduce the impact that will occur including pushing to achieve the set goals.

At December 31, 2022, the Risk Management Committee consists of 8 directors. The Company organizes the Risk Management Committee meetings regularly before the Board of Directors' meetings at least twice a year. From January 1, 2022 - December 31, 2022, held a total of 4 meeting as highlighted below:

1. Mr.Thunya	Siltorn	Chairman	Attended the meeting 4 times
2. Ms.Rompissri	Noichaiboon	Committee	Attended the meeting 4 times
3. Mrs.Suwannee	Sujaritvanitchpong	Committee	Attended the meeting 4 times
4. Mr.Daroonwat	Noichaiboon	Committee	Attended the meeting 4 times
5. Mr.Paitoon	Intrarawisut	Committee	Attended the meeting 4 times
6. Mr.Surasak	Wachirapakorn	Committee	Attended the meeting 4 times
7. Mrs.Supaporn	Chansuroj	Committee	Attended the meeting 4 times
8. Mr.Sompong	Rom-rok	Committee	Attended the meeting 4 times

The Risk Management Committee has duties and responsibilities assigned by the Board of Directors, summary of key performance duties are as follows:

- **Reviewing the adequacy of the overall risk management system of the Company.**

Risk Management Committee has considered an overview of the efficiency of the current risk management system to reduce the impact of uncertainty in the business environment, build confidence and credibility to shareholders and stakeholders that can support all risks covering all aspects.

- **Assess and analyze risks that may occur in the future and affect the Company's business operations.**

In 2022, the Risk Management Committee jointly considered new risk factors in various aspects both inside and outside the organization that may occur in the future, which may or may not be able to control and constantly changing. Therefore, need to prepare a supporting action plan in order to reduce the impact of various risks. It has been proposed to the Board of Directors for acknowledgment and approval continuously.

- **Closely monitored corporate risk management in 2022**

Risk Management Committee has monitored the performance according to the risk factor management plan in the past year whether it meets the specified goals or not. Analyze the causes and obstacles to determine solutions and prevent the organization from being damaged by those risks.

Summary of meeting attendance of the Board of Directors and subcommittees in 2022

Directors	Number of meeting attendance / Number of meetings			
	BOM	AC	NRC	RMC
Mr.Vinai Vittawasgarnvej		7 / 7		
Mr.Wara Tongprasin		7 / 7	4 / 4	
Mr.Aroon Sricharoon		7 / 7		
Mr.Chattri Siripanichkorn			4 / 4	
Mr.Thunya Siltorn				4 / 4
Ms.Urawee Kanokpruk			4 / 4	
Mr.Danucha Noichaiboon			4 / 4	
Ms.Rompissri Noichaiboon	35 / 35			4 / 4
Mrs.Suwannee Sujaritvanitchpong	35 / 35			4 / 4
Mr.Daroonwat Noichaiboon	35 / 35			4 / 4
Mr.Paitoon Intrarawisut	35 / 35			4 / 4
Mr.Surasak Wachirapakorn	35 / 35			4 / 4
Mrs.Supaporn Chansuroj				4 / 4
Mr.Sompong Rom-rok				4 / 4

Remark : BOM = Board of Management, AC = Audit Committee, NRC = Nomination and Remuneration Committee,
RMC = Risk Management Committee

In 2022, there was no ESG committee meeting as it was just established in December 2022.

9. Internal control and related party transactions

9.1 Internal Control

The Company places importance on continuous internal control and risk management. The Board of Directors has set up and assigned the Audit Committee to be responsible for reviewing adequacy and appropriateness of internal control and risk management. By discharge of duty in compliance with the applicable laws, notifications, and regulations.

At the Board of Directors' meeting No.2/2023 on 27 February 2023, all 3 audit committees attended. The Board of Directors evaluated the internal control system by asking information from Head of Internal Audit and Internal Control System Assessment Results, prepared by Internal Audit together with the management in accordance with the framework of internal control practices of the The Committee of Sponsoring Organizations of the Treadway Commission (COSO) by following the form of the SEC's internal control system sufficiency assessment form before submitting to the Board of Directors for approval. To increase confidence in the internal control system and operating under the principles of good corporate governance. In 2022, the Board approved the hiring of external auditors from A.M.T Solutions Co., Ltd. continued from 2021, responsible for verifying the performance of all departments and evaluating the Company's internal control system. The report from A.M.T are no significant deficiencies in the internal control system that will affect its' operations. Including the Company's auditor, ANS Audit Company Limited, reported that there were no material flaws and no special remarks regarding the financial reports and internal control.

The Board regards internal control as adequate and suitable for its business, environment and no significant deficiencies. The results of the internal control assessment for the past year are summarized as follows:

1. Control within organization

- The Company is well aware of its corporate responsibility for the society as a whole, by ensuring its directors, executives and employees conduct ethical business without seeking personal benefits for themselves or others, avoiding conflict of interest, and refraining from the happening of corruption in their responsible works. A proper disciplinary procedure is posed in case of breaching the Company's regulations, disseminated to all executives and employees.

- The Company has defined the roles of the Board of Directors and the Management in Business Etc. The Board of Directors has assigned the Board of Management to undertake business administration on its behalf, to determine policies, the organization structure and targets on business administration.

- The Company has established nomination process to recruit personnel with required knowledge, skills, expertise and experience, for staff and executive levels. It has a process in place for performance evaluation and salary increment. The other remuneration and benefits are made available as appropriate to employees at all levels without discrimination, Promote the development of employee potential and has also worked out a succession plan.

- The Company has an independent work unit handling internal audit and following up on other work units' operations in terms of internal control, risk management and compliance with applicable laws. Such internal audit unit shall implement in line with the annual audit plan, and shall report the audit result to both the Board of Management and the Audit Committee for acknowledgement, as well as comments and recommendation for the management's improvement and remedial action accordingly.

- The Audit Committee shall perform duties with independence in the scope of power and duties prescribed in the Audit Committee Charter. It has reviewed financial reports, risk management, internal control and audit systems, proposed appointment of external auditor and auditor remuneration and connected transactions or transactions that may have conflict of interest. Results of such review by the Audit Committee are also proposed to the meeting of the Board of Directors for acknowledgement and consideration on a quarterly basis and published in the Audit Committee's annual report.

2. Risk assessment

- The Company had analysis various risk factors in external factors, for example, the competition of transformer market, economic and politics, disaster, epidemic and internal factor are raw material volatility, production, information technology, the management of inventory etc. Risk Management Committee reviewed risk identification and risk level assessment, and examined risk management to ensure efficiency and suitability with the organization, closely followed up on risk management performance, and reported risk management activities of all departments as the significant agenda items to the meetings of the Audit Committee and the Board of Directors for acknowledgment and consideration.

3. Control activities

- The Company has put in place written about policies, corporate rules and operation manual to control operations in financial transactions, procurement, production, quality control, sales of goods and general administration with scope of power, duties, responsibilities and approval amount limit for each level and request for budget spending. The management will communicate them to staff members for further translation into practice. The operation monitoring system is in place with reporting at meetings held at all levels on a weekly, monthly and quarterly. If found an error, will correct immediately. In addition, the Company ensures the establishment, review and improvement of policy and regulatory manuals to suit the situation.

- The Company has appointed representatives as directors in associated companies to follow up operations of such companies

- The Company Secretary has been assigned to keep and regularly update information on the significant shareholder, directors, executives, and connected persons, to facilitate monitoring and review of related transactions or transactions prone to conflict of interest.

4. Information and communication

- IT system is in place to support the data storing/searching for important documents, including internal and external operational information to ensure that it is accurate, complete, sufficient for operation and has been updated to meet the changes in the IT world such as prevention, access to the IT systems of the Company wrongfully to protect against various forms of cyber threats around the world. Its' causing damage to the organization such as the cost of data redemption, the impact of business interruption and losing customer confidence. Information security policies and guidelines are published with executives and employees at all levels to prepare them for cyberthreats.

Cyber Security Operations

The Company has established a security policy for information technology systems in accordance with relevant laws by announced since 2020 with the following guidelines:

- Support and educate everyone in the organization, including third parties who work with the organization, to be aware of the importance of various cyber threats by strictly complying with this policy.
- Manage information technology risks to an acceptable level.
- Allocate and manage information technology resources to be sufficient for business operations.
- Review and improve the information technology management policy at least once a year or when there is an event that significantly affects the Company's information system.

In this regard, information technology officers will monitor and screen information from outside that may be a threat to the Company, along with alerts through the intranet system to let everyone know immediately if an abnormality is found. Protect infrastructure risks to cover information technology systems to manage program system flaws, update tools to be modern and efficient, to protect the security of the Company's information system.

In 2022, the Company has not been damaged by information threats. The management regularly monitors the operations of relevant departments while reviewing the policy to be suitable for the rapidly changing situation.

- **Personal Data Protection Act: PDPA**

A solution to protect to lawfully use personnel data of all person in charge with our organization conducted to comply the implementation of the Personnel Data Protection Act, B.E. 2019. The Company has formulated a policy and work process planning in accordance with the PDPA by assessing and analyzing all sectors of the organization. Set up the detection and data lack protection system, Along with communicating and training everyone in the organization to acknowledge and strictly follow, to prevent legal problems, including civil, criminal and administrative penalties, which will have a detrimental effect on the organization.

For the protection of customer personal information, collected, used, disclosed and transferred for the purchase of goods or services. The Company has prevented the leakage of personal information of customers by having a unit responsible for protecting customer information and limiting access rights or authorized persons who need to use the information only. The Company is transparent and always insists on keeping the customer's personal information secure and confidential.

In 2022, there was no leak of personal information causing damage to the Company.

- The Company has an adequate and effective IT system. There are communication channels in and between the departments, allowing timely and quick access of news and information through such means as meetings, emails, intranet, internal broadcast and social media such as Line Group of operating lines, etc., thus ensuring the efficient up-to-date communication within the company and reaching to all employees which is the vital factor in maintaining the unity.

- For external parties, the Company has disclosed and communicated its information comprehensively and equitably to the stakeholders through its communication channel, i.e., www.ekarat.co.th and in case of disclosure according to the criteria of the Stock Exchange of Thailand (SET), such as financial report, annual report of operating results, and minutes of the annual general meeting of shareholders, via the SET's information system and the company's website. Moreover, the company has made available a channel for its stakeholders to report any incident or any act prone to a violation of the laws and rules as well as the code of business ethics, which may cause damage to the company by post or e-mail to the Company secretary or Managing Director. The Company also conducts customer satisfaction surveys to listen to the problems and complaints including the suggestions to improve services for more efficiency.

5. Monitoring activities

- The Company has a process to monitor business operations at director, executive, and managerial levels through various meetings, namely Board of Management (weekly), Board of Directors meeting (quarterly), Board Committee meetings to consider to consider and improve to achieve the goals regularly.
- The Company monitors and evaluates its internal controls at all levels and preparing the internal control reports annually Including reviewing and evaluating the effectiveness of the internal audit from the Company's internal audit department according to the set plans.
- The internal auditors will prepare the audit report and suggestion for improvement and presented to Executives for acknowledgement and approval. The Office of the Internal Audit monitors the progress of those implementations through to completion and provides a summary of progress for presentation to Managing Director and Audit Committee to ensure the effective practice as per the recommendations. Also, in the case of suspected transactions or actions that could potentially cause damage to the Company's operating results such as conflicts of interest, fraud, major irregularity or deficiency in the internal control system or a breach of rules, the head of Office of the Internal Audit will report to the Managing Director and the Audit Committee immediately.

9.2 Head of Internal Audit Control

The Company has appointed Mr. Nuttavit Noisri as the head of Internal Audit Department and taking effect on January 1, 2021. He had internal audit work experience more than 18 years, has knowledge and understanding of the Company's business activities and operations and obtained training relating to internal audit work, i.e. Certified Professional Internal Audit of Thailand CPIAT from the Association of Internal Auditors of Thailand. Therefore, the Audit Committee agreed that Nuttavit Noisri is appropriate to act as the supervisor of the internal auditor.

In addition, the Audit Committee Meeting No. 7/2022 on December 15, 2022 appointed A.M.T. Solution Co., Ltd., an external agency, to perform the duties of the Company's internal auditor in 2023 continuously for the third year. The Audit Committee have considered that A.M.T had good understanding of our business, the service fee was reasonable and to ensure continuity in internal audit work. In this regard, A.M.T Solution Co., Ltd. has assigned Mr. Suphot Pannoi, Managing Director, to be the primarily responsible person for the Company's internal auditor. (More details about the internal audit supervisor in Attachment 3).

Appointment, removal or rotation of Manager of Internal Audit Control Department shall be subject to approval or consent from the Audit Committee.

9.3 Related Party Transactions

The Company has specified rule including guidelines clearly on the related transaction with the associated persons, subject to strictly comply with the notification and regulation of the Stock Exchange of Thailand and the Securities and Exchange Commission is principal, summarized as followings.

- Proposing a connected transaction under such the rules to the Board of Directors and/or the shareholders' meeting for the approval. Through the consideration of the Audit Committee for fairness, the pricing is reasonable and take into the best interests of the Company and the interest directors no right to cast vote at the meeting.
- Disclosure of connected transactions with related companies adequately and comply with the regulations of the Securities and Exchange Commission. As well as the accounting standards on information disclosure about related parties or businesses.

The Company has significant transactions with related parties, which are directly and indirectly related through inter-company shareholding or common shareholders and directorships. The related transactions comply with the terms and conditions specified in the agreement between the Company and the concerned parties.

Reasonableness of related party transaction

In considering the approval of related party transactions, The Company determines the authority of the person who has the right to approve according to the specified amount. The Audit Committee is responsible for reviewing the connected transactions of the Company and subsidiaries, related companies and connected persons on a quarterly basis to eliminate conflicts of interest prudently with the interests of the Company as the top priority. Procurement of goods, raw materials or services from related entities aims to maximize mutual benefit in business operations of the Company's group. Such transactions are regarded as normal business practices, leading commercial benefits to the Company and related companies without any benefits transferring or irregular transaction. It has been approved by the management and the Board of Directors before entering into the transaction.

For the years ended December 31, 2022, the auditor disclosed related transactions in the notes to the financial statements and the Audit Committee has reviewed that as normal business practices with normal business conditions.



Policy on Future Connected Transaction

The future connected transaction will be conducted as part of its normal without special favors of transfer of benefits between the Company, subsidiaries, related company and shareholders. Pricing policy will determine from the normal business price as it is assigned to other unrelated parties/businesses and based on the market price.

The Company has no policy to grant loans or credit guarantees to non-subsidiary companies which holding less than 50 percent of shares or related businesses and persons.

The relationship of the parties

Name	Country	Nature of relationships	Related by
Ekarat Solar Co., Ltd.	Thailand	Subsidiary	Direct shares holding of 99.99%
Ekarat Energy Co., Ltd.	Thailand	Subsidiary	Direct shares holding of 51%

Balance with related parties as at December 31, 2022 and 2021 are as follows:

Related Company	Item	December 31, 2022		December 31, 2021		Necessity and reasonableness
		Consolidated	Separate	Consolidated	Separate	
		Financial Statements	Financial Statements	Financial Statements	Financial Statements	
Ekarat Energy Co., Ltd.	Other Receivable	-	12,000	-	18,000	Normal business transaction of goods and services.
	Rental Income		24,000	-	24,000	Mutually agreed price based on the contract
Ekarat Solar Co., Ltd.	Interest Income	-	-	-	331,665	Based on the agreed price according to the interest rates of domestic commercial banks.
Related Person	Cash Advance	223,200	-	40,000	-	According to mutual agreement
	Consulting Fee	2,685,000	2,685,000	-	-	Mutually agreed price based on the contract



Part 3

Financial Statements





Report on The Board of Directors' Responsibilities for The Financial Statements

The Board of Directors is responsible for the separate financial statements and the consolidated financial statements of the Company and its subsidiaries, and the financial information in the Annual Report. The said financial statements for the year ended December 31, 2022 have been prepared in accordance with Thai Financial Reporting Standards, with appropriate accounting policies applied on a consistent basis, exercising due discretion and estimate as may be carefully and justifiable. Adequate disclosures have also been made in the notes to the financial statements. These financial statements were audited by certified independent auditors who have given their unqualified opinions.

The Board of Directors has appointed an Audit Committee which comprises the independent directors who are responsible for reviewing the financial reports and for maintaining the adequacy of the internal control and audit systems of the Company. In order to ensure that accounting information is recorded correctly, completely, timely and to prevent fraud or materially irregular operations. The Audit Committee has expressed its opinion with regard to the stated matters in the Report of the Audit Committee which are presented in the Annual Report.

The Board of Directors is of the opinion that the Company's overall internal control system is adequate and appropriate and can assure the creditability of the separate financial statements as well as the consolidated financial statements of the Company and its subsidiaries for the year ended December 31, 2022.

(Mr.Vichit Yamboonrueng)

Chairman of the Board of Director

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
FINANCIAL STATEMENTS AND AUDITOR'S REPORT
FOR THE YEAR ENDED DECEMBER 31, 2022



Independent Auditor's Report

To the Shareholders and the Board of Directors of Ekarat Engineering Public Company Limited and its Subsidiaries

Opinion

I have audited the accompanying consolidated and separate financial statements of Ekarat Engineering Public Company Limited and its subsidiaries ("the Group") and of Ekarat Engineering Public Company Limited ("the Company"), which comprise the consolidated and separate statements of financial position as at December 31, 2022, and the related consolidated and separate statements of comprehensive income, consolidated and separate statements of changes in shareholders' equity and consolidated and separate statements of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the consolidated and separate financial position of the Ekarat Engineering Public Company Limited and its subsidiaries and of Ekarat Engineering Public Company Limited respectively as at December 31, 2022, consolidated and separate financial performance and consolidated and separate 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 Financial Statements section of my report. I am independent of the Group in accordance with the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. 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 year. 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.

Allowance for expected credit losses of trade accounts receivable

Risk

As discussed in Note to Financial Statements No. 8, as at December 31, 2022, the Group and the Company had net balance of trade receivables of Baht 366.75 million in the consolidated financial statements and Baht 366.65 million in the separate financial statements. The Group measured expected credit losses on trade accounts receivable based on the management's estimate of the lifetime expected credit loss, which is estimated by taking into account the credit history of the Group's customers, the current and future market environment and customer-specific conditions.

I identified the measurement of expected credit losses as a key audit matter because trade accounts receivable is material to the Group and the recognition of expected credit loss requires the exercise of significant management judgement.

Auditor's Responses

I obtained an understanding of the Group's policy for the allowance for expected credit losses, and then verified whether the computation method for the allowance of expected credit losses complies with the Company's policy. I also considered the appropriateness of the allowance of expected credit losses by considering the aging profile of outstanding debts, and assessed each customer's ability to pay for those long overdue items and considered the adequacy of disclosures in accordance with Thai Financial Reporting Standards

Impairment of Property, Plant and Equipment

Risk

As discussed in Note to Financial Statements No. 14, as at December 31, 2022 and 2021, the Company has property, plant and equipment related to the unused assets under production and distribution section of solar cells panels with a net book value amounting of Baht 73.20 million and of Baht 84.86 million, respectively. I identified the impairment of property, plant and equipment as a key audit matter because the provision for impairment requires significant judgment by management.

Auditor's Responses

I obtained an understanding of the Company's policy to determine the allowance for impairment of property, plant and equipment. I also considered the appropriateness of the allowance for impairment of the property, plant and equipment by verifying Management's cash flow projection. Such verification includes assessment of the work done by the independent appraiser, assessment of the significant assumptions and testing the computation of the amount of estimated impairment by review the assessment report and consider the reasonableness of the judgements that the appraiser used to support the determination of the fair value of the asset, test the suitability and adequacy of the evidence that the appraiser used to determine the fair value of an asset. The verification includes a test of the evidence that the appraiser received from the management and the actual financial information of the Company and test of value calculation of allowance for impairment of property, plant and equipment.

Other Information

Management is responsible for the other information. The other information comprises the information include in Annual Report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The Annual Report for the year is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon. In connection with my audit of the financial statements.

My responsibility is to read the other information 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 for correction of the misstatement.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group'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 or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the 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 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 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 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 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 to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the 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.

(Atchara Suknaibai boon)

Certified Public Accountant Registration Number 4642

ANS Audit Company Limited

Bangkok, February 27, 2023

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES

STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31, 2022

		Unit: Baht			
		Consolidated financial statements		Separate financial statements	
Notes		December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Assets					
Current assets					
Cash and cash equivalents	6	89,089,341	126,879,121	88,051,925	125,817,527
Current financial assets - net	7	-	-	-	-
Trade and other current receivables - net	5,2, 8	394,906,536	289,045,161	394,818,095	288,962,759
Inventories - net	9	965,343,057	888,162,121	965,343,057	888,162,121
Derivatives assets	33, 38	-	97,393	-	97,393
Deposit and advance payment for goods		14,728,693	22,073,549	14,728,693	22,073,549
Other current assets	38	6,894,869	12,588,190	6,658,692	12,282,981
Total current assets		1,470,962,496	1,338,845,535	1,469,600,462	1,337,396,330
Non-current assets					
Investments in subsidiary companies - net	10	-	-	1,274,925	1,274,925
Non-current financial assets - net	11	19,650,000	19,650,000	19,650,000	19,650,000
Investment properties - net	12	1,631,755	1,631,755	1,631,755	1,631,755
Assets for rent - net	13	3,338,270	5,189,187	3,338,270	5,189,187
Property, plant and equipment - net	14	554,444,449	551,328,867	550,822,789	547,410,541
Right-of-use assets - net	15	75,554,678	80,603,855	75,554,678	80,603,855
Intangible assets - net	16	11,350,690	296,544	11,350,690	296,544
Deferred tax assets - net	17	70,771,609	77,546,852	70,771,609	77,546,852
Withholding tax		618,825	549,776	-	-
Other non-current assets		646,783	851,999	557,954	763,170
Total non-current assets		738,007,059	737,648,835	734,952,670	734,366,829
Total assets		2,208,969,555	2,076,494,370	2,204,553,132	2,071,763,159

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES

STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31, 2022

		Unit: Baht			
		Consolidated financial statements		Separate financial statements	
Notes		December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	18	210,794,404	221,598,183	210,794,404	221,598,183
Trade and other current payables	19	247,628,528	250,598,060	247,628,528	250,598,060
Accrued expenses	20	64,209,636	29,265,414	64,164,491	24,599,289
Advance received for goods and services	21	68,354,070	78,053,145	68,354,070	78,053,145
Current portion of loans from financial institutions	22	21,873,727	21,806,947	21,873,727	21,806,947
Current portion of lease liabilities	23	11,445,212	12,185,693	11,445,212	12,185,693
Current portion of other financial liability	14, 24	3,165,575	-	3,165,575	-
Accrued corporate income tax		19,217,381	3,308,830	19,217,381	3,308,830
Derivatives liabilities	33	1,203,157	-	1,203,157	-
Other current liabilities	5.3	18,513,512	2,856,710	18,153,162	2,679,561
Total current liabilities		666,405,202	619,672,982	665,999,707	614,829,708
Non-current liabilities					
Long-term loans from financial institutions - net	22	16,211,369	38,085,165	16,211,369	38,085,165
Lease liabilities - net	23	52,254,146	53,747,505	52,254,146	53,747,505
Other financial liability - net	14, 24	13,132,682	-	13,132,682	-
Non-current provisions for employee benefit	25	80,120,896	78,248,645	80,120,896	78,248,645
Other non-current liabilities		5,477,951	5,650,260	5,477,951	5,650,260
Total non-current liabilities		167,197,044	175,731,575	167,197,044	175,731,575
Total liabilities		833,602,246	795,404,557	833,196,751	790,561,283

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION
AS AT DECEMBER 31, 2022

		Unit: Baht			
		Consolidated financial statements		Separate financial statements	
Notes		December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Liabilities and shareholders' equity					
Shareholder's equity					
Shares capital					
Authorized					
Ordinary shares 1,471,532,856 shares of Baht 0.80 each					
(December 31, 2021 : ordinary shares 2,014,934,106 shares)	26	1,177,226,285	1,611,947,285	1,177,226,285	1,611,947,285
Issued and paid-up					
Ordinary shares 1,471,532,856 shares of Baht 0.80 each					
		1,177,226,285	1,177,226,285	1,177,226,285	1,177,226,285
Premium on shares capital	29	25,648,690	25,648,690	25,648,690	25,648,690
Surplus on change of proportion interest in subsidiary		364,450	364,450	-	-
Retained earnings					
Appropriated					
Legal reserve					
	27	35,658,251	27,839,797	35,658,251	27,839,797
Unappropriated					
		136,167,948	49,677,456	132,823,155	50,487,104
Total equity of the parent company		1,375,065,624	1,280,756,678	1,371,356,381	1,281,201,876
Non-controlling interests		301,685	333,135	-	-
Total shareholders' equity		1,375,367,309	1,281,089,813	1,371,356,381	1,281,201,876
Total liabilities and shareholders' equity		2,208,969,555	2,076,494,370	2,204,553,132	2,071,763,159

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2022

		Unit: Baht			
		Consolidated financial statements		Separate financial statements	
	Notes	2022	2021	2022	2021
Revenues	31, 34				
Revenue from sales of goods		1,604,893,971	1,080,093,924	1,604,893,971	1,079,675,718
Revenue from services and maintenance	5.4	225,227,184	187,821,869	225,251,184	187,845,869
Revenue from service of installing a solar panel	21	239,038,204	108,570,417	239,038,204	108,570,417
Revenue from sales of electricity		35,486,761	37,774,893	35,486,761	37,774,893
Total revenues		2,104,646,120	1,414,261,103	2,104,670,120	1,413,866,897
Costs					
Cost of goods sold		(1,253,429,035)	(833,043,585)	(1,253,429,035)	(832,184,351)
Cost of services and maintenance		(122,405,661)	(101,786,012)	(122,405,661)	(101,786,012)
Cost from service of installing a solar panel		(230,764,247)	(105,480,397)	(230,764,247)	(105,480,397)
Cost of electricity sold		(19,324,585)	(18,784,525)	(19,027,919)	(18,487,859)
Loss on devaluation of goods	9, 34	(1,816,396)	(9,542,740)	(1,816,396)	(10,025,500)
Total costs		(1,627,739,924)	(1,068,637,259)	(1,627,443,258)	(1,067,964,119)
Gross profit		476,906,196	345,623,844	477,226,862	345,902,778
Other income	5.4	16,313,453	11,304,653	11,811,648	11,634,913
Loss on asset impairment	34	(128,628)	(5,985,439)	(128,628)	(5,985,439)
Distribution costs		(109,481,347)	(88,550,873)	(109,481,347)	(88,550,873)
Administrative expenses	5.4	(160,749,074)	(140,540,423)	(160,690,926)	(140,668,929)
Profit from operating activities		222,860,600	121,851,762	218,737,609	122,332,450
Finance cost		(22,515,890)	(12,766,882)	(22,515,890)	(12,766,882)
Profit before income tax expenses		200,344,710	109,084,880	196,221,719	109,565,568
Income tax expenses	17	(39,852,634)	(19,272,988)	(39,852,634)	(19,272,988)
Profit for the year		160,492,076	89,811,892	156,369,085	90,292,580
Other comprehensive income for the year		-	-	-	-
Total comprehensive income for the year		160,492,076	89,811,892	156,369,085	90,292,580

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2022

		Unit: Baht			
		Consolidated financial statements		Separate financial statements	
Notes		2022	2021	2022	2021
Profit (loss) attributable to					
Equity holders of the parent		160,523,526	89,891,953	156,369,085	90,292,580
Non-controlling interests		(31,450)	(80,061)	-	-
		160,492,076	89,811,892	156,369,085	90,292,580
Total comprehensive income (loss) attributable to					
Equity holders of the parent		160,523,526	89,891,953	156,369,085	90,292,580
Non-controlling interests		(31,450)	(80,061)	-	-
		160,492,076	89,811,892	156,369,085	90,292,580
Earnings per share					
Basic earnings per share (Baht)	30	0.109	0.063	0.106	0.064
Number of weighted average share (Shares)		1,471,532,856	1,419,884,123	1,471,532,856	1,419,884,123

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF CHANGE IN SHAREHOLDERS' EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2022

		Unit: Baht						
		Consolidated financial statements						
Notes	Share capital issued and paid-up	Premium on shares capital	Surplus on change of proportion interest in subsidiary	Retained earnings (deficit)		Total parent shareholders' equity	Non-controlling interest	Total shareholders' equity
				Appropriated to legal reserve	Unappropriated			
Balance as at January 1, 2021	1,074,631,523	-	364,450	25,182,581	(37,557,281)	1,062,621,273	413,196	1,063,034,469
Change in shareholders' equity for the year :								
Capital increase from exercise of warrants	102,594,762	25,648,690	-	-	-	128,243,452	-	128,243,452
Legal reserve	-	-	-	2,657,216	(2,657,216)	-	-	-
Comprehensive income (loss) for the year	-	-	-	-	89,891,953	89,891,953	(80,061)	89,811,892
Balance as at December 31, 2021	1,177,226,285	25,648,690	364,450	27,839,797	49,677,456	1,280,756,678	333,135	1,281,089,813
Balance as at January 1, 2022	1,177,226,285	25,648,690	364,450	27,839,797	49,677,456	1,280,756,678	333,135	1,281,089,813
Change in shareholders' equity for the year :								
Legal reserve	-	-	-	7,818,454	(7,818,454)	-	-	-
Dividend paid	-	-	-	-	(66,214,580)	(66,214,580)	-	(66,214,580)
Comprehensive income (loss) for the year	-	-	-	-	160,523,526	160,523,526	(31,450)	160,492,076
Balance as at December 31, 2022	1,177,226,285	25,648,690	364,450	35,658,251	136,167,948	1,375,065,624	301,685	1,375,367,309

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF CHANGE IN SHAREHOLDERS' EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2022

	Unit: Baht					
	Separate financial statements					
	Notes	Share capital issued and paid-up	Premium on shares capital	Retained earnings (deficit)		Total shareholders' equity
				Appropriated to legal reserve	Unappropriated	
Balance as at January 1, 2021		1,074,631,523	-	25,182,581	(37,148,260)	1,062,665,844
Change in shareholders' equity for the year :						
Capital increase from exercise of warrants	29	102,594,762	25,648,690	-	-	128,243,452
Legal reserve		-	-	2,657,216	(2,657,216)	-
Comprehensive income for the year		-	-	-	90,292,580	90,292,580
Balance as at December 31, 2021		1,177,226,285	25,648,690	27,839,797	50,487,104	1,281,201,876
Balance as at January 1, 2022		1,177,226,285	25,648,690	27,839,797	50,487,104	1,281,201,876
Change in shareholders' equity for the year :						
Legal reserve	27	-	-	7,818,454	(7,818,454)	-
Dividend paid	28	-	-	-	(66,214,580)	(66,214,580)
Comprehensive income for the year		-	-	-	156,369,085	156,369,085
Balance as at December 31, 2022		1,177,226,285	25,648,690	35,658,251	132,823,155	1,371,356,381

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES

STATEMENTS OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2022

Unit: Baht

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash flows from operating activities :				
Profit for the year	160,492,076	89,811,892	156,369,085	90,292,580
Adjustments to reconcile net profit to net cash provided by (used in) operating activities				
Bad debts and expected credit loss	482,020	2,964,780	654,769	3,145,809
Loss on devaluation of inventories	1,816,396	9,542,740	1,816,396	10,025,500
Loss on impairment of property, plant and equipment	-	5,848,628	-	5,848,628
Loss on impairment of other non-current assets	128,628	136,811	128,628	136,811
Amortization of intangible assets	148,733	207,391	148,733	207,391
Depreciation of right-of-use assets	13,586,430	14,353,423	13,586,430	14,353,423
Depreciation	64,458,147	64,332,334	64,161,481	64,035,668
Non-current provisions for employee benefit	5,776,017	5,811,074	5,776,017	5,811,074
Gain from disposals of assets	(1,385,873)	(967,018)	(1,385,873)	(967,018)
Unrealized (gain) loss on exchange rate	(1,891,257)	173,630	(2,064,006)	324,266
Loss on measurement fair value of derivatives contract	1,203,157	-	1,203,157	-
Transfer liabilities to be revenues	(5,039,611)	(1,779,292)	(539,611)	(1,779,292)
Finance costs	22,515,890	12,766,882	22,515,890	12,766,882
Interest incomes	(354,177)	(349,547)	(352,372)	(679,807)
Income tax expenses	39,852,634	19,272,988	39,852,634	19,272,988
Profit from operations before changes in operating assets and liabilities	301,789,210	222,126,716	301,871,358	222,794,903
Operating assets (increase) decrease				
Trade and other current receivables	(106,694,614)	(24,287,092)	(106,688,614)	(26,577,692)
Inventories	(89,357,370)	(521,568,013)	(89,357,370)	(522,050,773)
Deposit and advance payments for goods	7,344,856	(14,912,993)	7,344,856	(14,912,993)
Other current assets	5,624,272	(11,373,304)	5,624,290	(11,304,931)
Other non-current assets	76,588	-	76,588	-
Operating liabilities increase (decrease)				
Trade and other current payables	(5,131,270)	139,948,857	(5,131,270)	141,988,629
Accrued expenses	39,430,215	5,297,440	39,551,195	5,261,460
Advance received for goods and services	(9,422,311)	52,587,090	(9,422,311)	52,587,090
Other current liabilities	15,656,802	(5,623,632)	15,473,601	(5,452,516)
Other non-current liabilities	40,434	151,555	40,434	151,555
Cash received (paid) from operating activities	159,356,812	(157,653,376)	159,382,757	(157,515,268)
Employee benefit obligations paid	(3,903,766)	(10,473,475)	(3,903,766)	(10,473,475)
Finance costs paid	(22,238,795)	(12,416,551)	(22,238,795)	(12,416,551)
Corporate income tax refund	-	10,317,770	-	10,317,770
Corporate income tax paid	(17,168,840)	(16,347,245)	(17,168,840)	(16,347,245)
Net cash provided by (use in) operating activities	116,045,411	(186,572,877)	116,071,356	(186,434,769)

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2022

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash flows from investing activities :				
Cash received from sales of assets for rent	2,037,474	1,328,153	2,037,474	1,328,153
Cash received from sale of property, plant and equipment	2,950,234	185,610	2,950,234	185,610
Cash paid for acquisition of assets for rent	(248,160)	(1,072,594)	(248,160)	(1,072,594)
Cash paid for acquisition of property, plant and equipment	(52,390,901)	(16,535,411)	(52,390,901)	(16,535,411)
Cash paid for assets payable	(1,711,348)	(1,294,950)	(1,711,348)	(1,294,950)
Cash paid for acquisition of intangible assets	(11,202,879)	(117,396)	(11,202,879)	(117,396)
Cash received from interest income	502,756	196,442	500,989	195,034
Net cash used in investing activities	(60,062,824)	(17,310,146)	(60,064,591)	(17,311,554)
Cash flows from financing activities :				
Increase in other financial liability	21,336,291	-	21,336,291	-
Cash received from capital increase from exercise of warrants	-	128,243,452	-	128,243,452
Increase (decrease) in short-term loans from financial institutions	(9,358,674)	182,866,202	(9,358,674)	182,866,202
Repayment of liabilities under financial lease contracts	(12,477,370)	(13,290,413)	(12,477,370)	(13,290,413)
Repayment of other financial liability	(5,038,034)	-	(5,038,034)	-
Repayment of long-term loans from financial institutions	(22,020,000)	(28,264,000)	(22,020,000)	(28,264,000)
Cash paid for dividends	(66,214,580)	-	(66,214,580)	-
Net cash provided by (use in) financing activities	(93,772,367)	269,555,241	(93,772,367)	269,555,241
Net cash and cash equivalents increase (decrease) - net	(37,789,780)	65,672,218	(37,765,602)	65,808,918
Cash and cash equivalents at the beginning of the year	126,879,121	61,206,903	125,817,527	60,008,609
Cash and cash equivalents at the ending of the year	89,089,341	126,879,121	88,051,925	125,817,527
Supplemental cash flow information :				
Non-cash transactions :				
Transfer of inventories to property, plant and equipment	10,321,621	2,227,291	10,321,621	2,227,291
Transfer of inventories to asset for rent	38,417	1,635,654	38,417	1,635,654
Transfer of right-of-use assets to property, plant and equipment	1,706,271	-	1,706,271	-
Acquisition of assets on credit	4,619,271	1,850,982	4,619,271	1,850,982
Increase in right-of-use assets from liabilities under lease agreements	10,243,530	2,651,445	10,243,530	2,651,445

The accompanying notes are an integral part of these financial statements.

EKARAT ENGINEERING PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2022

1. General information

Ekarat Engineering Public Company Limited (“the Company”) was registered as a public company under Company Registration Number 0107537002711 on December 9, 1994, and was listed on the Stock Exchange of Thailand on August 7, 2006.

The head office is located at 9/291 UM Tower, 28th Floor, Ramkhamhaeng Road, Suanluang, Suanluang, Bangkok. The Company and its subsidiaries (“the Group”) engage in the manufacture and distribution of transformers and solar farms.

The Company has the following four branches:

Factory 1: 190/1 Moo 6 Hoklee Canal, Bangpakong River, Tambon Thasa-An, Amphur Bangpakong, Chachoengsao Province.

Factory 2: 7/242 Moo 6 Tambon Mabyangporn, Amphur Pluakdang, Rayong Province.

Solar thermal power plants:

Factory 1: 365, 365/1 Moo 3 Tambon Kroksomboon Amphur Sri-mahapo Prachinburi Province.

Factory 2: 78 Moo 9 Tambon Lahore Amphur Bang Bua Thong Nonthaburi Province.

2. Basis of preparation of the financial statements

The accompanying financial statements are prepared in accordance with Thai Financial Reporting Standards (“TFRS”) including related interpretations and guidelines promulgated by the Federation of Accounting Professions (“FAP”) and applicable rules and regulations of the Thai Securities and Exchange Commission.

Presentation of the financial statements complies with Notification of the Department of Business Development, dated December 26, 2019, issued under the Accounting Act B.E. 2543.

The accompanying financial statements have been prepared in Thai language and expressed in Thai Baht. Such financial statements have been prepared for domestic reporting purposes. For the convenience of the readers not conversant with the Thai language, an English version of the financial statements has been provided, translated based on the Thai version.

The financial statements have been prepared on a historical cost basis, except where otherwise disclosed in the accounting policies.

Preparation of the financial statements in conformity with Thai Financial Reporting Standards (“TFRS”) requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying amounts of assets and liabilities that are not readily apparent from other sources. Subsequent actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised, if the revision affects only that period, and in the period of the revision and future periods, if the revision affects both current and future periods.

Basis of preparation of consolidation financial statements

- a) The consolidated financial statements include the financial statements of the Company and its subsidiaries (together referred to as “the Group”) are as follows:

Name	Nature of business	Incorporation	% of shareholding	
			2022	2021
Ekarat Solar Co., Ltd.	Distributor of solar cell and solar panel	Thailand	99.99	99.99
Ekarat Energy Co., Ltd.	Operate on solar electric power	Thailand	51.00	51.00

- b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and if it has the ability to direct the activities that significantly affect the amount of its returns.
- c) Subsidiaries are fully consolidated as from the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
- d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.
- e) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.
- f) Non-controlling interests represent the portion of profit or loss and net assets of the subsidiaries that are not held by the Company and are presented separately in the consolidated profit or loss and within equity in the consolidated statement of financial position.

The separate financial statements present investments in subsidiaries according to the Cost Method.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised and new financial reporting standards and interpretations which are effective for fiscal periods beginning on or after January 1, 2022. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after January 1, 2023

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after January 1, 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and, for some standards, providing temporary reliefs or temporary exemptions for users.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Significant accounting policies and accounting judgments and estimates

4.1 Significant accounting policies

Revenue recognition

- Sales are recognized upon the transfer of ownership to customers in exchange for the consideration to which the Group is entitled. Sales are shown net of sales taxes and discounts.
- Revenue from service and maintenance is recognized upon service completion and in accordance with the service contract.
- Revenue from installation of solar electric generating systems is recognized when a performance obligation is satisfied over the period of the contract by measuring progress towards complete satisfaction of that performance obligation by referencing the completion of a physical proportion of the contract work performed as assessed by the project engineers.

Recognized revenue not yet due according to the contracts has been presented under the caption of “Contract asset” in the statement of financial position. The amounts recognized are reclassified to trade receivables when the Group’s right to consideration is unconditional, such as upon completion of services and acceptance by the customer.

Amounts received by the Group or that are due from customers with the obligation to transfer services to customers are presented under the caption of “Contract liability” in the statement of financial position. Contract liabilities are classified as “Advance received for goods and services” and will be recognized as revenue when the obligation satisfied under the term of contract.

- The Group recognizes revenue from sales of electricity when electricity is distributed to customers. Sales are recognized based on units of sale delivered at the applicable tariff rates.
- Rental income is recognized based on the term of the lease.
- Interest income is recognized on an accrual basis based on the effective interest rate.
- Other income is recognized on an accrual basis.

Expense recognition

- Costs of installation of solar electric generating systems are recognized when a performance obligation is satisfied over the period of the contract by measuring progress towards complete satisfaction of that performance obligation by referencing the completion of a physical proportion of the contract work performed as assessed by the project engineers. The estimated total cost is determined by the Group’s project engineers or its responsible person, but such estimate is subject to change. Expected loss from each project is provided and charged as an expense in the period when the estimated total costs of the project exceed its total contracted income.

The actual cost of services incurred but not yet recognized as cost of services in profit or loss is referred to as “Work in process” under current assets in the statement of financial position, while contracts whose calculated costs of construction exceed incurred costs of construction are shown as “Accrued expense” under current liabilities in the statement of financial position.

Work in process includes the cost of raw materials, direct labor and other expenses incurred for each project. Such work in progress is valued at the lower of cost or net realizable value.

- Payments made under short-term leases and low-value leases are recognized in profit or loss according to the straight-line method over the term of the lease. Contingent rentals are charged to profit or loss for the accounting period in which they are incurred.
- Financial cost consists of interest expenses or other expenses of a similar nature charged to profit or loss in the year such expenses are incurred except where they are partly recorded as cost of assets due to the effect of the long period of time used to acquire construction or produce such assets prior to direct utilization or for sale. Interest which is part of installment amounts under lease contracts is charged to profit or loss by the effective rate method.
- Other expenses are recognized on an accrual basis.

Cash and cash equivalents

Cash and cash equivalents include cash, bank deposits in the forms of savings and current accounts, and fixed accounts that do not exceed three months and that are not subject to withdrawal restrictions.

Trade and other receivables

Trade receivables are amounts due from customers for goods sold or service performed in the ordinary course of business.

Trade receivables are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at present value.

The Group applies TFRS 9's simplified approach to measure expected credit losses. The simplified approach requires expected lifetime losses to be recognized from initial recognition of the receivables.

Inventories

Inventories are recorded at cost adjusted by allowance for inventories that are slow-moving or obsolete (if any) or net realizable value, whichever is the lower. Cost is computed as follows:

- Raw materials and supplies are valued at cost by using the first-in, first-out method.
- Finished goods and work in process are valued at cost by using the specific identification method.

Net realizable value is the estimated selling price in the ordinary course of business less the expenses necessary to make the sale.

Financial assets and financial liabilities

Classification

The classification of financial assets depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

The Group classifies its debt instruments in the following categories:

- those to be measured subsequently at fair value (either through other comprehensive income or through profit or loss) and
- those to be measured at amortized cost.

The Group reclassifies debt instruments when and only when its business model for managing those assets changes.

The equity instruments held must be irrevocably classified to two measurement categories; i) at fair value through profit or loss (FVPL), or ii) at fair value through other comprehensive income (FVOCI) without recycling to profit or loss.

Measurement

At initial recognition, where a financial asset is not at FVPL, the Group measures the financial asset at its fair value plus or minus transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

There are three measurement categories into which the Group classifies its debt instruments:

- **Amortized cost:** A financial asset will be measured at amortized cost when the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows. In addition, the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Interest income from these financial assets is included in financial income using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented in profit or loss.
- **FVOCI:** A financial asset will be measured at FVOCI when it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. In addition, the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, interest income and related foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss and recognized on other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of comprehensive income.
- **FVPL:** A asset that does not meet the criteria for amortized cost or FVOCI is measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented net within other gains/(losses) in the period in which it arises.

Equity instruments shall be subsequently measured at fair value and the fair value change is to be recognized through profit or loss or other comprehensive income depending on the classification of such equity instrument.

Derivatives are classified and measured at fair value through profit or loss unless hedge accounting is applied.

Dividends from such investments continue to be recognized in profit or loss when the Group's right to receive payments is established.

Impairment

Expected credit losses associated with financial assets carried at amortized cost and FVOCI, and assets from loan commitments and financial guarantees, are assessed without the increases in credit risk. The Company applies the general approach to the measurement of expected credit losses. In the case of trade receivables, however, the Company applies the simplified approach to measure expected credit losses.

Investments in subsidiary companies

In the separate financial statements, investments in subsidiary companies are recorded according to the cost method less accumulated allowance for impairment and recorded the recognition of the change of the investments value in profit or loss when the investments have been disposed or impaired.

Investment properties

Investment properties are recorded at cost. Afterward, the Group recorded the investment properties, which is land at cost less allowance for accumulated impairment (if any).

The Group recognized the difference between the net amount received from disposal and the carrying amount of the asset in profit or loss in the period the investment properties were removed from the account.

Assets for rent

Assets for rent are inventories for rent or loans to customers that have been recorded at the initial value at cost. Afterward, the Group recorded assets for rent at cost less accumulated depreciation and allowance for accumulated impairment (if any). Depreciation is calculated by the straight-line method over the useful life for five years.

Property, plant and equipment

Property, plant and equipment are recorded at cost. Afterward, the Group recorded the property, plant and equipment at cost less accumulated depreciation and allowance for accumulated impairment (if any) and depreciation is calculated by the straight-line method over the following estimated useful lives:

	Estimated useful lives (years)
Office buildings and construction	10 - 40
Machinery, tools and equipment	5 - 25
Furniture and office equipment	3 - 5
Vehicles	5

The Group did not carry depreciation for land, land improvements and assets under construction. In the case of impairment of assets, the Group will calculate the depreciation of the assets using the carrying amount after deducting allowance for loss on impairment (if any) over the remaining useful life of the asset.

Property, plant and equipment shall be eliminated from accounts on disposal or where no future economic benefits are expected from their usage or disposal. Profit or loss arising on disposal is recognized in profit or loss when such asset is eliminated from accounts.

Intangible assets

Intangible assets are shown at cost less accumulated, amortized expenses and allowance for impairment (if any) of that asset. The Group amortizes intangible assets with certain useful lives systematically throughout the useful life of individual asset and will review the period and method for amortization of intangible assets with certainty in useful life at least at the end of every year. Amortized expenses will be recognized in profit or loss based on period during which economic benefits are expected from the assets.

Impairment of assets

The Group has considered the impairment of assets-property, plant and equipment, investments in subsidiary companies and intangible assets and other non- current assets whenever events or changes indicate that the carrying amount of an asset exceeds recoverable amount (net selling price of the asset under the normal course of operations or its utilization value, whichever is higher) by considering the impairment for each asset item or each asset unit generating cash flow, whichever is practical.

If the carrying amount of an asset exceeds its net realizable value, the Group will recognize an impairment loss in profit or loss for the period or decrease appraisal surplus if those assets have been revaluated and recorded as appraisal surplus included in shareholders' equity. The Group will reverse the impairment loss whenever there is an indication that there is no longer impairment or reduction in impairment as "other income" or "appraisal surplus," whichever is practical.

Trade and other payables

Trade and other payables are stated at cost.

Employee benefits

Short-term employee benefits

The Group recognizes salaries, wages, bonuses, and contributions to the social security fund and its provident fund as expenses on an accrual basis.

Post-employment benefits

The Group has severance pay obligations to employees upon their retirement under labor law. The defined benefits plan is defined as a post-employment benefit plan.

The obligation under the defined benefits plan is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method on a regular basis. The Projected Unit Credit Method, allocates benefits for the current period and previous period that must be paid to an employee who provided services to the Group throughout various periods according to the calculation formula of the benefits of the project. And, accordingly, such benefits will be allocated according to the straight-line method throughout the service life of the employee until retirement.

Current service costs, past service costs and gains and losses on settlement including gains and losses from reducing project size and project benefit payments when reducing project size will be recognized in profit or loss for the period during which the transaction occurs.

Actuarial gains and losses arising from post-employment benefits are recognized immediately in other comprehensive income and loss.

The defined benefit obligations are measured at the present value of estimated future cash flows using a discount rate that is similar to the interest rate on government bonds.

Estimation of liabilities

Provisions are recognized when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Leases

Leases - where the Group is the lessee

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognizes right-of-use ("ROU") asset and lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, initial direct costs and estimated costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any incentive received.

The lease liability is initially measured at the present value by discounting lease payments that are not paid at the commencement date using the interest rate implicit in the lease, if the rate can be readily determined. If that rate cannot be readily determined, the Group uses the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability are as follows:

- fixed payments including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee;
- the exercise price, under a purchase option that the Group is reasonably certain to exercise, whereby the exercise price is considered as lease payments in an optional renewal period; and
- payments of penalties for early termination of a lease if the Group is reasonably certain to terminate early.

To apply a cost model, the Group measures the ROU asset at cost, less accumulated depreciation and accumulated impairment loss and then makes adjustments for any remeasurement of the lease liability. The ROU asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term. However, if the lease transfers ownership of the underlying asset to the Group by the end of the lease term or if the cost of the ROU asset reflects that the Group will exercise a purchase option, the Group depreciates the ROU asset from the commencement date to the end of the useful life of the underlying asset. The useful life of the ROU asset is determined on the same basis as those of property, plant and equipment.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

	Estimated useful lives (years)
Right-of-use - land	25
Machinery, tools and equipment	5
Office equipment	5
Vehicles	5

The lease liability is re-measured when there is a change in future lease payments arising from the following:

- a change in an index or a rate used to determine those payments
- a change in the Group's estimate of the amount expected to be payable under a residual value guarantee
- the Group changes its assessment of whether it will exercise a purchase, extension or termination option

When the lease liability is re-measured to reflect changes to the lease payments, the Group recognises the amount of the remeasurement of the lease liability as an adjustment to the ROU asset. However, if the carrying amount of the ROU asset is reduced to zero and there is a further reduction in the measurement of the lease liability, the Group recognises any remaining amount of the remeasurement in profit or loss.

Short-term leases and leases of low-value assets

The Group has elected not to recognise ROU assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Foreign currencies

Foreign currency transactions are translated into Baht at the rates prevailing on the dates of their occurrence. Monetary assets and liabilities denominated in foreign currency that are outstanding at the period then ended are translated into Thai Baht at the foreign exchange rate prevailing at that date. Exchange gains or losses from translations are included as income or expenses in the in profit or loss.

Non- monetary assets and liabilities, which are derived from accounting items denominated in foreign currencies, are recorded at their initial cost and then converted into Baht using exchange rates prevailing on that date.

Income tax

Income tax expenses for the year comprise current and deferred tax. Current and deferred taxes are recognized in profit or loss except to the extent that they relate to items recognized directly in shareholders' equity or in other comprehensive income.

Current tax

The Group recognizes current tax at the amount expected to be paid to the taxation authorities, calculated based on taxable profits in accordance with the Revenue Code.

Deferred tax

The Group recognizes deferred tax on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using tax rates enacted at the end of the reporting period.

The Group recognizes deferred tax liabilities for all taxable temporary differences while they recognise deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized.

Related party transactions

Related parties comprise enterprises and individuals that control, or are controlled by, the Company, whether directly or indirectly, or which are under common control with the Group and the Company.

They also include associated companies and individuals that directly or indirectly own a voting interest in the Company giving them significant influence over the Company, key management personnel, directors and officers with authority in the planning and direction of the Group and the Company's operations.

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 buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure its assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except where there is no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation techniques that are appropriate in the circumstances and that maximize the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy into three levels based on categories of input to be used in fair value measurement as follows:

- Level 1 Use of quoted market prices in an observable active market for such assets or liabilities.
- Level 2 Use of other observable inputs for such assets or liabilities, whether directly or indirectly.
- Level 3 Use of unobservable inputs such as estimates of future cash flows.

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

Basis earnings per share

Basis earnings per share are calculated by dividing profit for the year of the Company (excluding other comprehensive income) by the weighted average number of issued and fully paid shares during the accounting year.

Segment information

Sectorial business operations are disclosed under the separate business sectors of the Group. The business segment is the business sector that sources products or provides services which have different risk and return from the risks and return of the products or services provided by other business sectors.

4.2 Significant accounting judgments and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make significant judgments and estimates regarding matters that are inherently uncertain. These judgments and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgments and estimates are as follows:

Revenue from contracts with customers

Identification of performance obligations

In identifying performance obligations, management is required to use judgement regarding whether each obligation to deliver goods or services is considered distinct, taking into consideration terms and conditions of the arrangement. In other words, if a good or service is separately identifiable from other obligation in the contract and if the customer can benefit from it, it is accounted for separately.

Determination of timing of revenue recognition

In determining the timing of revenue recognition, management is required to use judgement regarding whether performance obligations are satisfied over time or at a point in time, taking into consideration terms and conditions of the arrangement. The Group recognizes revenue over time if the:

- Customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs;
- Entity's performance creates or enhances a customer controlled asset as the asset is created or enhanced; and
- Entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

Where the above criteria are not met, revenue is recognized at a point in time. Where revenue is recognized at a point in time, the management is required to determine when the performance obligation under the contract is satisfied.

In calculating the revenue recognized over time, management is required to use judgement to measure progress towards complete satisfaction of a performance obligation based on information provided by the Group's project managers and certificates of works from its customers.

Allowances for expected credit losses of trade receivables

In determining an allowance for expected credit losses of trade receivables, management needs to make judgement and estimates based upon, among other things, past collection history, aging profile of outstanding debts and forecast economic conditions for groupings of various customer segments with similar credit risks. The Group's historical credit loss experience and forecast economic conditions may also not be representative of whether a customer will actually default in the future.

Allowance for devaluation of inventories

In determining the reduced cost of inventories to net realizable value, management makes judgment and estimates of the net realizable value of inventories based on the amount the inventories that are expected to be realized. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period. Also, management makes judgement and estimates about expected losses from stock obsolescence based upon aging profile of inventories and prevailing economic conditions.

Fair valuation of financial assets and derivatives

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period.

Impairment of investment in subsidiary

The Company treats investment in its subsidiary as impaired when there has been a significant or prolonged decline in the fair value below its cost or where other objective evidence of impairment exists. The determination of what constitutes “significant” or “prolonged” requires judgment by management.

Property, plant and equipment and depreciation

In determining depreciation of property, plant and equipment, the management is required to make estimates of the useful lives and residual values of the property, plant and equipment and to review estimate useful lives and residual values when there are any changes.

In addition, management is required to review property, plant and equipment for impairment on a periodic basis and record impairment losses when it is determined that their recoverable amount is lower than the carrying amount.

This requires judgment regarding forecast of future revenues and expenses relating to the assets subject to the review.

Deferred tax assets

Deferred tax assets are recognized in respect of temporary differences only to the extent that it is probable that taxable profit will be available against which these differences can be utilized. Significant judgment by management is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of estimate future profits.

Post-employment benefits under defined benefit plans

Obligations under defined benefit plans are determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rates, future salary increase rates, mortality rates and staff turnover rates.

5. Transactions with related parties

The Company has significant transactions with related parties, which are directly and indirectly related through inter-company shareholding or common shareholders and directorships. The related transactions comply with the terms and conditions specified in the agreement between the Company and the concerned parties.

5.1 Relationship among the parties

Name	Country	Nature of relationships	Related by
Ekarat Solar Co., Ltd.	Thailand	Subsidiary	Direct shares holding of 99.99%
Ekarat Energy Co., Ltd.	Thailand	Subsidiary	Direct shares holding of 51%

Balances with related parties as at December 31, 2022 and 2021 are as follows:

5.2 Other receivable - related company

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Other receivable				
Ekarat Energy Co., Ltd.	-	-	12,000	18,000

5.3 Other current liability - related person

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash advance				
Related person	223,200	40,000	-	-

5.4 Significant transactions with related parties

Significant transactions with related parties for the years ended December 31, 2022 and 2021 are as follows:

Unit: Baht					
	Consolidated		Separate		Pricing Policy
	financial statements		financial statements		
	2022	2021	2022	2021	
Rental income					
Ekarat Energy Co., Ltd.	-	-	24,000	24,000	Mutually agreed price based on the contract.
Interest income					
Ekarat Solar Co., Ltd.	-	-	-	331,665	Based on the agreed price according to the interest rates of domestic commercial banks.
Consulting fee					
Related person	2,685,000	-	2,685,000	-	Mutually agreed price based on the contract.

5.5 Remuneration of key management

Remuneration of key management for the years ended December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate	
	financial statements	
	2022	2021
Benefit - short-term	14,349,150	17,309,000
Benefit - after retirement	866,697	840,965
Directors' remuneration	5,645,000	3,366,000
Total	20,860,847	21,515,965

6. Cash and cash equivalents

Cash and cash equivalents as at December 31, 2022 and 2021 are as follows:

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash on hand	680,834	672,284	680,000	670,000
Current accounts	6,163,361	10,607,998	6,163,361	10,607,998
Savings accounts	81,121,290	38,032,475	80,084,708	36,973,165
Fixed account (maturity less than 3 months)	-	76,000,000	-	76,000,000
Cheque due for deposit	1,123,856	1,566,364	1,123,856	1,566,364
Total cash and cash equivalents	89,089,341	126,879,121	88,051,925	125,817,527

7. Current financial assets - net

Current financial assets - net as at December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate	
	financial statements	
	2022	2021
Current financial assets		
Investment in equity instrument on marketable securities	1,128,315	1,128,315
Loss from change in fair value	(1,128,315)	(1,128,315)
Total current financial assets - net	-	-

As at December 31, 2022 and 2021, the fair value of equity instrument on marketable securities, arranged in Level 2, measured using a closing price from an asset management company.

8. Trade and other current receivables - net

Trade and other current receivables - net as at December 31, 2022 and 2021 are as follows:

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Trade receivables				
- Other companies	351,599,983	243,032,313	351,599,983	237,247,372
Contract assets	15,972,313	42,833,836	15,871,733	42,733,256
Post-dated cheque	12,721,311	9,846,894	12,721,311	9,846,894
Total trade receivables	380,293,607	295,713,043	380,193,027	289,827,522
<u>Less</u> allowance for expected credit loss	(13,539,725)	(18,781,197)	(13,539,725)	(12,996,256)
Total trade receivables - net	366,753,882	276,931,846	366,653,302	276,831,266
Other current receivables				
- Related company	-	-	12,000	18,000
- Other companies	5,980,027	5,632,684	5,980,027	5,632,684
Prepaid expenses	14,353,417	8,644,046	14,353,417	8,644,046
Deposit receivable	10,930,217	668,263	10,930,217	668,263
Others	907,873	1,367,697	908,012	1,367,875
Total other current receivables	32,171,534	16,312,690	32,183,673	16,330,868
<u>Less</u> allowance for expected credit loss	(4,018,880)	(4,199,375)	(4,018,880)	(4,199,375)
Total other current receivables - net	28,152,654	12,113,315	28,164,793	12,131,493
Total trade and other current receivables - net	394,906,536	289,045,161	394,818,095	288,962,759

As at December 31, 2022 and 2021, the Group's trade receivables classified by age analysis are as follows:

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Trade receivables - other companies				
Aged on the basis of due dates				
Not yet due	220,939,544	135,314,934	220,939,544	135,314,934
Over due				
Less than 3 months	92,353,451	61,096,430	92,353,451	61,096,430
From 3 months to 6 months	13,076,325	13,232,183	13,076,325	13,232,183
From 6 months to 12 months	6,383,700	5,023,324	6,383,700	5,023,324
More than 12 months	18,846,963	28,365,442	18,846,963	22,580,501
Total	351,599,983	243,032,313	351,599,983	237,247,372
Contract assets				
Aged on the basis of services dates				
Less than 3 months	14,297,247	36,100,750	14,297,247	36,100,750
From 3 months to 6 months	1,169,666	120,910	1,169,666	120,910
From 6 months to 12 months	255,080	6,462,804	255,080	6,462,804
More than 12 months	250,320	149,372	149,740	48,792
Total	15,972,313	42,833,836	15,871,733	42,733,256
Post-dated cheque				
Not yet due	12,721,311	9,846,894	12,721,311	9,846,894
Total	380,293,607	295,713,043	380,193,027	289,827,522
<u>Less</u> allowance for expected credit loss	(13,539,725)	(18,781,197)	(13,539,725)	(12,996,256)
Total trade receivables - net	366,753,882	276,931,846	366,653,302	276,831,266

The normal credit terms for the Group's customers are approximately 30 - 90 days with average age of 30 - 90 days for a post-dated cheque.

As at December 31, 2022 and 2021, a part of trade receivable overdue more than 12 months is under installment payments.

For the year ended December 31, 2022, movement in the allowance for expected credit loss of trade receivables and contract assets are as follows:

	Unit: Baht	
	Consolidated	Separate
	financial statements	financial statements
As at January 1, 2022	18,781,197	12,996,256
Increase during the year	1,251,161	1,251,161
<u>Less</u> reversal of allowance for expected credit loss	(797,697)	(624,948)
written-off bad debts	(5,694,936)	(82,744)
As at December 31, 2022	13,539,725	13,539,725

9. Inventories - net

Inventories - net as at December 31, 2022 and 2021 are as follows:

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Raw materials	593,577,488	496,450,782	593,577,488	496,450,782
Raw materials - in transit	54,710,677	57,172,526	54,710,677	57,172,526
Work in process	210,849,109	143,643,689	210,849,109	143,643,689
Finished goods	142,655,143	225,476,209	140,965,928	223,786,994
Supplies	6,039,496	6,091,375	6,039,496	6,091,375
Total	1,007,831,913	928,834,581	1,006,142,698	927,145,366
<u>Less</u> allowance for decline				
in value of goods	(42,488,856)	(40,672,460)	(40,799,641)	(38,983,245)
Total inventories - net	965,343,057	888,162,121	965,343,057	888,162,121

For the year ended December 31, 2022, the Group's movement of allowance for the decline in value of goods (cost of goods exceeding net realizable value and allowance for deteriorated and obsolete goods) are as follows:

	Unit: Baht	
	Consolidated	Separate
	financial statements	financial statements
As at January 1, 2022	40,672,460	38,983,245
<u>Add</u> loss on provision of declining in value of inventories	15,605,429	15,605,429
<u>Less</u> disposal of the deteriorate inventories	(13,789,033)	(13,789,033)
As at December 31, 2022	42,488,856	40,799,641

10. Investments in subsidiary companies - net

Investments in subsidiary companies - net as at December 31, 2022 and 2021 are as follows:

	Percentage of Shareholding (%)		Paid-up share Capital (Million Baht)		Unit: Million Baht					
					Separate financial statements					
					Allowance for					
					Cost method		impairment		Net	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Ekarat Solar Co., Ltd.	99.99	99.99	1,000	1,000	999.99	999.99	(999.99)	(999.99)	-	-
Ekarat Energy Co., Ltd.	51.00	51.00	2.50	2.50	1.27	1.27	-	-	1.27	1.27
Total					1,001.26	1,001.26	(999.99)	(999.99)	1.27	1.27

11. Non - current finance assets - net

Non-current finance assets - net as at December 31, 2022 and 2021 are as follows:

	Level of fair value	Unit: Baht					
		Consolidated and Separate financial statements					
		December 31, 2022			December 31, 2021		
		Fair value either through other comprehensive income		Amortized cost	Fair value either through other comprehensive income		Amortized cost
		fair value	comprehensive income		comprehensive income	Amortized cost	
Non-current finance assets - net							
Investments in common stock - non listed companies - net	Level 3	-	-	-	-	-	-
Deposits at financial institutions with collateral obligations	Level 1	-	19,650,000	19,650,000	-	19,650,000	19,650,000
Total		-	19,650,000	19,650,000	-	19,650,000	19,650,000

Investments in common stock - non listed companies - net as at December 31, 2022 and 2021 are as follows:

	Unit: Million Baht									
	Percentage of Shareholding (%)		Paid-up share Capital (Million Baht)		Consolidated and Separate financial statements					
					Allowance for					
					Cost method		impairment		Net	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
G.E.C. Engineering Co.,Ltd.	1.19	1.19	230	230	2.73	2.73	(2.73)	(2.73)	-	-
Saha Karn Engineering Co.,Ltd.	0.04	0.04	403	403	0.16	0.16	(0.16)	(0.16)	-	-
Total					2.89	2.89	(2.89)	(2.89)	-	-

As at December 31, 2022 and 2021 deposits at financial institutions with collateral obligations are used to guarantee credit and obligations with commercial banks as mentioned in Notes 18, 22 and 36.1.

12. Investment properties - net

Investment properties - net as at December 31, 2022 and 2021 are as follows:

	Unit : Baht	
	Consolidated and Separate financial statements	
	2022	2021
Cost	12,973,886	12,973,886
<u>Less</u> allowance for impairment	(11,342,131)	(11,342,131)
Net	1,631,755	1,631,755

As at December 31, 2022 and 2021, the Company and a related company jointly registered ownership of land, valued of Baht 12.42 million, with an area of 136 rai 1 ngan and 67 square wah. (Total cost is Baht 17.92 million).

Such land is a non-operating land which has appraised by an independent appraiser using the market value approach in accordance with the report dated October 10, 2019 at the appraised value amount of Baht 1.67 million.

The fair value of investment property is categorized as a Level 3 of the fair value hierarchy.

13. Assets for rent - net

For the years ended December 31, 2022, the movement of assets for rent - net are as follows:

	Unit: Baht			
	Consolidated and Separate financial statements			
	Transformer	Transformer		
	Repurchased	reserved at	and solar panel	
	transformer	service center	for borrow or rent	Total
Cost				
Balance as at January 1, 2022	22,915,913	3,503,563	5,280,259	31,699,735
Acquisition	248,160	-	-	248,160
Transfer from inventories	38,417	-	-	38,417
Transfer in (transfer out)	(589,874)	325,630	264,244	-
Disposal	(792,750)	-	(54,971)	(847,721)
Balance as at December 31, 2022	21,819,866	3,829,193	5,489,532	31,138,591
Accumulated depreciation				
Balance as at January 1, 2022	(18,280,513)	(2,650,097)	(4,638,004)	(25,568,614)
Depreciation for the year	(870,033)	(259,785)	(394,742)	(1,524,560)
(Transfer in) transfer out	164,444	(111,380)	(53,064)	-
Disposal	179,817	-	54,970	234,787
Balance as at December 31, 2022	(18,806,285)	(3,021,262)	(5,030,840)	(26,858,387)
Accumulated allowance for impairment				
Balance as at January 1, 2022	(941,934)	-	-	(941,934)
(Increase) decrease during the year	-	-	-	-
Balance as at December 31, 2022	(941,934)	-	-	(941,934)
Net book value				
As at December 31, 2022	2,071,647	807,931	458,692	3,338,270
As at December 31, 2021	3,693,466	853,466	642,255	5,189,187

Depreciation is recognized in profit or loss for the years

Ended December 31, 2022	1,524,560
Ended December 31, 2021	1,508,997

14. Property, plant and equipment - net

For the years ended December 31, 2022, the movements of property, plant and equipment - net are as follows:

	Unit: Baht						
	Consolidated financial statements						
	Land and land improvement	Building and construction	Machinery, tools and equipment	Furniture and office equipment	Vehicles	Work under construction	Total
Cost							
Balance as at January 1, 2022	104,034,296	967,404,168	1,552,300,526	82,576,071	39,747,673	3,842,889	2,749,905,623
Acquisition	-	40,000	31,953,991	5,182,110	6,600	19,827,468	57,010,169
Transfer from inventories	-	1,027,037	-	-	-	9,294,584	10,321,621
Transfer in (transfer out)	-	558,447	2,770,446	328,381	-	(3,657,274)	-
Disposal	-	(23,100)	(10,194,210)	(4,609,233)	(6,675,500)	(1,774,524)	(23,276,567)
Transfer from right-of-use assets	-	-	8,118,309	-	887,757	-	9,006,066
Balance as at December 31, 2022	104,034,296	969,006,552	1,584,949,062	83,477,329	33,966,530	27,533,143	2,802,966,912
Accumulated depreciation							
Balance as at January 1, 2022	-	(503,575,858)	(955,401,190)	(76,089,520)	(37,895,701)	-	(1,572,962,269)
Depreciation for the year	-	(24,616,183)	(34,222,773)	(2,988,047)	(1,106,585)	-	(62,933,588)
Disposal	-	23,099	9,107,800	4,603,957	6,552,819	-	20,287,675
Transfer from right-of-use assets	-	-	(6,576,942)	-	(722,852)	-	(7,299,794)
Balance as at December 31, 2022	-	(528,168,942)	(987,093,105)	(74,473,610)	(33,172,319)	-	(1,622,907,976)
Accumulated allowance for impairment:							
Balance as at January 1, 2022	-	(124,451,982)	(499,937,909)	(61,351)	-	(1,163,245)	(625,614,487)
Increase (decrease) during the year	-	-	-	-	-	-	-
Balance as at December 31, 2022	-	(124,451,982)	(499,937,909)	(61,351)	-	(1,163,245)	(625,614,487)
Net book value							
As at December 31, 2022	104,034,296	316,385,628	97,918,048	8,942,368	794,211	26,369,898	554,444,449
As at December 31, 2021	104,034,296	339,376,328	96,961,427	6,425,200	1,851,972	2,679,644	551,328,867
Depreciation is recognized in profit or loss for the years							
Ended December 31, 2022							62,933,588
Ended December 31, 2021							62,823,337

	Unit: Baht						
	Separate financial statements						
	Land and land improvement	Building and construction	Machinery, tools and equipment	Furniture and office equipment	Vehicles	Work under construction	Total
Cost							
Balance as at January 1, 2022	112,075,491	799,104,484	1,092,407,722	73,565,714	40,083,673	4,010,925	2,121,248,009
Acquisition	-	40,000	31,953,991	5,182,110	6,600	19,827,468	57,010,169
Transfer from inventories	-	1,027,037	-	-	-	9,294,584	10,321,621
Transfer in (transfer out)	-	558,447	2,770,446	328,381	-	(3,657,274)	-
Disposal	-	(23,100)	(10,194,210)	(4,609,233)	(6,675,500)	(1,774,524)	(23,276,567)
Transfer from right-of-use assets	-	-	8,118,309	-	887,757	-	9,006,066
Balance as at December 31, 2022	112,075,491	800,706,868	1,125,056,258	74,466,972	34,302,530	27,701,179	2,174,309,298
Accumulated depreciation							
Balance as at January 1, 2022	-	(407,606,544)	(653,868,063)	(66,688,466)	(38,263,649)	-	(1,166,426,722)
Depreciation for the year	-	(24,319,517)	(34,222,773)	(2,988,047)	(1,106,585)	-	(62,636,922)
Disposal	-	23,099	9,107,800	4,603,957	6,552,819	-	20,287,675
Transfer from right-of-use assets	-	-	(6,576,942)	-	(722,852)	-	(7,299,794)
Balance as at December 31, 2022	-	(431,902,962)	(685,559,978)	(65,072,556)	(33,540,267)	-	(1,216,075,763)
Accumulated allowance for impairment:							
Balance as at January 1, 2022	-	(101,381,090)	(304,811,682)	(54,729)	-	(1,163,245)	(407,410,746)
Increase (decrease) during the year	-	-	-	-	-	-	-
Balance as at December 31, 2022	-	(101,381,090)	(304,811,682)	(54,729)	-	(1,163,245)	(407,410,746)
Net book value							
As at December 31, 2022	112,075,491	267,422,816	134,684,598	9,339,687	762,263	26,537,934	550,822,789
As at December 31, 2021	112,075,491	290,116,850	133,727,977	6,822,519	1,820,024	2,847,680	547,410,541
Depreciation is recognized in profit or loss for the years							
Ended December 31, 2022							62,636,922
Ended December 31, 2021							62,526,671

As at December 31, 2021, the management of the Company appointed an independent appraiser to assess the fair value of assets in the production and distribution section of solar cells panels. According to the appraisal report dated November 15, 2021, the appraiser determines the salvage value to be the fair value of the asset, the results showed that the expected return value of assets in the production and distribution section of solar cells panels (calculated by cost method) is lower than the book value of assets according to the consolidated and separate financial statement in the amount of Baht 5.81 million. Therefore the management considered to record the allowance for impairment of assets in the consolidated and separate profit or loss for the year 2021 the whole amount.

As at December 31, 2022 and 2021, the Company has net book value of these unused assets of Baht 73.20 million and Baht 84.86 million, respectively.

As at December 31, 2022 and 2021, assets under the Project Farm Solar, with booked values of Baht 117.74 million and Baht 125.04 million, respectively, are assets that the Company has right to utilize in its sale of electricity from a government agency for a 25-year term. Such project is situated on land owned by multiple parties, as discussed in Note to Financial Statements No. 15.

As at December 31, 2022, and 2021 the Group has fixed assets at cost totaling of Baht 605.84 million and Baht 591.83 million, respectively, were fully depreciated. However, most of such assets are still in use.

As at December 31, 2022, and 2021 the Company mortgaged land with constructions (including land with construction in the future) with booked values of Baht 161.06 million and Baht 171.00 million, respectively, and certain machineries with booked values of Baht 30.19 million and Baht 40.66 million, respectively, as collateral against credit facilities and obligations with commercial banks as mentioned in Notes to Financial Statements No. 18, 21 and 36.1.

As at September 27, 2022, the Company has entered into a sale and lease back machine agreement with a financial institution to pay a monthly installment of Baht 0.32 million for a period of 5 years which is presented in other financial liability in Notes to Financial Statements No. 24. As at December 31, 2022, the machine has booked values of Baht 22.97 million.

As at December 31, 2022 and 2021, the Company has unused assets with booked values of Baht 80.74 million and Baht 91.69 million, respectively.

15. Right-of-use assets - net

For the years ended December 31, 2022, the movements of right-of-use assets - net are as follows:

	Unit: Baht				
	Consolidated and Separate financial statements				
	Right-of-use - land	Machinery, tools and equipment	Office equipment	Vehicles	Total
Cost					
Balance as at January 1, 2022	54,637,268	9,118,309	1,575,000	49,290,500	114,621,077
Acquisition	-	-	-	10,243,530	10,243,530
Decrease	-	-	-	(3,426,037)	(3,426,037)
Reclassify to property, plant and equipment	-	(8,118,309)	-	(887,757)	(9,006,066)
Balance as at December 31, 2022	54,637,268	1,000,000	1,575,000	55,220,236	112,432,504
Accumulated depreciation					
Balance as at January 1, 2022	(6,529,473)	(5,988,723)	(395,044)	(21,103,982)	(34,017,222)
Depreciation for the year	(2,405,595)	(1,005,157)	(314,828)	(9,860,850)	(13,586,430)
Decrease	-	-	-	3,426,032	3,426,032
Reclassify to property, plant and equipment	-	6,576,942	-	722,852	7,299,794
Balance as at December 31, 2022	(8,935,068)	(416,938)	(709,872)	(26,815,948)	(36,877,826)
Net book value					
As at December 31, 2022	45,702,200	583,062	865,128	28,404,288	75,554,678
As at December 31, 2021	48,107,795	3,129,586	1,179,956	28,186,518	80,603,855
Depreciation is recognized in profit or loss for the years					
Ended December 31, 2022					13,586,430
Ended December 31, 2021					14,353,423

On August 22, 2016, the Company entered into an agreement to support a ground-based solar farm project to generate electricity for government and agricultural cooperatives. The agreement has a 25-year term, from January 1, 2017 to December 31, 2041, and carries an obligation to pay for such projects, until completion, as follows:

	Unit: Baht
Land usage fee	23,789,500
Agreement granted fee	9,025,000
Royalty for electricity sale	Percentage of sales before expenses each month (Minimum guarantee of Baht 47,906,675)

16. Intangible assets - net

For the year ended December 31, 2022, movements of intangible assets - net are as follows:

	Unit: Baht		
	Consolidated financial statements		
	Software during		
	Computer software	installation	Total
Cost			
Balance as at January 1, 2022	28,033,523	-	28,033,523
Acquisition	702,879	10,500,000	11,202,879
Disposal	(1,709,996)	-	(1,709,996)
Balance as at December 31, 2022	27,026,406	10,500,000	37,526,406
Accumulated amortization			
Balance as at January 1, 2022	(25,309,885)	-	(25,309,885)
Amortization for the year	(148,733)	-	(148,733)
Disposal	1,709,996	-	1,709,996
Balance as at December 31, 2022	(23,748,622)	-	(23,748,622)
Accumulated allowance for impairment			
Balance as at January 1, 2022	(2,427,094)	-	(2,427,094)
(Increase) decrease during the year	-	-	-
Balance as at December 31, 2022	(2,427,094)	-	(2,427,094)
Net book value			
As at December 31, 2021	850,690	10,500,000	11,350,690
As at December 31, 2022	296,544	-	296,544
Amortization is recognized in profit or loss for the years			
Ended December 31, 2022			148,733
Ended December 31, 2021			207,391

	Unit: Baht		
	Separate financial statements		
	Software during		
	Computer software	installation	Total
Cost			
Balance as at January 1, 2022	20,846,410	-	20,846,410
Acquisition	702,879	10,500,000	11,202,879
Disposal	(1,709,996)	-	(1,709,996)
Balance as at December 31, 2022	19,839,293	10,500,000	30,339,293
Accumulated amortization			
Balance as at January 1, 2022	(20,549,866)	-	(20,549,866)
Amortization for the year	(148,733)	-	(148,733)
Disposal	1,709,996	-	1,709,996
Balance as at December 31, 2022	(18,988,603)	-	(18,988,603)
Accumulated allowance for impairment			
Balance as at January 1, 2022	-	-	-
(Increase) decrease during the year	-	-	-
Balance as at December 31, 2022	-	-	-
Net book value			
As at December 31, 2021	850,690	10,500,000	11,350,690
As at December 31, 2022	296,544	-	296,544
Amortization is recognized in profit or loss for the years			
Ended December 31, 2022			148,733
Ended December 31, 2021			207,391

As at December 31, 2022 and 2021, the intangible assets, costing Baht 18.75 million and Baht 19.73 million respectively, were fully amortized but are still in use.

17. Deferred tax assets - net

Deferred tax assets - net as at December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate financial statements	
	2022	2021
Deferred tax assets	72,977,779	79,737,858
Deferred tax liabilities	(2,206,170)	(2,191,006)
Net	70,771,609	77,546,852

Movement of deferred tax assets and liabilities incurred during the years ended December 31, 2022 and 2021 are as follows:

	Unit: Baht		
	Consolidated and Separate financial statements		
	Movement increase (decrease)		
	Other		
	January 1, 2022	Profit or loss	December 31, 2022
Deferred tax assets :			
Allowance for devaluation of inventories	7,796,649	363,279	-
Allowance for impairment of fixed assets and related depreciation	55,893,838	(7,634,153)	-
Non-current provisions for employee benefit	15,649,729	374,450	-
Estimated demolition	163,067	36,470	-
Lease agreements	234,575	99,875	-
Total	79,737,858	(6,760,079)	-
Deferred tax liability :			
Depreciation from change in estimated useful life	(1,833,523)	134,312	-
Depreciation	(357,483)	(149,476)	-
Total	(2,191,006)	(15,164)	-
Net	77,546,852	(6,775,243)	-

	Unit: Baht		
	Consolidated and Separate financial statements		
	Movement increase (decrease)		December 31, 2021
	January 1, 2021	Other comprehensive income Profit or loss	
Deferred tax assets :			
Allowance for devaluation of inventories	5,850,625	1,946,024	-
Allowance for impairment of fixed assets and related depreciation	62,144,359	(6,250,521)	-
Non-current provisions for employee benefit	16,582,209	(932,480)	-
Estimated demolition	126,596	36,471	-
Lease agreements	120,667	113,908	-
Total	84,824,456	(5,086,598)	-
Deferred tax liability :			
Depreciation from change in estimated useful life	(1,967,836)	134,313	-
Depreciation	(245,881)	(111,602)	-
Total	(2,213,717)	22,711	-
Net	82,610,739	(5,063,887)	-

Income tax expenses for the years ended December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate financial statements	
	2022	2021
Current tax expense		
Current periods	33,077,391	14,209,101
Deferred tax expense		
Movement in temporary differences	6,775,243	5,063,887
Total income tax expenses	39,852,634	19,272,988

Reconciliation of effective tax rate

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Profit before tax expenses	200,344,710	109,084,880	196,221,719	109,565,568
Tax rate	20%	20%	20%	20%
Current tax expense as tax rate	40,068,942	21,816,976	39,244,344	21,913,114
Tax effects on:				
Benefit of non-taxable				
promoted operation (BOI)	(2,634,392)	(3,281,785)	(2,634,392)	(3,281,785)
Net loss in current year,				
not recognized as deferred tax	12,836	33,076	-	-
Net loss in past event,				
not recognized as deferred tax	(931,308)	(2,923,817)	-	(661,766)
Income tax on inter-company profit	59,333	2,259,090	-	-
Non-deductible expenses by the Revenue Code	4,658,018	1,882,094	4,623,477	1,816,071
Non-taxable income/deductible expense	(1,380,795)	(512,646)	(1,380,795)	(512,646)
Tax expense	39,852,634	19,272,988	39,852,634	19,272,988
The average effective tax rate	20%	18%	20%	18%

Income tax rate

The Group used income tax rate of 20% for the calculation of corporate income tax for the years ended December 31, 2022 and 2021.

18. Short-term loans from financial institutions

Short-term loans from financial institutions as at December 31, 2022 and 2021 are as follows:

Unit: Baht				
Consolidated and Separate financial statements				
	2022	Interest rate	2021	Interest rate
Promissory notes	-	MLR-0.5%, MLR-1.5%, MLR-2.15%	36,250,000	MLR-1.5%, MLR-2.15%
Trust receipts	210,794,404	Market rate	185,348,183	Market rate
Total	210,794,404		221,598,183	

As at December 31, 2022 and 2021, the Company has overdrafts and short-term loans limits from four local banks totaling Baht 1,499.98 million, and 1,369.98 million respectively. These loans are guaranteed by bank deposits in Note to Financial Statements No.11, and part of land with constructions and machineries in Note to Financial Statements No.14.

19. Trade and other current payables

Trade and other current payables as at December 31, 2022 and 2021 are as follows:

Unit: Baht		
Consolidated and Separate financial statements		
	2022	2021
Trade payables		
Other parties	230,491,970	237,830,727
Total trade payables	230,491,970	237,830,727
Other current payables		
Other parties	11,806,417	9,984,725
Assets payables	4,765,257	1,861,296
Others	564,884	921,312
Total other current payables	17,136,558	12,767,333
Total trade and other	247,628,528	250,598,060

20. Accrued expenses

Accrued expenses as at December 31, 2022 and 2021 are as follows:

	Unit: Baht			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Accrued bonus	37,613,888	7,479,020	37,613,888	7,479,020
Accrued commission	14,914,999	8,325,743	14,914,999	8,325,743
Other accrued expenses	11,680,749	13,460,651	11,635,604	8,794,526
Total	64,209,636	29,265,414	64,164,491	24,599,289

21. Advances received for goods and services

Advances received for goods and services as at December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate financial statements	
	2022	2021
Deposit received in advance	701,800	544,800
Advance received for goods	27,835,030	18,590,463
Advance received from services and maintenance contracts	23,446,629	9,093,260
Contract liabilities	16,370,611	49,824,622
Total	68,354,070	78,053,145

As at December 31, 2022 and 2021, contract assets and liabilities are as follows:

	Unit: Baht	
	Consolidated and Separate financial statements	
	2022	2021
Contract assets		
Value of contract	18,550,010	230,533,169
Revenue recognized		
- Services revenue recognized from beginning of the year	10,715,810	67,341,327
- Services revenue recognized during the year	2,797,050	102,718,782
Revenue recognized on percentage of completion basis	13,512,860	170,060,109
<u>Less</u> Value of progress billings (installment)	(12,520,510)	(142,300,792)
Contract assets (included in trade and other current receivables - net)	992,350	27,759,317
Contract liabilities		
Value of contract	330,804,631	185,866,428
Revenue recognized		
- Services revenue recognized from beginning of the year	(64,661,866)	(1,820,093)
- Services revenue recognized during the year	(236,241,154)	(5,851,635)
Revenue recognized on percentage of completion basis	(300,903,020)	(7,671,728)
<u>Less</u> Value of progress billings (installment)	317,273,631	57,496,350
Contract liabilities (included in advances received for goods and services)	16,370,611	49,824,622

22. Long-term loans from a financial institution - net

Long-term loans from a financial institution - net as at December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate financial statements	
	2022	2021
Long-term loans from financial institution	38,390,000	60,410,000
<u>Less</u> deferred front end fee	(304,904)	(517,888)
Total	38,085,096	59,892,112
<u>Less</u> current portion of long-term loans	(21,873,727)	(21,806,947)
Long-term loans from financial institution - net	16,211,369	38,085,165

The movements in long-term loans from a financial institution for the year ended December 31, 2022 are as follows:

	Unit: Baht
	Consolidated and Separate
	financial statements
As at January 1, 2022	60,410,000
<u>Less</u> loan repayment during the year	(22,020,000)
As at December 31, 2022	38,390,000

As at December 31, 2022 and 2021, long-term loans from financial institutions are as follows:

Unit: (Million Baht)				((%)/ annum)		Repayment of principal and interest rate
Credit Line		Outstanding balance		Interest rate		
2022	2021	2022	2021	2022	2021	
120.00	120.00	30.09	45.81	MLR-1.50%	MLR-1.50%	
19.50	19.50	3.90	7.80	3.50%	3.50%	
12.00	12.00	4.40	6.80	3.50%	3.50%	
151.50	151.50	38.39	60.41			

Collaterals

As at December 31, 2022 and 2021, the Company has bank deposits, as mentioned in Note to Financial Statements No. 11, and land and certain machines, as mentioned in Note to Financial Statements No. 14, as collateral.

The Company has purchased an insurance policy for machines and equipment for the highest insurable amount allowable by insurance company. The benefit derivable from such policy is to be given to the lending financial institution. The Company must comply with material loan provisions, for example, maintain a debt to equity ratio (D/E) and debt repayment capacity ratio as stated in the contracts until the completion of the repayment.

23. Lease liabilities - net

Lease liabilities - net as at December 31, 2022 and 2021 are as follows:

Unit: Baht	
Consolidated and Separate financial statements	
	2022
	2021
Due not later than one year	
Minimum payments	14,878,501
Deferred interest	(3,433,289)
Lease liabilities - net	11,445,212
Due later than one year but not later than five years	
Minimum payments	31,998,296
Deferred interest	(8,780,753)
Lease liabilities - net	23,217,543
Due later than five years	
Minimum payments	38,982,020
Deferred interest	(9,945,417)
Lease liabilities - net	29,036,603

Lease liabilities consist of machinery, tools and equipment lease agreements, office equipment lease agreements, vehicle lease agreements and an agreement to support a ground-based solar farm to generate electricity to government and agricultural cooperatives with a 25-year term, as mentioned in Note to Financial Statement No. 15.

24. Other financial liabilities - net

Other financial liabilities - net as at December 31, 2022 and 2021 are as follows:

	Unit: Baht	
	Consolidated and Separate financial statements	
	2022	2021
Due not later than one year		
Minimum payments	3,792,600	-
Deferred interest	(627,025)	-
Lease liabilities - net	3,165,575	-
Due later than one year but not later than five years		
Minimum payments	14,222,250	-
Deferred interest	(1,089,568)	-
Lease liabilities - net	13,132,682	-

As at September 27, 2022, the Company entered into a sale and leaseback machine agreement contract with a financial institution, to pay a monthly installment of Baht 0.32 million for a period of 5 years. Sale and leaseback agreement transactions is considered as a transfer of asset which is not a sale in accordance with TFRS 15 "Revenue from Contracts with Customers". Therefore, the Company continue recognizes such transfer assets as fixed assets in the financial statement and recognizes liabilities from sale and leaseback as other financial liabilities equal to the transfer proceeds of assets.

As at December 31, 2022, the machines have a booked value of Baht 22.97 million as mentioned in Note to Financial Statement No. 14.

25. Non-current provisions for employee benefits

Movement of the present value of non-current provisions for employee benefits and employee benefits expenses in the statements of comprehensive income for the years ended December 31, 2022 and 2021 are as follows:

Unit: Baht	
Consolidated and Separate financial statements	
Post - employment benefit plan	
	2022
	2021
Non-current provisions for employee benefit	
as at beginning of the years	78,248,645
Included in profit or loss:	
Current service cost	4,237,511
Interest cost	1,538,506
Benefit paid during the years	(3,903,766)
Non-current provisions for employee benefit	
at end of the years	80,120,896

Expenses are recognized in profit or loss and other comprehensive income for the years ended December 31, 2022 and 2021, as follows:

Unit: Baht	
Consolidated and Separate financial Statements	
	2022
	2021
Included in profit or loss:	
Cost of sales	3,766,426
Administrative expenses	2,009,591
Total	5,776,017

Principal actuarial assumptions as at December 31, 2022 and 2021 (represented by the weighted-average) are as follows:

	(Percentage (%)/annum)	
	Consolidated and Separate financial statements	
	2022	2021
Discount rate	1.73%	1.73%
Future salary increase rate	5.65%	5.65%
Mortality rate	100% of Thai Mortality Ordinary Tables of 2017	100% of Thai Mortality Ordinary Tables of 2017
Turnover rate		
Under 20 years old	14%	14%
20 - 29 years old	20%	20%
30 - 39 years old	12%	12%
40 - 59 years old	5%	5%
Above 60 years old	0%	0%
Retired age	60 years	60 years

Changes in the actuarial assumption will affect employee benefit obligation for the years ended December 31, 2022 and 2021 as follows:

	Unit: Baht			
	Consolidated and Separate financial statements			
	2022		2021	
	Increase	Decrease	Increase	Decrease
Discount rate (0.50% movement)	(3,543,350)	3,792,858	(3,664,004)	3,927,450
Future salary increases rate (0.50% movement)	4,352,708	(4,090,695)	4,059,404	(3,821,244)
Employee turnover (1.00% movement)	(4,704,254)	5,044,028	(4,394,663)	4,703,327

The Group has a defined benefits plan, in accordance with severance payment provisions under labor law, for eligible retired employees according to their work service periods at various rates.

The actuarial assumption of the discount rate is estimated from the weighted average of yield rate of government bonds that reflects the estimated timing of benefit payments.

The actuarial assumption of mortality rate for reasonable estimation of probability of retirement in the future is estimated from the mortality table from the Office of Insurance Commission.

The actuarial assumption of resignation rate is estimated based on an historical data base on employee age ranges.

26. Share capital

According to the Ordinary Shareholder's Meeting for the year 2022, held on April 29, 2022, the meeting passed the resolution to decrease of the Company's registered share capital by 543,401,250 shares with a par value of Baht 0.80 per share which were reserved for the exercise of warrants (AKR-W1) amounting to 543,401,250 units which were not exercised within the period of the warrants as scheduled. At present, these warrants for purchasing the ordinary shares of the Company were expired. The Company registered such share capital decrease with the Department of Business Development, Ministry of Commerce on May 11, 2022.

27. Legal reserve

Pursuant to the Thai Public Company Limited Act B.E. 2535, the Company is required to appropriate at least 5% of its annual net income, after deduction of expenses, as legal reserve until the reserve equals 10% of its authorized share capital. The reserve is not available for dividend distribution.

28. Dividend payment

According to the Ordinary Shareholder's Meeting for the year 2022, held on April 29, 2022, the meeting passed the resolution to pay dividend from net profit of the year 2021 to shareholders of the Company at the rate of Baht 0.03 per share for 1,471.53 million shares, totaling of Baht 44.15 million. The dividend was paid on May 27, 2022.

According to the Board of Directors' Meeting No.9/2022, held on October 20, 2022, the meeting resolved to approve to pay an interim dividend from the operating results for the six-month period ended June 30, 2022, to shareholders of the Company at the rate of Baht 0.015 per share for 1,471.53 million shares, totaling Baht 22.07 million. The dividend was paid on November 17, 2022.

29. Warrant

On May 28, 2021, the warrant holders of 128,243,452 units exercised their rights to purchase 128,243,452 ordinary shares at an exercise price of Baht 1.00 per share, resulting in an increase in the issued and paid-up share capital of the Company from Baht 1,074,631,523 (1,343,289,404 shares) to Baht 1,177,226,285 (1,471,532,856 shares) and share capital premium of Baht 25,648,690. The Company registered such paid-up share capital with the Department of Business Development, Ministry of Commerce on June 9, 2021

30. Basic earnings per shares

Basic earnings per share for years ended December 31, 2022 and 2021 are calculated as follows:

	For the years ended December 31,			
	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Number of ordinary shares at beginning of year (Unit: Share)	1,471,532,856	1,343,289,404	1,471,532,856	1,343,289,404
Impact of shares issued during the year				
by exercising of warrants (Unit: Share)	-	76,594,719	-	76,594,719
Weighted average number of ordinary shares during the year (Basic) (Unit: Share)	1,471,532,856	1,419,884,123	1,471,532,856	1,419,884,123
Net profit for the year attributable to equity holders of the Company (Unit: Baht)	160,523,526	89,891,953	156,369,085	90,292,580
Basic earnings per share (Unit: Baht)	0.109	0.063	0.106	0.064

31. Operating segment

The operating segment information in the consolidated financial statement for the years ended December 31, 2022 and 2021 are as follows:

	Unit: Million Baht							
	Goods production and distribution		Services		Installation of a solar panel		Electricity	
	2022	2021	2022	2021	2022	2021	2022	2021
Revenues from sales and services	1,604.89	1,080.09	225.23	187.82	239.04	108.57	35.49	37.78
Cost of sale and service	(1,255.25)	(842.59)	(122.41)	(101.79)	(230.76)	(105.48)	(19.32)	(18.78)
Gross profit	349.64	237.50	102.82	86.03	8.28	3.09	16.17	19.00
Distribution costs and administrative expenses								
Profit from operation							206.68	116.53
Other income							16.31	11.30
Loss on impairment of assets							(0.13)	(5.99)
Finance costs							(22.52)	(12.76)
Income tax expenses							(39.85)	(19.27)
Profit for the year							160.49	89.81

For the year ended December 31, 2022 the Group had revenues from major customers, representing approximately 14.63% of total revenues from operations.

Details of the sectorial business assets as at December 31, 2022 and 2021 are as follows:

	Unit: Million Baht					
	Goods production, services and installation a solar panel business		Electricity distribution business		Consolidated financial statements	
	2022	2021	2022	2021	2022	2021
Fixed assets	379.31	368.30	175.13	183.03	554.44	551.33
Other assets					1,654.53	1,525.16
Total assets					2,208.97	2,076.49

32. Capital management

The objective of financial management of the Group is to maintain the continuity of operational capability and capital structure to be duly appropriated.

33. Financial Instruments

Financial risk management policy

The Group bears risk due to interest rate fluctuations and from non-performance of contractual obligations by contractual parties. The Group will consider using the appropriate financial instruments when it deems it is necessary to manage such risks. However, the Group does not have a policy to hold or issue any financial instruments for speculation or for trading.

Risk from credit provision

The Group bears risk due to credit provision related to trade receivables. However, the Group has set a policy to conduct business only with reliable traders with good financial status in order to reduce the risk of financial loss. The Group does not have high concentrations of credit risk since it has a large and diverse customer base. Maximum exposure to credit risk is limited to the carrying amounts of receivables as stated in the statements of financial position.

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.

Risk from interest rates

The Group bears significant risk over interest rates on financial instruments, which includes loans from financial institutions. Therefore, it is subject to risk in relation to floating interest rates which may fluctuate in the future, possibly affecting the operating results and cash flows.

As at December 31, 2022 and 2021, significant financial instruments have the following details: (with respect to interest rates, they are already shown in related Notes to Financial Statements).

	Unit: Million Baht					
	Consolidated financial statements					
	December 31, 2022					
	Fixed interest rate					
	Within 1 year	more than 1 year to 5 years	more than 5 years	Floating Interest rate	Non Interest bearing	Total
Financial assets						
Cash and cash equivalents	-	-	-	81	8	89
Trade and orther current receivables - net	-	-	-	-	395	395
Non-current financial assets - net	-	-	-	20	-	20
Total	-	-	-	101	403	504
Financial liabilities						
Short-term loans from financial institutions	-	-	-	211	-	211
Trade and other current payables	-	-	-	-	248	248
Lease liabilities	12	23	29	-	-	64
Other financial liabilities	3	13	-	-	-	16
Long-term loans from financial institutions	-	-	-	38	-	38
Total	15	36	29	249	248	577

	Unit: Million Baht					
	Consolidated financial statements					
	December 31, 2021					
	Fixed interest rate					
	Within 1 year	more than 1 year to 5 years	more than 5 years	Floating Interest rate	Non Interest bearing	Total
Financial assets						
Cash and cash equivalents	76	-	-	38	13	127
Trade and orther current receivables - net	-	-	-	-	289	289
Non-current financial assets - net	-	-	-	20	-	20
Total	76	-	-	58	302	436
Financial liabilities						
Short-term loans from financial institutions	-	-	-	222	-	222
Trade and other current payables	-	-	-	-	250	250
Lease liabilities	12	23	31	-	-	66
Long-term loans from financial institutions	-	-	-	60	-	60
Total	12	23	31	282	250	598

Risk on exchange rates

The Group is exposed to foreign currency risk relating to sales which are denominated in foreign currency. The Group primarily utilizes forward exchange contracts with maturities of less than one year to hedge the foreign currency risk on collections.

As at December 31, 2022 and 2021, the Group has outstanding balance of derivative assets and derivative liabilities for buying forward contracts are as follows:

Consolidated and Separate financial statements						
Currency	Foreign currency		Contract amount		Fair value of assets (liabilities) (Baht)	
	2022	2021	2022	2021	2022	2021
US Dollar	1,032,701	2,807,676	36,404,687	93,675,862	(1,203,157)	(181,917)
Euro	-	200,000	-	7,868,000	-	279,310
			36,404,687	101,543,862	(1,203,157)	97,393

As at December 31, 2022 and 2021, the Group did not enter into forward exchange contracts for the following:

Unit: foreign currencies				
Consolidated financial statements				
Currency	Trade receivables		Trust receipts/Trade payables	
	2022	2021	2022	2021
US Dollar	5,250	62,111	4,061,625	5,487,897
Euro	-	141,975	551,531	538,348
SGD Dollar	191,500	150,400	-	-
Ringgit Malaysia	287,630	978,040	-	-

Unit: foreign currencies				
Separate financial statements				
Currency	Trade receivables		Trust receipts/Trade payables	
	2022	2021	2022	2021
US Dollar	5,250	62,111	4,061,625	5,487,897
Euro	-	-	551,531	538,348
SGD Dollar	191,500	150,400	-	-
Ringgit Malaysia	287,630	978,040	-	-

Fair values of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value are not expected to be materially different from the amounts presented in the statements of financial position.

The methods and assumptions used by the Group in estimating the fair value of financial instruments are as follows:

- For financial assets and liabilities which have short-term maturity, including cash and cash equivalents, trade and other current receivables, non-current financial assets, trade and other current payables, lease liabilities and other financial liabilities, their carrying amounts in the statements of financial position approximate their fair values.
- For loans from carrying interest approximate to the market rate, their carrying amounts in the statements of financial position approximate their fair values.

34. Expenses by nature

The Company has significant expenses by nature for the years ended December 31, 2022 and 2021 are as follows:

	Unit: Baht			
	Consolidated financial statement		Separate financial statement	
	2022	2021	2022	2021
Changes in finished goods and				
work in progress (increase) decrease	15,615,645	(151,513,045)	15,615,645	(151,513,045)
Raw material and supplies used	1,088,185,961	712,870,851	1,088,185,961	712,388,091
Loss from decline in value of inventories	1,816,396	9,542,740	1,816,396	10,025,500
Loss on impairment of assets	128,628	5,985,439	128,628	5,985,439
Employee expense	285,354,572	257,729,920	285,354,572	257,629,920
Directors' remuneration	15,215,847	18,149,965	15,215,847	18,149,965
Depreciation and amortization	78,193,310	78,893,148	77,896,644	78,596,482
Management consulting fee	3,345,000	1,080,000	3,345,000	1,080,000
Commission and consultation	38,831,595	33,297,985	38,831,595	33,297,985

35. Provident fund

The Group and its employees have jointly established a provident fund in accordance with the Provident Fund Act B.E. 2530. The Group and its employees contribute to the fund, on a monthly basis, at rates that depend on the work period of the particular employee. A local financial institution is managing the provident fund. The provident fund will pay out to the particular employee upon termination in accordance with the fund rules. For the years ended December 31, 2022 and 2021, in the consolidated financial statements, the Group's contributions amounted to approximately Baht 5.46 million and Baht 5.40 million, respectively.

36. Commitment and contingent liabilities

36.1 As at December 31, 2022 and 2021, the Group has the following credit facilities with financial institutions:

Unit: Million Baht							
Consolidated and Separate financial statements							
2022				2021			
Credit facilities		Available		Credit facilities		Available	Interest rate
		Utilized				Utilized	
Letters of guarantee		262.06			131.14		1.00% - 1.75%
Promissory note		-			36.25		MLR-0.5%, MLR-1.5%, MLR-2.15%
Letter of credit, trust receipt and packing credit	1,299.98	210.79	827.13	1,169.98	185.35	817.24	Market Rate
Bank overdraft		-			-		MOR
Local factoring	200.00	-	200.00	200.00	-	200.00	MOR-0.75%
Long-term loans	151.50	151.50	-	151.50	151.50	-	MLR-1.50%

On October 1, 2021, the Company entered into an agreement with a company to provide the credit line to issue a letter of guarantee with a commercial bank amount of Baht 50 million for bid bonds which agrees to purchase products from the Company and is responsible for fees, interest, and other expenses arising from using of such credit line.

Commitment and contingent liabilities are guaranteed by deposits at financial institutions in Note to Financial Statements No. 11, and by mortgage of the Company's land with constructions in Note to Financial Statements No. 14.

36.2 As at December 31, 2022 and 2021, the Company has commitments on future asset rental and other service agreements in the amounts of Baht 1.47 million and Baht 2.06 million, respectively.

36.3 The Company has a commitment under four construction and architectural design contracts to which the Company entered into in the amount of Baht 12.38 million. As at December 31, 2022, the Company has outstanding commitment under such contract of Baht 7.04 million.

36.4 The Company has a commitment under three construction and installation contracts to which the Company entered into in the amount of Baht 170.03 million. As at December 31, 2022, the Company has outstanding commitment under such contract of Baht 9.44 million.

36.5 The Company has a commitment under two consulting contract which the Company entered into in the amount of Baht 17.12 million. As at December 31, 2022, the Company has outstanding commitment under such contact of Baht 3.56 million.

36.6 The Company has a commitment under one Enterprise resource planning system installation contract to which the Company entered into in the amount of Baht 21 million. As at December 31, 2022, the Company has outstanding commitment under such contract of Baht 8.40 million.

37. Investment promotion privileges

As at December 31, 2022 and 2021, the Board of Investment, under the Investment Promotion Act B.E.2520, granted the Company the following promotional privileges:

- 37.1 The Company is promoted to generate electricity from solar cells, a Type 7.1 Activity: Utilities and Basic Services No.1105 (1)/2010, dated February 5, 2010, effective on December 14, 2009, and No. 1297(1)/2013, dated March 7, 2013, effective on October 3, 2012.
- 37.2 The Company is promoted to generate electricity from solar cells, a Type 7.1.1.2 Activity: Utilities and Basic Services No. 60-0018-1-00-1-0, dated January 11, 2017, effective on November 7, 2016. The Company enjoys the following rights and privileges:
 - Exemption from corporate income tax on net profit derived from the promoted activity for 8 years, commencing from the date of income is earned from that activity. Where a loss has been incurred during corporate income tax exemption period, the promoted Company is granted permission to deduct such annual loss from net profits accrued for a maximum of 5 years after expiration of the corporate income tax period.
 - Exemption for dividends derived from the promoted activity throughout the period the promoted company receives the corporate income tax exemption privilege.
 - Fifty percent corporate income tax reduction (from the prevailing rate) on profits earned from the promoted activity for a maximum of 5 years after the expiration of the corporate income tax exemption period.
 - Double deduction from taxable income from transportation, electricity and water costs for the period of 10 years after the expiry of the exemption period.
 - Twenty-five percent reduction allowed for project infrastructure installation or construction cost in addition to the normal depreciation.

The Company has income and expenses for the years ended December 31, 2022 and 2021, from the promoted activity as follows:

	Unit: Baht		
	Separate financial statements		
	For the year ended December 31, 2022		
	Promoted	Non-promoted	Total
Revenue from sales and services	28,843,128	2,075,826,992	2,104,670,120
Other income	158,771	11,652,877	11,811,648
Total revenue	29,001,899	2,087,479,869	2,116,481,768
Operating cost	(13,918,804)	(1,611,708,058)	(1,625,626,862)
Loss on devaluation of goods	-	(1,816,396)	(1,816,396)
Distribution costs and administrative expenses	(2,175,597)	(267,996,676)	(270,172,273)
Reversal of loss on assets impairment	-	(128,628)	(128,628)
Finance costs	-	(22,515,890)	(22,515,890)
Total expenses	(16,094,401)	(1,904,165,648)	(1,920,260,049)
Profit before income tax expenses	12,907,498	183,314,221	196,221,719

	Unit: Baht		
	Separate financial statements		
	For the year ended December 31, 2021		
	Promoted	Non-promoted	Total
Revenue from sales and services	34,730,795	1,379,136,102	1,413,866,897
Other income	-	11,634,913	11,634,913
Total revenue	34,730,795	1,390,771,015	1,425,501,810
Operating cost	(15,015,057)	(1,042,923,562)	(1,057,938,619)
Loss on devaluation of goods	-	(10,025,500)	(10,025,500)
Distribution costs and administrative expenses	(3,306,814)	(225,912,988)	(229,219,802)
Loss on assets impairment	-	(5,985,439)	(5,985,439)
Finance costs	-	(12,766,882)	(12,766,882)
Total expenses	(18,321,871)	(1,297,614,371)	(1,315,936,242)
Profit before income tax expenses	16,408,924	93,156,644	109,565,568

38. Reclassification

During the year the Group has reclassified certain accounts in the consolidated and separate statements of financial position as at December 31, 2021, to conform to the presentation of the financial statements of current year. There is no effect to net profit or shareholders' equity of the Group as follows:

	Unit: Baht		
	Consolidated financial statements		
	As previously		
	reported	Reclassified	After reclassified
Statements of financial position			
as at December 31, 2021			
Other current assets	12,685,583	(97,393)	12,588,190
Derivatives assets	-	97,393	97,393

	Unit: Baht		
	Separate financial statements		
	As previously		
	reported	Reclassified	After reclassified
Statements of financial position			
as at December 31, 2021			
Other current assets	12,380,374	(97,393)	12,282,981
Derivatives assets	-	97,939	97,939

39. Subsequent event after reporting date

According to the Board of Directors' Meeting No.2/2023, held on February 27, 2023, the meeting resolved to approve to pay a dividend from net profit of the year 2022, to shareholders of the Company at the rate of Baht 0.060 per share. The Company made the payment of interim dividend of Baht 0.015 per share. The payment of remaining dividend of Baht 0.045 per share, will be paid on May 26, 2023. The annual dividend payment is subject to approval by the Ordinary Shareholder's Meeting.

40. Approval of financial statements

These financial statements have been approved by the Company's Board of Directors on February 27, 2023.

Attachment



Information of Directors and Executive

Mr. Vichit Yamboonruang



Position : Independent Director
Chairman of the Board

Age : 81 years

Appointment Date : February 28, 2011

Education / Training

- Ph.D. Public & International Affairs, University of Pittsburgh, USA
- Master of Economics, Columbia University, USA
- Bachelor of Economics, Commerce and Accountancy, Chulalongkorn University

Expertise

- Administration and Large Organization Management
- Accounting and Finance
- Risk Management
- Economics
- Security and Society

Training by the Thai Institute of Directors Association (IOD)

- 2017 Boards that Make a Difference (BMD)
- 2007 Charter Director Class (CDC)
- 2004 Director Certification Program (DCP)
- 2004 Director Accreditation Program (DAP)
- 2004 Audit Committee Program (ACP)
- 2004 Role of the Chairman Program (RCP)

Position in Non-Listed Company

- 2018 - present Chairman of the Board of Director, V C K Solutions Co., Ltd.
- 2007 - 2013 Chairman of the Board of Director, Thai League Co., Ltd.

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2018 - present Independent Director/ Chairman of Audit Committee, BMP Energy PCL.
- 2012 - present Independent Director/ Chairman of Audit Committee, Sherwood Chemicals PCL.
- 2012 - present Independent Director/ Chairman of Audit Committee, Jasmine International PCL.
- 2012 - 2021 Chairman of the Board of Director, Wilk & Hoeglund PCL.

Shareholding as at December 31, 2022

- Held personally : 3,168,722 shares or 0.216%
- Held by spouse : 7,310 shares or 0.0005%

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times



Mr. Vinai Vittavasgarnvej

Position : Independent Director
Chairman of Audit Committee

Age : 72 years

Appointment Date : June 11, 2012

Education

- Capital Market Academy (2011)
- Thailand National Defense College (2004)
- Master of Political Science, Thammasat University
- Bachelor of Commerce and Accountancy, Thammasat University

Expertise

- Administration and Large Organization Management
- Accounting and Finance
- Risk Management
- Economics
- Security and Society

Training by the Thai Institute of Directors Association (IOD)

- 2012 Audit Committee Program (ACP)
- 2006 Director Certification Program (DCP)

Position in Non-Listed Company

- 2010 - 2011 Director General of The Treasury Department
- 2008 - 2010 Director General of The Revenue Department

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2019 - present Independent Director / Audit Committee, Charoen Pokphand Foods PCL.
- 2014 - present Independent Director / Vice Chairman of the Board of Director / Chairman of Audit Committee, Srisawad Power 1979 PCL.
- 2012 - present Independent Director / Chairman of the Board of Director Sahamitr Pressure Container PCL.
- 2018 - 2020 Chairman of the Board of Director, JSSR Group Co., Ltd.
- 2016 - 2019 Independent Director / Audit Committee, Syn Mun Kong Insurance PCL.

Shareholding as at December 31, 2022

- Held personally : -None-
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times

Mr. Wara Tongprasin



Position : Independent Director
Chairman of Nomination and Remuneration Committee
Audit Committee

Age : 51 years

Appointment Date : June 17, 2009

Education

- Code of Ethics Training Program for Professional Accountants (only for certified public accountants) organized by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King.
- The course on revenue recognition and lease agreements with PAEs and NPAEs organized by Bangkok Suvarnabhumi University.
- How to keep up with taxation and comply with financial reporting standards (TFRS 15 & TFRS for NPAEs) Course, organized by Phureepark Co., Ltd.
- Tax Auditor and Certified Public Accountant (CPA)
- Bachelor of Business Administration (Accounting), Ramkhamhaeng University

Training by the Thai Institute of Directors Association (IOD)

- 2020 Computable General Equilibrium (CGE)
- 2018 Risk Management Program for Corporate Leaders (RCL)
- 2015 Advanced Audit Committee Program (AACP)
- 2009 Director Accreditation Program (DAP)

Expertise

- Administration and Large Organization Management
- Accounting and Finance
- Risk Management
- Economics
- Security and Society

Position in Non-Listed Company

- 2022 - present Director, Test Solution Co., Ltd.
- 2022 - present Managing Director, Thai Rice Trading (888) Co., Ltd.
- 2021 - present Director, SMP Audit Co., Ltd.
- 2013 - present Managing Director, Friend Construction and Engineering Co., Ltd.
- 2005 - present Managing Director, The Asset Audit Co., Ltd.
- 2013 - 2019 Director, Wara Holding Co., Ltd.

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2014 - present Independent Director / Chairman of Audit Committee / Corporate Governance Committee, Airports of Thailand PCL.

Shareholding as at December 31, 2022

- Held personally : 39 shares or 0.000%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times



Mr. Aroon Sricharoon

Position : Independent Director
Audit Committee
Age : 76 years
Appointment Date : May 13, 2019

Education

- Advanced Certificate Course in Public Economics Management for Executives, King Prajadhipok's Institute
- Top Executive Program in Urban Development Management, Class 2
- Bachelor of Communication Arts, Sukhothai Thammathirat Open University
- Bachelor of Political Science, Sukhothai Thammathirat Open University

Expertise

- Administration and Large Organization Management
- Risk Management
- Economics
- Security and Society

Training by the Thai Institute of Directors Association (IOD)

- 2019 Director Accreditation Program (DAP)

5-Year Past Experiences and/or Remarkable Position in Listed Company

-None-

Position in Non-Listed Company

- 2003 - present The President, Alpha Siamese Co., Ltd.
- 1991 - present Managing Director, Sahapatanakanpim Co., Ltd.
- 2015 - 2016 Chairman of Advisors, Flea Market Management Committee, Bangkok
- 2014 - 2015 Chairman of Advisors, Flea Market Director Department, Bangkok
- 2008 - 2007 President of Rotary Club Prakanong

Shareholding as at December 31, 2022

- Held personally : 210,000 shares or 0.015%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times

Mr. Chatri Siripanichkorn



Position : Independent Director
Nomination and Remuneration Committee

Age : 75 years

Appointment Date : July 12, 2016

Education

- Certified Public Accountant (CPA)
- Attorney at Law License
- Barrister 29, The Thai Bar Under The Royal Patronage
- Bachelor of Laws, Thammasat University
- Bachelor of Commerce and Accountancy, Thammasat University

Expertise

- Administration and Large Organization Management
- Accounting and Finance
- Risk Management
- Economics
- Security and Society
- Law

Training by the Thai Institute of Directors Association (IOD)

- 2013 Director Accreditation Program (DAP)

Position in Non-Listed Company

- 2002 - 2007 Director of Compliance Control Department, Thai Asset Management Corporation

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2013 - present Chairman of Audit Committee, RAJA FERRY PORT PCL.
- 2018 - present Independent Director / Audit Committee, All Inspire Development PCL.

Shareholding as at December 31, 2022

- Held personally : -None-
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times



Mr. Thunya Sriton

Position : Independent Director
Chairman of Risk Management Committee
Age : 76 years
Appointment Date : June 30, 2020

Education

- Bachelor of Electrical Engineering, Chulalongkorn University

Expertise

- Administration and Large Organization Management
- Risk Management
- Economics
- Engineering

Training by the Thai Institute of Directors Association (IOD)

- 2020 Director Accreditation Program (DAP)

5-Year Past Experiences and/or Remarkable Position in Listed Company

-None-

Position in Non-Listed Company

- 2016 - present Freelance Engineer,
- 2008 - 2016 Chief Operation Officer, Italian Thai Power Co., Ltd.
- 2004 - 2008 Managing Director, Ratchaburi Power Co., Ltd.
- 1996 - 2004 Assistant Director of Engineering and Service, Union Energy Co., Ltd.¹

Shareholding as at December 31, 2022

- Held personally : -None-
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times

Miss Urawee Kanokpruk



Position : Director
Nomination and Remuneration Committee

Age : 45 years

Appointment Date : February 28, 2011

Education

- Master of Engineering, University of Florida, USA
- Bachelor of Engineering, Chulalongkorn University

Expertise

- Administration and Large Organization Management
- Risk Management
- Research and Development
- Economics
- Engineering

Training by the Thai Institute of Directors Association (IOD)

- 2011 Director Accreditation Program (DAP)

5-Year Past Experiences and/or Remarkable Position in Listed Company

-None-

Position in Non-Listed Company

- 2019 - present Director, Ekarat Energy Co., Ltd.
- 2013 - present Director, Business Values Promotion Center Co., Ltd.
- 2012 - present Director, Saendee Drinking Water Co., Ltd.
- 2012 - present Project Management Manager, Chula Engineering Co., Ltd.
- 2007 - present Director, Kanokpruk Co., Ltd.
- 2015 - 2019 Director, Thai Super Esco Co., Ltd.
- 2012 - 2019 Director, Hippolicious Co., Ltd.
- 2008 - 2015 Researcher, Chula Unisearch of Chulalongkorn University
- 2007 - 2015 Researcher, NIDA-Center for Business Innovation (NIDA-CBI)

Shareholding as at December 31, 2022

- Held personally : 31,000,000 shares or 2.107%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times



Mr. Wiwat Sangtian

Position : Director
Authorized Director
Age : 73 years
Appointment Date : June 25, 2014

Education

- Ph.D. of Civil Engineering, Carnegie-Mellon University, USA
- Master of Civil Engineering, Carnegie-Mellon University, USA
- Bachelor of Civil Engineering, Chulalongkorn University

Expertise

- Administration and Large Organization Management
- Accounting and Finance
- Risk Management
- Security and Society
- Engineering

Training by the Thai Institute of Directors Association (IOD)

- 2014 Director Accreditation Program (DAP)

Position in Non-Listed Company

- 2004 - present Managing Director, Ekarat Solar Co., Ltd.
- 1996 - present Director, Ekarat Power & Management Co., Ltd.
- 1988 - present Director, Ekarat Chemical Co., Ltd.

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 1995 – 2011 Managing Director, Ekarat Engineering PCL

Shareholding as at December 31, 2022

- Held personally : 170,000 shares or 0.012
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times

Mr. Danucha Noichaiboon



Position : Director
Nomination and remuneration Committee
Authorized Director

Age : 66 years

Appointment Date : January 15, 2011

Education

- Diploma, National Defence College, The Joint State - Private Sector Course Class 17, Thailand National Defence College
- Master of Business Administration, Ramkhamhaeng University
- Bachelor of Business Administration, Ramkhamhaeng University

Expertise

- Administration and Large Organization Management
- Accounting and Finance
- Risk Management
- Security and Society

Training by the Thai Institute of Directors Association (IOD)

- 2011 Director Accreditation Program (DAP)

Position in Non-Listed Company

- 2015 - present Director, Ekarat Energy Co., Ltd.
- 2005 - present Director, KV Asset Co., Ltd.
- 2004 - present Director, Ekarat Solar Co., Ltd.
- 1995 - present Director, Ekarat Land and Development Co., Ltd.
- 1987 - present Director, Ekarat Power Electronic Co., Ltd.

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2012 - 2021 Managing Director, Ekarat Engineering PCL.

Shareholding as at December 31, 2022

- Held personally : -None-
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : Uncle of Miss Rompissri Noichaiboon and Brother of Mr. Daroonwat Noichaiboon

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times



Miss Rompissri Noichaiboon

Position : Director
Risk Management Committee
Managing Director
Authorized Director

Age : 46 years

Appointment Date : March 18, 2021

Education

- All quality standardization Courses
- Role of Executives at All Levels / Time Management / Strategic Planning / Cost Reduction
- Human Capital Management Techniques and Organizations for the Highest Returns Course
- Master of Operations Research, George Washington University, USA
- Bachelor of Engineering, Rangsit University

Expertise

- Administration and Large Organization Management
- Risk Management
- Economics
- Engineering
- Security and Society

Training by the Thai Institute of Directors Association (IOD)
-None-

Position in Non-Listed Company

- 2021 - present Director, Ekarat Energy Co., Ltd.
- 2020 - present Director, Ekarat Solar Co., Ltd.
- 2005 - present Director, KV Asset Co., Ltd.

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2020 Deputy Managing Director of Sale and Service / Purchasing Manager, Ekarat Engineering PCL.
- 2012 - 2019 Purchasing Manager, Ekarat Engineering PCL.
- 2008 - 2012 Human Resources and Administration Manager, Ekarat Engineering PCL.

Shareholding as at December 31, 2022

- Held personally : 1,171,724 shares or 0.08%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : Niece of Mr. Danucha Noichaiboon and Mr. Daroonwat Noichaiboon

Attendance at the Board of Directors' Meeting during 2022 : 10 times out of 10 times

Mrs. Suwannee Sujaritwanichapong

Position : Chief Financial Officer
Age : 67 years



Education

- Master of Business Administration, National Institute of Development Administration
- Certificate of MINI MIS, Kasetsart University
- Certificate of Business Administration Chulalongkorn University
- Bachelor of Accounting theory, Chulalongkorn University

Training by the Thai Institute of Directors Association (IOD)

- 2021 CFO's Orientation for New IPOs

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2007 - 2020 Internal Audit Manager, Ekarat Engineering PCL.
- 2002 - 2004 Internal Audit Manager, Delta Electronics (Thailand) PCL.
- 2000 - 2002 Accounting and Finance Manager, Technology Applications (Thailand) PCL.

Position in Non-Listed Company

-None-

Shareholding as at December 31, 2022

- Held personally : 30,000 shares or 0.002%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-



Mr. Daroonwat Noichai boon

Position : Deputy of Managing Director of Marketing
Age : 64 years

Education

- Advanced Security Management Program (ASMP) Class 8
- Diploma, National Defence College, The Joint State - Private Sector Course 2010, Thailand National Defence College
- Security Psychology Program, Institute of Security Psychology Class 94
- Master of Business Administration Ramkhamhaeng University
- Bachelor of Business Administration Ramkhamhaeng University

Training by the Thai Institute of Directors Association (IOD)

-None-

5-Year Past Experiences and/or Remarkable Position in Listed Company

-None-

Position in Non-Listed Company

- 2005 - present Director, KV Asset Co., Ltd.
- 2004 - present Director, Ekarat Solar Co., Ltd.

Shareholding as at December 31, 2022

- Held personally : 3,366,652 shares or 0.229%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives

: Uncle of Miss Rompissri Noichai boon and
Brother of Mr. Danucha Noichai bo

Mr. Paitoon Intrarawisut

Position : Deputy of Managing Director of Factory
Age : 64 years



Education

- All quality standardization Courses
- Role of Executives at All Levels / Time Management / Strategic Planning / Cost Reduction
- Improvement and development to reduce quality work processes Course
- High School Certificate, Watdansamrong School

Training by the Thai Institute of Directors Association (IOD)

-None-

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2019 Acting as Deputy Managing Director of Factory, Ekarat Engineering PCL.
- 2016 - 2018 Factory Manager, Ekarat Engineering PCL.
- 2008 - 2016 Production Manager, Ekarat Engineering PCL.

Position in Non-Listed Company

-None-

Shareholding as at December 31, 2022

- Held personally : 113,332 shares or 0.008%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-



Information of the Person Supervising Accounting

Mrs. Somjit Phokabutr

Position : Accounting Manager
Age : 64 years

Education

- Bachelor of Business Administration (Accounting) Ramkhamhaeng University

Training by the Thai Institute of Directors Association (IOD)

-None-

Position in Non-Listed Company

-None-

Continuing Professional Development Program

- 2022
 - Update Accounting Standards for Bookkeepers 2022 organized (6 hours)
 - Planning and Improving Operational Processes for Quality Accounting (6 hours)
 - Recording revenues and expenses affecting the calculation of net profit (6 hours)
- 2021
 - TFRS Financial Reporting Standards Effective 2021 (6 hours)
 - Developing operational potential for the new generation of accountants to accurately record accounts in accordance with accounting standards (3 hours)
 - Profitability cost data analysis for accountants (6 hours)
- 2020
 - Revenue recognition criteria according to TFRS15 for general business and related issues in the audit of revenue recognition (6 hours)
 - Understanding TER13 fair value measurements (6 hours)
 - Deferred income tax (6 hours)
 - Training on preparing consolidated financial statements (6.30 hours)

5-Year Past Experiences and/or Remarkable Position in Listed Company

1995 - 2014 Account Manager, Ekarat Engineering PCL.

Shareholding as at December 31, 2022

- Held personally : 4,283 shares or 0.000%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Information of the Company Secretary

Miss Hansa Buranajan

Position : Company Secretary
 Age : 56 years
 Appointment Date : January 1, 2021



Education

- Bachelor of Business Administration, Ramkhamhaeng University

Training by the Thai Institute of Directors Association (IOD)

- 2021 Company Secretary Program

Position in Non-Listed Company

-None-

5-Year Past Experiences and/or Remarkable Position in Listed Company

- 2019 - 2021 Corporate Communications Manager, Ekarat Engineering PCL.
- 2006 - 2018 Public Relations Manager, Ekarat Engineering PCL.
- 1998 - 2005 Secretary of Chairman of Executive Officer, Ekarat Engineering PCL.

Shareholding as at December 31, 2022

- Held personally : 1,166,820 shares or 0.08%
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

The Company Secretary Duties

1. Preparing and keeping the following documents:
 - 1.1 A register of directors
 - 1.2 A notice calling directors' meeting, the minutes of the board of directors and an annual report of the Company
 - 1.3 A notice calling shareholders meeting and the minutes of the shareholders' meeting;
2. Keeping a report on conflict of interests, reported by a director or an executive.
3. Arrange the Board of Directors Meeting and Annual General Meeting of Shareholders.
4. Orientation and advising the new director.
5. Liaise with the regulatory agencies such as the Stock Exchange of Thailand.
6. Disclosure and information reporting to the regulatory agencies and public which comply with the law properly.
7. Operating any act that is abided by the Capital Market Supervisory Board and assigned by the Board of Directors.

Details of the directors of the subsidiary

Name	Ekarat Engineering PCL.	The Subsidiary		Related Company
		Ekarat Solar Co., Ltd.	Ekarat Energy Co., Ltd.	
1. Mr. Vichit Yamboonruang	X			
2. Mr. Vinai Vittawasarnvej	/, AC			
3. Mr. Aroon Sricharoon	/, AC			
4. Mr. Wara Tongprasin	/, AC			
5. Mr. Chattri Sirpanichkorn	/			
6. Mr. Thunya Siltorn	/			
7. Miss Urawee Kanokpruk	/		/	
8. Mr. Wiwat Sangtian	/, //	/, M, //		
9. Mr. Danucha Noichailboon	/, //	/, //	/, //	/, //
10. Miss Rompissri Noichailboon	/, M, //	/, //	/, //	/, //
11. Mrs. Suwannee Sujaritvanitchpong	Y			
12. Mr. Daroonwat Noichailboon	Y	/		/, //
13. Mr. Paitoon Intrarawisut	Y			

Note : X = Chairman of The Board, / = Director, // = Authorized Director, AC = Audit Committee, M = Managing Director, Y = Management

Information of the Head of Internal Audit

Mr. Nuttavit Noisri

Position : Internal Audit Manager
Age : 48 years



Educational Record

- Master's degree, Master of Laws National Institute of Development Administration (NIDA)
- Master's degree, Master of Business Administration (MBA), Ramkhamhaeng University
- Diploma in Legal Practice, Lawyers Council under the Royal Patronage of His Majesty The King
- Bachelor of Laws, Sukhothai Thammathirat Open University
- Bachelor of Political Science, Ramkhamhaeng University
- Bachelor of Business Administration, Ramkhamhaeng University

Training History

- Certified Professional Internal Audit of Thailand CPIAT, The Institute of Internal Auditors of Thailand (IIAT)
- Leadership Skills for Auditors, The Institute of Internal Auditors of Thailand (IIAT)
- Audit Program Development, The Institute of Internal Auditors of Thailand (IIAT)
- Control Self – Assessment, The Institute of Internal Auditors of Thailand (IIAT)
- Preventing Corruption in Organizations, The Institute of Internal Auditors of Thailand (IIAT)
- Assessment of the internal control system According to the guidelines of COSO 2013, Federation of Accounting Professions Under royal Patronage of His Majesty The King
- Internal Audit Certificate Course, Course 2, Federation of Accounting Professions Under royal Patronage of His Majesty The King
- Internal Audit Certificate Course, Course 1, Federation of Accounting Professions Under royal Patronage of His Majesty The King
- Governance and risk management according to the framework of the COSO-ERM 2004, Faculty of Commerce and Accountancy, Thammasat University

Work Experience

- 2006 - Present Internal Audit Division Manager Ekarat Engineering Public Company Limited
- 2003 - 2006 Senior Internal Auditor Road Accident Victims Protection Company Limited

Shareholding as at December 31, 2022

- Held personally : -None-
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-



Details about A.M.T. Solution Company Limited

The Company has appointed A.M.T. Solution Company Limited, an outsource company, to act as the Company's internal auditor for the year 2022 by assigning Mr. Suphot Pannoi to be primarily responsible for the performance of internal auditors. The details are as follows.

Mr. Suphot Pannoi

Position : Managing Director
Age : 41 years

Educational and Trainee

- Master of Business Administration, Ramkhamhaeng University
- Bachelor of Auditing, Rajamangala University of Technology Krungthep
- Mini Master of Business Economics (MBE), Chulalongkorn University
- Director Accreditation Program (DAP) Class 119/2015, Thai Institute of Directors Association
- Advanced Audit Committee Program (AACP) Class 27/2017, Thai Institute of Directors Association
- Smart Professional Entrepreneur (SPE) Class 2/2015, Department of Business Development Ministry of Commerce
- License to be a collateral enforcer under the Business Collateral Act 2015
- Orientation Course – CFO focus on financial report Class 3, Federation of Accounting Professions
- Understand Each TFRS Update 2018, Federation of Accounting Professions

Work Experience

- Present Managing Director
A.M.T. Solution Co., Ltd./ A.M.T. Audit Group Co., Ltd.
- Present Audit Committee
Chai Watana Tannery Group PCL.
- 2014 - present Internal Audit Executive
Thai Wire Products PCL.
Cyber Planet Company Interactive PCL.
Make To Win Garment Co., Ltd.
- 2010 - 2014 Internal Audit Manager / MTS Gold Co., Ltd.
- 2009 – 2010 Audit Manager / AAC Audit Firm Co., Ltd.
- 2004 – 2009 Audit Supervisor / AMC Office Co., Ltd.

Shareholding as at December 31, 2022

- Held personally : -None-
- Held by spouse or minor children : -None-

Family Relationship among Directors and Executives : -None-

Assets for business undertaking and detail of asset appraisal

Assets for business undertaking

The detail of Assets for business undertaking at https://www.ekarat.co.th/ir_index.php

The details of asset appraisal

- None-

Corporate Governance Policy and Code of Business Ethics of Ekarat Engineering Public Company Limited.

The Company recognized the importance of the operation principles. The Company has policies on business ethics and business ethics of the Board of Directors, the Board of Management and staffs according to the good corporate governance system as practice guidelines standard in the Company's Articles of Association. The Company have policy to behave under the best practices for the director which conducted from Code of Best Practices for Directors of Listed Company that governed by The Stock Exchange of Thailand. The assigned principles must able to do practically. In addition, the Company has adopted the Good Corporate Governance to develop the policies which will increase the ability to the competition, management, and operation for the value added and efficiency of the Company which will give the security and confidential to the stakeholders.

The Company has announced its good corporate governance principles and code of business ethics handbook to the acknowledgement by publicized on the Company's internet and website. Further details related to the Company's Corporate Governance and Code of Business Ethics can be studied from https://www.ekarat.co.th/ir_index.php

Report of the Audit Committee

The details are report in section 8.2

EKARAT ENGINEERING PUBLIC COMPANY LIMITED

9/291 U.M. Tower Bldg., 28th fl., Ramkhamhaeng Rd.,
Suanluang District, Bangkok 10250 Thailand.



Call Center

Tel : 095-371-5551



Tel : 02-719-8777 (Auto)



Fax : 02-719-8760



E-mail : marketing@ekarat.co.th



www.ekarat.co.th