TPI POLENE POWER Public Company Limited

รายงานประจำปี ๒๕๖๓

ANNUAL REPORT 2020

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Investors can access the Company's information securely in the annual report (form 56-1) through the website at www.sec.or.th.

Message from the Board of Directors

Dear Shareholders,

TPI Polene Power Public Company Limited ("Company"), a subsidiary of TPI Polene Public Company Limited ("TPIPL"), has invested heavily in the Company so that the Company can generate production capacity. Subsequently, the Company was successfully listed on the Stock Exchange of Thailand and has always made good profits for its shareholders.

TPI Polene Power Group adheres to a policy of driving the economy towards sustainable development (ESG & Bio Circular-Green Economy-BCG). This policy follows our parent company, TPIPL, with a focus on balanced growth in all areas, including economic, social and environmental, and an emphasis on good corporate governance to be an internationally trusted company with sustainable growth.

TPI Polene Power is a leading operator of RDF power plants in Thailand, with the largest and most successful waste-to-energy power plant operations in the country. The Company always pledges its commitment to continuously pursue and research innovations for its waste-to-energy power plants, waste heat-to-energy power plants, and alternative power plants to enhance maximum efficiency to serve the need for clean power energy and reduce energy from fossil fuels for an increased population in the future. This is part of our commitment to the preservation of the environment. The Company also implements environmental-friendly production processes that help eliminate the PM 2.5 problem and the overall global warming problem caused by greenhouse gases, and waste problems in communities, as a response to the government's policy of promoting the sustainable development of power production in the country.

"CLEAN AND GREEN ENERGY PRODUCER
FOR
OUR HEALTHY COUNTRY"

In 2020, even though the world was affected by the COVID-19 pandemic, the Company continued to grow stronger thanks to an increase in production capacity and units of power sales according to the plans that the Company Group had prepared since 2019. The Company maintained its position as the leader in refused-derived fuel (RDF)-fired and waste heat recovery power plants in the country. The company has installed additional steam boilers to increase the utilization rate of power generation and preparations are being made to invest in waste-to-energy power plant projects that will involve the government setting terms of reference (TOR) for private sector bidding. This will include investing in other renewable power plants and power plants for energy security for economic and social development according to the country's Power Development Plan (PDP) and other government policies. These projects will expand the Company's business and performance and will ensure continuous growth. The Company always conducts business in accordance with good corporate governance and realizes its responsibility for good corporate governance and for the benefits of shareholders and society as a whole.

Continuous EBITDA Growth

In 2020, the Company and its subsidiaries registered earnings before interest, tax, depreciation and amortization (EBITDA) of Baht 5,750 million, an increase of Baht 245 million or 4%, compared with Baht 5,505 million in 2019. This increase is from the installation of additional steam boilers (which will be completed by early 2021) to increase the utilization rate of power generation.

In 2020, the Company and its subsidiaries registered profits for the year of Baht 4,506 million, a decrease of Baht 101 million or 2.19%, compared to 2019. This was mainly due to the fact that in 2020 the Company had net foreign exchange losses of Baht 4 million, while in 2019 the Company had net foreign exchange gains of Baht 92 million. Also, the Company had financial costs of Baht 285 million in 2020, an increase of Baht 126 million compared to Baht 159 million in 2019.

Total installed electricity capacity of 440 MW Power Plants

At present, the Company commercially operated eight power plants with a total installed capacity of 440 MW, comprising two waste-heat recovery power plants with a total installed capacity of 40 MW, four RDF-fired power plants with a total installed capacity of 180 MW, one mixed fuel-fired power plant of 70 MW, and one coal-fired power plant of 150 MW installed capacity. The Company is in the process of participating in bidding for government waste-to-energy power plant projects in order to expand the Company's business and make economic and social development investments in areas with an urgent need, in accordance with government policies.

Increase the utilization rate of electricity and increase the capabilities of the business

From 2020 to the beginning of 2021, the Company had business development plans for its energy business to increase the utilization rate of power generation at a high level in order to reduce costs and increase revenues. The installation of three additional boilers has

been completed, which will result in the increase in the utilization rate of power generation. In addition, the Company is always aware that technological development and innovation increase the efficiency of RDF production and reduce production costs for RDF power plants, which are crucial and necessary for business operations. Thus, the Company continuously emphasizes the value of research and development and applies new technology in power generation.

Chosen as the winning bidder to invest in construction and management of the waste disposal system of Songkhla Provincial Administration Organization

In January 2021, the Company was selected by the Songkhla Provincial Administrative Organization to implement a waste disposal management project with striker-type incineration technology using the electricity generation system that uses solid waste as a direct fuel. This project will have an installed 9.9 MW power generating system under the Power Purchase Agreement of 7.92 MW to the Provincial Electricity Authority for a period of 20 years at a tariff of Baht 5.78 per unit for the first period of 8 years, and at a tariff of Baht 5.08 per unit for the next period of 12 years. In addition, the Company will have income in the form of tipping fees at the rate of Baht 400 per ton for a period of 20 years, with an investment value of approximately Baht 2,100 million.

In January 2021, the Company participated in the bidding for the waste disposal project of Nakhon Ratchasima Municipality with an investment of approximately Baht 2,100 million. This project will include a 9.9 MW Power Purchase Agreement to the Provincial Electricity Authority for a period of 20 years at a tariff of Baht 5.78 per unit for the first period of 8 years, and at a tariff of Baht 5.08 per unit for the next period of 12 years. In addition, the Company will earn revenue in the form of tipping fees. The results of the auction is expected to be announced by March 2021.

The Company has a standing policy to seek new business opportunities by participating in the bidding for waste disposal projects for power generating plants under government policy, both to expand existing power generating capacity, and to invest in projects for economic and social development government designated areas.

Driving the economy towards sustainable development (ESG & Bio Circular-Green Economy-BCG)

TPI Polene Power Group has a policy to drive the economy towards sustainable development. TPI Polene Power Group's growth will be driven by internationally competitive innovation in order to distribute wealth to communities through environmental protection and sustainable development following the Circular Economy by making the most of resources. The Green Economy policy helps reduce environmental impact by implementing low carbon production to reduce greenhouse gas emissions which cause global warming. The Company also utilizes waste-to-energy power systems and biotechnology to add value to products and support the agricultural sector to create a Bioeconomy by producing organic fertilizers that are safe for consumers and at the same time lowering costs for farmers. Linking the Circular Economy, Green Economy and Bio Economy is the driving force of moving the economy towards sustainable development.

TPI Polene Power Group also focuses on social responsibilities and has good corporate governance by adhering to its business ethics, preventing conflicts of interest, practicing anti- corruption, and managing organizational risk. It also conducts business with fairness to all stakeholders, such as prioritizing the occupational management system, and the health and safety of employees and stakeholders with a commitment to improve well-being and prevent hazards. This includes the practice of human rights principles during hiring and taking care of employees so that they feel connected as a family within the organization. In addition, the company is committed to cooperating with all suppliers in accordance with the supplier's sustainability practice guidelines.

Development of the Futuristic Advanced Industrial City Project, Chana District, Songkhla Province

The Group has realized the potential value of investing in the Futuristic Advanced Industrial City Project in Chana District, Songkhla Province, which uses cutting-edge technology to develop the area to maximize benefits from utilities, industrial estate construction, the construction of a deep sea port to build a transportation network for the exports and imports of the future, and building power plants which use natural gas, biomass and other renewable energy sources as a fuel to generate electricity. As a result, the livelihoods of the people in these areas will be improved. This is in line with the government's intention to develop a special economic development project in the South to strengthen security through industry promotion, the import and export of goods, and the creation of jobs for the welfare of the people. This project follows the Indonesia - Malaysia - Thailand Growth Triangle (IMT-GT) protocol, agreed by the governments of the three countries in this region during the time of Prime Minister Chuan Leekpai. The Company started to seriously prepare for the project in 2020, in line with the Cabinet's resolution that agreed on the principles of the urgent investment plan in the special development zone, Chana District, Songkhla Province. All government agencies involved in the plan will proceed in accordance with the relevant duties and laws.

The largest single-location municipal waste disposal facility in the world

With a vision for the creation of stable and sustainable business growth, the Company emphasizes the Company's expertise to preserve environmental conditions by using municipal waste, under the concept of "zero waste out", and waste heat from cement production to produce electricity, instead of emitting such waste heat into the environment, to help solve the global warming problem. This Company policy is consistent with government policy as the government has designated this as an important agenda to reduce carbon dioxide emissions and greenhouse effects and to solve overloaded waste problems by using waste as a fuel to produce electricity. The company is in the process of expanding its RDF (Refuse Derived Fuel) production capacity, which will be able to use RDFs equivalent to approximate 10,000 tons of municipal solid waste per day. The RDF capacity expansion project will be completed in 2021 and will become the largest single-location municipal waste disposal facility in the world. The project will reduce CO2 emissions (which cause global warming) by approximately 8.5 million tons per annum and eliminate 3.5 million tons of municipal waste per annum.

In addition, the Company is aware of the clear role of its environmental, social, and governance (ESG) responsibilities while balancing excellent business operations achievements, good corporate governance, and care for society and the environment.

On behalf of the Company, the Company's Board of Directors would like to take this opportunity to thank all related parties for their ongoing support and trust in the Company to create continuous progress for the organization and to motivate the management team and all levels of the Company's staff to overcome obstacles to achieve the goal of building stability in the organization, enhance the economic strength of the country, and support the public well-being and consistently protect the surrounding environment to further enhance the sustainable growth of the country.

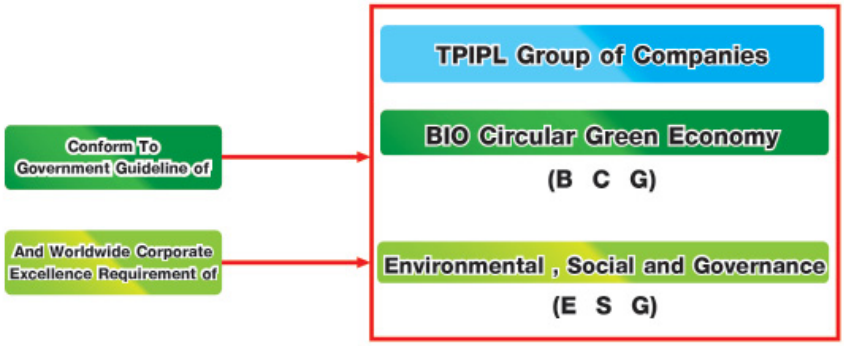
Sincerely Yours,

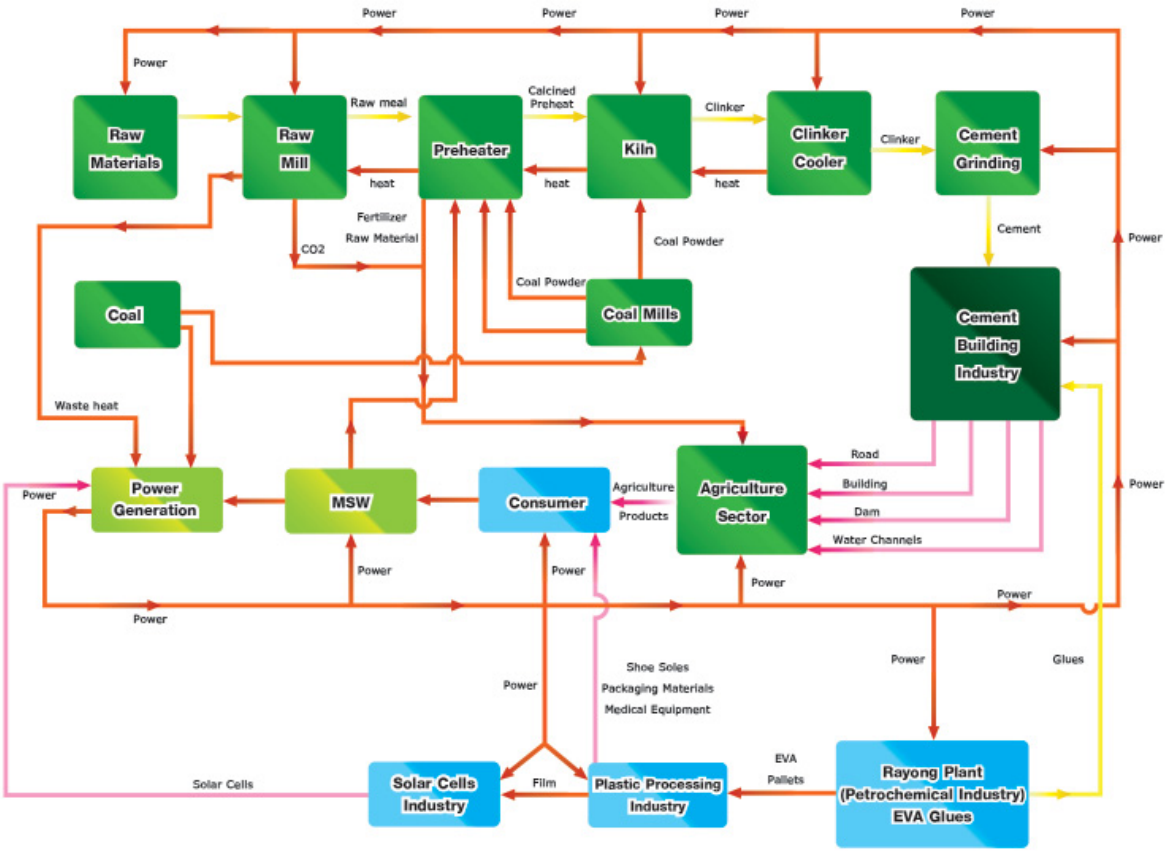
Mr. Prachai Leopairatana

Chairman

The Principal Policy of TPI Polene Group

- **Providing customer service to make the most out of our products**
- **Recycling waste from consumption**





Audit Committee's Report for 2020

To: Shareholders:

Dear Sirs,

The Audit Committee of TPI Polene Power Public Company Limited consists of 3 independent directors, who are all qualified with knowledge of finance, accounting, law and management administration: namely, Mr. Manu Leopairote as the Chairman of the Audit Committee; Dr. Thiraphong Vikitset and Dr. Abhijai Chandrasen as Audit Committee members, with Miss Weeranuch Khimkhum, the Corporate Secretary, as Secretary to the Audit Committee. All Audit Committee members possess appropriate qualifications and are, in all aspects, in compliance with the rules and regulations imposed by the Stock Exchange of Thailand.

The Audit Committee has fully performed its duties and responsibilities to review and evaluate internal control systems, disclosure of Company information, and to review implementation of the provisions of related governing laws, as well as any other important tasks. In 2020, the Audit Committee convened 5 meetings as follows:

1. To review and evaluate internal control systems.

The Company has appropriate internal control systems and has operated the business efficiently and effectively under appropriate and sufficient internal controls, as supported by the operational performance report. The Company has internal controls and risk management systems that can protect against potential risks to the Company and to all related parties. The systems are in place to ensure that any mistakes and irregularities will be identified in due course; and that financial reports are accurate, adequate and reliable; and the assets used by the Company benefit all parties as well as shareholders. In addition, the Company has performed in compliance with the principles of good corporate governance and has embraced the Code of Conduct as a policy for all employees to follow, by emphasizing the balanced consideration of all related parties, fair treatment to all parties concerned, including shareholders, suppliers, contractors and the community as a whole. The Company also realizes the importance of creating public well-being and environmental conservation and fostering the development of all our staff to expand their knowledge so as to become a knowledge organization. This will further enhance our long-term development and create sustainable growth for the Company.

2. To review the disclosure of all relevant information for investors.

The Company has a policy of disclosing all relevant information for investors, such as connected transactions and any other transactions that might affect the interests of related parties. The Company always discloses accurate, reliable, and relevant information on a timely basis.

3. To review and to ensure that the Company performs in compliance with all regulations and related governing laws.

The Company has a clear policy to comply with all regulations and related governing laws, and codes of conduct, to protect against the use of insider information. As announced in the Company's Rules and Regulations, any misuse of internal information shall be subject to disciplinary action, including dismissal. The Company supervises submission by the Management of reports of their shareholding in the Company to comply with related governing laws. The Company realizes the importance of information disclosure, including financial statements and other reports, and ensures that they are complete, accurate, reliable and timely.

4. To select, nominate, and propose the remuneration of the statutory auditors of the Company for 2021

The Audit Committee has taken into consideration the independence, performance, experience and appropriate remuneration of auditors. The Audit Committee has passed a unanimous resolution to propose to the Company's Board of Directors for consideration and to propose to the shareholders' meeting to consider and approve the appointment of Mr. Ekkasit Chuthamsathit, CPA registration no. 4195 or Mr. Boonyarit Thanormcharoen, CPA registration no. 7900 or Mr. Natthapongse Thantijatthanond, CPA registration no. 8829, KPMG Phoomchai Audit Limited, to be the statutory auditors of the Company for 2021.

The Audit Committee considers that in the previous year, the Board of Directors as well as the Management of the Company was in complete compliance with the principles of good corporate governance. They performed their duties and responsibilities ethically, with integrity, and in a professional manner, to achieve the objectives of the Company. In addition, a product quality system, in compliance with international standards and applicable laws, has been developed. The Audit Committee recognizes that the Company is committed to social and environmental responsibility. The Company has also prepared financial reports in compliance with generally accepted accounting principles, with an adequate disclosure of information, internal control and audit systems, and is able to ensure product quality and good corporate governance, without any material deficiencies.

On behalf of the Audit Committee,

Mr. Manu Leopairote

Chairman of the Audit Committee

Corporate Profile

Company's Name	: TPI Polene Power Public Company Limited
Abbreviation in the SET	: TPIPP
Registration Number	: 0107559000184
Nature of Business	: The Company operates power plants, focusing on waste-to-energy power plants and waste-heat recovery power plants, and operates petrol and gas stations.
Registered Capital and Paid-up Capital	: Baht 8,400,000,000 Consisting of 8,400,000,000 ordinary shares, at the par value of Baht 1 each.
Accounting Period	: January 1 - December 31

Location	
Head Office Location	: 26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120
Tel. Number	: +66 (0) 2213-1039- 49, 285-5090 -9
Fax Number	: +66 (0) 2213-1035, 213-1038
Web Address	: http://www.tpipolenepower.co.th
Power Plant and RDF Plant	: 299 Moo 5, Mittraparp Road, Tambol Tubkwang, Amphur Kangkhoy, Saraburi 18260
Tel. Number	: +66 (0) 3633-9111
Fax Number	: +66 (0) 3633-9228-30

Investors Relation Unit:	
Tel. Number	: +66 (0) 2213-1039 ext. 12985 and 12988

Other Relevant Information:	
Share Registrars	: Thailand Securities Depository Company Limited
Office Location	: The Stock Exchange of Thailand, 93 Rajadapisek Road, Khwang Dindaeng, Dindaeng, Bangkok 10400
Tel. Number	: +66 (0) 2009-9000, call center +66 (0) 2009-9999
Fax Number	: +66 (0) 2009-9991

Auditor	
Statutory Auditor	: KPMG Phoomchai Audit Limited
Address	: 1 Empire Tower, Floor 48-50, South Sathorn, Kwang Yannawa, Sathorn, Bangkok 10120
Telephone	: +66 (0) 2677-2000
Fax	: +66 (0) 2677-2222

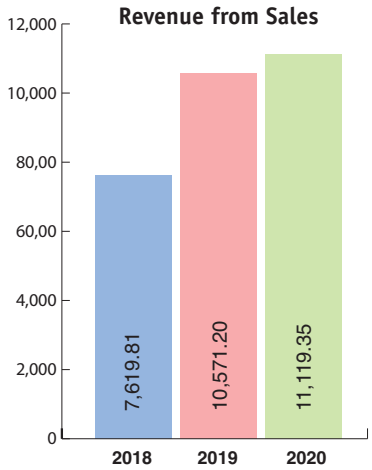
Financial Highlights

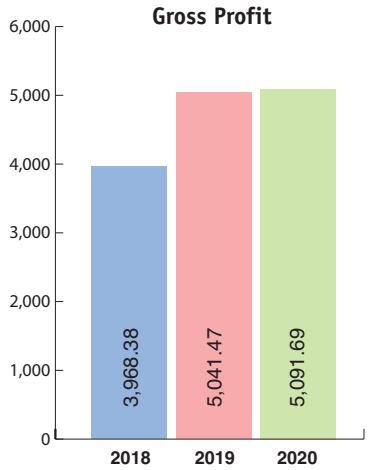
	Unit	2018	2019	2020
Statements of Income				
Revenue from Sales	(million BHT)	7,619.81	10,571.20	11,119.35
Total Revenues	(million BHT)	7,915.35	10,905.83	11,444.00
Cost of Sales	(million BHT)	3,651.43	5,529.73	6,027.66
Gross Profit	(million BHT)	3,968.38	5,041.47	5,091.69
EBITDA*	(million BHT)	4,263.90	5,504.81	5,750.24
Net Profit	(million BHT)	3,698.96	4,606.81	4,505.83
Statement of Financial Position				
Total Assets	(million BHT)	31,541.22	37,852.57	43,775.15
Interest Bearing Debt	(million BHT)	4,000.00	8,000.00	12,899.66
Total Liabilities	(million BHT)	6,492.85	10,742.24	14,847.01
Paid-up Capital	(million BHT)	8,400.00	8,400.00	8,400.00
Total Equity	(million BHT)	25,048.38	27,110.33	28,928.14
Financial Ratios				
Gross Profit Margin	(%)	52.08	47.69	45.79
Net Profit Margin	(%)	46.73	42.24	39.37
EBITDA Margin	(%)	55.96	52.07	51.71
Return on Assets	(%)	12.52	13.28	11.04
Return on Equity	(%)	15.02	17.66	16.08
Debt to Equity	(Times)	0.26	0.40	0.51
Interest Bearing Debt to Equity	(Times)	0.16	0.30	0.45
Net Interest Bearing Debt to Equity	(Times)	n.a.	0.17	0.33
Interest Bearing Debt to EBITDA	(Times)	(0.10)	0.85	1.67

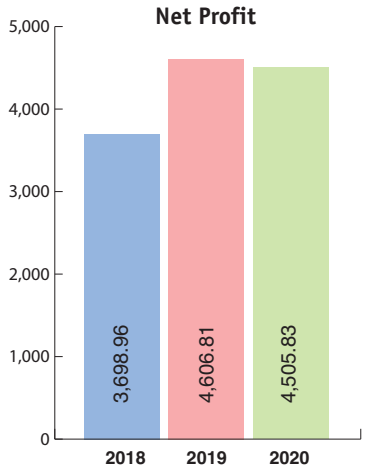
* EBITDA calculated from revenue from sale of power and goods + revenue from adders + other income - cost of sales of power and goods - distribution costs - administrative expenses + depreciation

Total Revenues and Profit

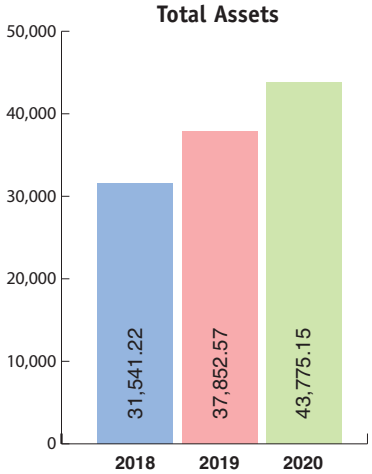
(unit: Million Baht)

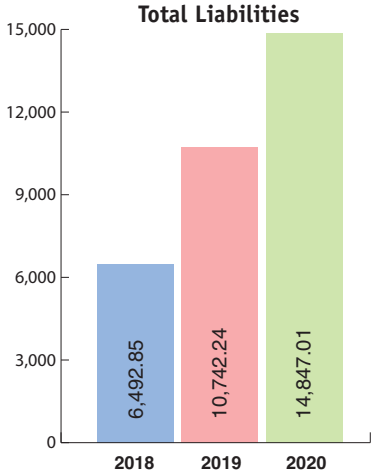


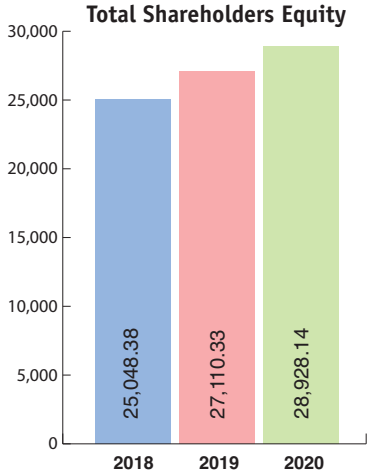




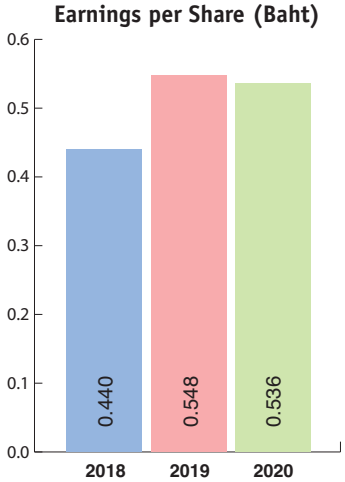
Financial Status

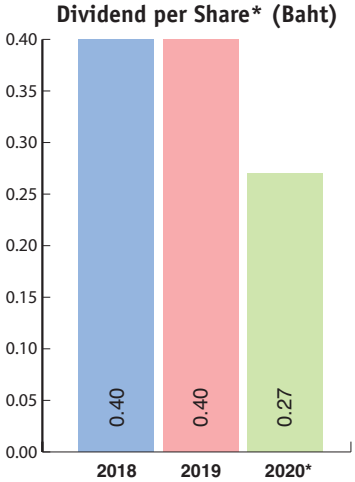


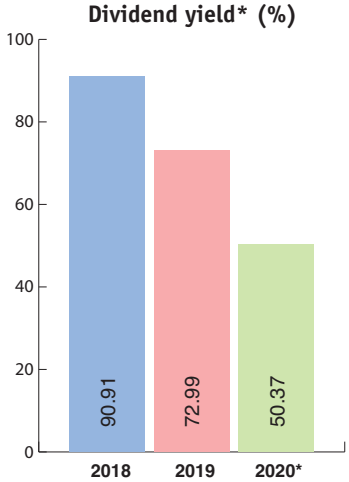




Profits and Dividends







* The dividend payment for the Company's 2020 performance divided into an interim dividend payment for the first half of 2020 performance at the rate of Baht 0.12 per share, which was already paid to shareholders, and the payment for performance during the second half of 2020 at Baht 0.15 per share, which has been considered and approved by the Board of Directors in the Company's Board of Directors' meeting no.2/2021 and is required to be approved in the 2021 Annual General Shareholder's Meeting.

Awards that made us proud

The company has continuously implemented research and development in the areas of production and personal development with a variety of activities to improve the company's fuel production plants and power plants. There are several agencies from the government sector, educational institutions, and the private sector that regularly visit our factories. The knowledge of waste management to convert it into fuel has been passed on. The Company was nominated to participate in various government and public organizations awards, both domestic and international. The Company received awards as follows:

1. CSR and Energy Awards (both domestic and international), outstanding industry and the Thai crown standard, respectively, as follows:

YEAR		Certificate/Award	Award-winning category	Organizer
2020		CSR-DIW Continuous Award	Distinguished Award: the standard of entrepreneurial responsibility that complies with the industry entrepreneur's responsibility to society	Department of Industrial Works, Ministry of Industry
2019		CSR-DIW Continuous Award	Distinguished Award: the standard of entrepreneurial responsibility that complies with the industry entrepreneur's responsibility to society	Department of Industrial Works, Ministry of Industry
		Thailand Energy Award	The Excellence Performance Award in the category of Renewable Energy Awards on Off-Grid Renewable Energy from Municipal Waste Project 2	Department of Alternative Energy Development and Efficiency, Ministry of Energy
		Thailand Voluntary Emission Reduction : T-VER	T-VER certificate is awarded for the production of RDF from municipal solid waste that helps reduce the greenhouse gas emissions in the equivalent amount of 68,573 tons of carbon dioxide per annum, credit period from May 1, 2016 to April 30, 2017.	Thailand Greenhouse Gas Management Organization (Public Organization), Ministry of Natural Resources and Environment

YEAR		Certificate/Award	Award-winning category	Organizer
2018		CSR-DIW Continuous Award	Distinguished award: the standard of entrepreneurial responsibility that complies with the industry entrepreneur's responsibility to society.	Department of Industrial Works, Ministry of Industry
		Thailand Energy Award	The Excellence Performance Award: Renewable Energy: Renewable Energy Application Project (Project to Increase Efficiency and Reduce Downtime of RDF 60 MW Power Plant)	Department of Alternative Energy Development and Efficiency, Ministry of Energy
2017		Thailand Energy Awards	The Excellence Performance Award: Renewable Energy: On-Grid Linkage Project, RDF 60 MW Renewable Fuel Power Generation Project	Department of Alternative Energy Development and Efficiency, Ministry of Energy
		ASEAN Energy Awards	1st runner up: Renewable energy: On-Grid project, RDF 60 MW renewable fuel power generation project	Department of Alternative Energy Development and Efficiency, Ministry of Energy
		Thailand Voluntary Emission Reduction : T-VER	T-VER Certificate under the voluntary greenhouse gas reduction program according to the standards of Thailand: Refused-derived Fuel (RDF) production project	Thailand Greenhouse Gas Management Organization (Public Organization: TGO)
		CSR-DIW Continuous Award	Distinguished award: the standard of entrepreneurial responsibility that complies with the industry entrepreneur's responsibility to society.	Department of Industrial Works Ministry of Industry

YEAR		Certificate/Award	Award-winning category	Organizer
2016		The First Award Plaque	Registration of Voluntary Greenhouse Gas Emissions in accordance with Thailand's Standard (T-VER) from the RDF production from municipal solid waste of TPI Polene Power PCL.	Thailand Greenhouse Gas Management Organization (Public Organization: TGO)
		CSR-DIW Award	Distinguished award: The entrepreneur's responsibility standard that complies with the industry entrepreneur's responsibility to society.	Department of Industrial Works, Ministry of Industry
2015		Thailand Energy Awards	Thailand Energy Awards on Renewable Energy: On-Grid Linkage Project: 20 MW RDF-fired Power Plant Project	Department of Alternative Energy Development and Efficiency, Ministry of Energy
2014		Thailand Energy Awards	Thailand Energy Awards on Renewable Energy: Off-Grid Project, RDF Production from Municipal Waste	Department of Alternative Energy Development and Efficiency, Ministry of Energy
		ASEAN Energy Awards	2nd runner-up: Off-Grid project, RDF production from municipal waste	Department of Alternative Energy Development and Efficiency, Ministry of Energy
2013		Outstanding Industry	Energy management	Ministry of Industry
2011		Thai Crown Standard (Crown Standard)	Project of Clean Development Mechanism ("CDM") of Thailand	Thailand Greenhouse Gas Management Organization (Public Organization: TGO)

2. Management systems were certified according to international standards (International Organization for Standardization: ISO)

The company has also been certified for the implementation of international standard systems in various systems from SOCOTEC Certification International Thailand as follows:

- ISO 9001 is an international standard that businesses around the world value for quality excellence and efficiency of operations within the organization. ISO 9001 is a quality management system in accordance with international standards. The key concept of ISO 9001 is to establish a management system for quality assurance, which ensures that all processes have been regulated and verifiable. All of the Company's RDF plants and power plants (TG1-TG 8) were verified by the latest system verification and the certificates were issued in 2019.
- ISO 14001: 2015 is the international standard for an organization's environmental management system to increase the environmental performance within the organization and for environmental sustainability of an organization that wants to manage and be responsible for the environment in a systematic way. It uses the requirements specified in the environmental management system standard as a guideline for practice. All of the Company's power plants (TG1-TG 8) were verified and certificates were received in 2020.
- ISO 5001 is an energy management system standard to serve as a framework for energy management for the organization to continuously improve performance, energy efficiency and conservation. The Company's RDF plant and waste power plants (TG5) were verified and certificates were received in 2020.

- OHSAS 18001 is an occupational health and safety management system standard; TIS 18001 aims to reduce and control the risks and hazards of employees and those involved, to increase the efficiency of business operations to ensure safety and promote the image of corporate responsibility towards employees and society. The waste heat-to-energy plants (TG1 & 2) and RDF-to-energy power plants (TG3) were verified and certificates were received in 2020.

3. Alternative Energy Certificate programs (Gold Label) for the year 2019 (Gold Label)

Waste heat recovery power plants (TG1&2) were certified Alternative Energy Certificate programs (Gold Label) from the Thailand Environment Institute ("TEI") based on using waste heat from cement production process to generate power (waste heat recovery power plant) in 2019.

4. Participation in environmental program to reduce greenhouse gas emissions

The company has participated in a Thailand Voluntary Emission Reduction Program (T-VER), which is a greenhouse gas reduction project developed by the Thailand Greenhouse Gas Management Organization (TGO) to promote and support all sectors to take part in a voluntary reduction of greenhouse gases. The amount of reduced greenhouse gas, called carbon credits (CO_2), which under the T-VER program are called "TVERs", can be sold in the domestic voluntary carbon market. The TGO has established rules and procedures for project development, methodologies for reducing greenhouse gases, and the registration and certification of greenhouse gas. The project will lead to the reduction or absorption of greenhouse gases occurring in Thailand. The Company's projects consist of:

- RDF Production from Municipal Solid Waste Project in 2016 in which the amount of greenhouse gas expected to be reduced was 34,754 tons of carbon dioxide equivalent per annum;
- RDF Production from Municipal Solid Waste Project in 2017 received a certificate of reduction of greenhouse gas emissions under the Thailand Voluntary Emission Reduction Program (T-VER);
- RDF Production from Municipal Solid Waste Project in 2019 in which the amount of greenhouse gases expected to be reduced was 68,573 tons of carbon dioxide equivalent per annum;
- The Company signed a memorandum of understanding with Thailand Greenhouse Gas Management Organization (TGO) and the Zukunft des Kohlenstoffmarketes Foundation, Germany on December 10, 2020, who requested to buy Carbon Credit from the Company, for the first round of 22,530 tons and the second round of 16,667 tons, totaling 39,197 tons, at a price of Euro 4 per ton of CO_2, total value of Baht 5,487,580. The Company intends to use the revenue from the sale of such carbon credits to promote environmental and social activities.

In 2021, the Company prepared to request a reduction in greenhouse gas emissions, under the Thailand Voluntary Emission Reduction (T-VER), from all waste- to- RDF projects and from all of the Company's RDF-fired power plants due to the increase in power generation capacity and the increased use of RDF.

The calculation of the reduction of greenhouse gas emission started from the use of waste to generate energy which can be derived from bringing waste to landfill, which will cause methane gas to be released into the atmosphere equivalent to 21 times the amount of carbon dioxide. If the waste is used as fuel, it can reduce methane emissions. From our calculations, it can be compared that generating electricity from waste will reduce greenhouse gas emissions by approximately 7.725 tons - Carbon Dioxide per MW or equal to 55,575 tons - Carbon Dioxide per MW per year. With all RDF-fired power plants of 180 MW, the Company can reduce greenhouse gas emissions by approximately 900,000 tons of carbon dioxide per year. Reducing the impact of greenhouse gas emissions will help sustain the climate in the world and the Company will be able to earn income from the sale of carbon credits as well.

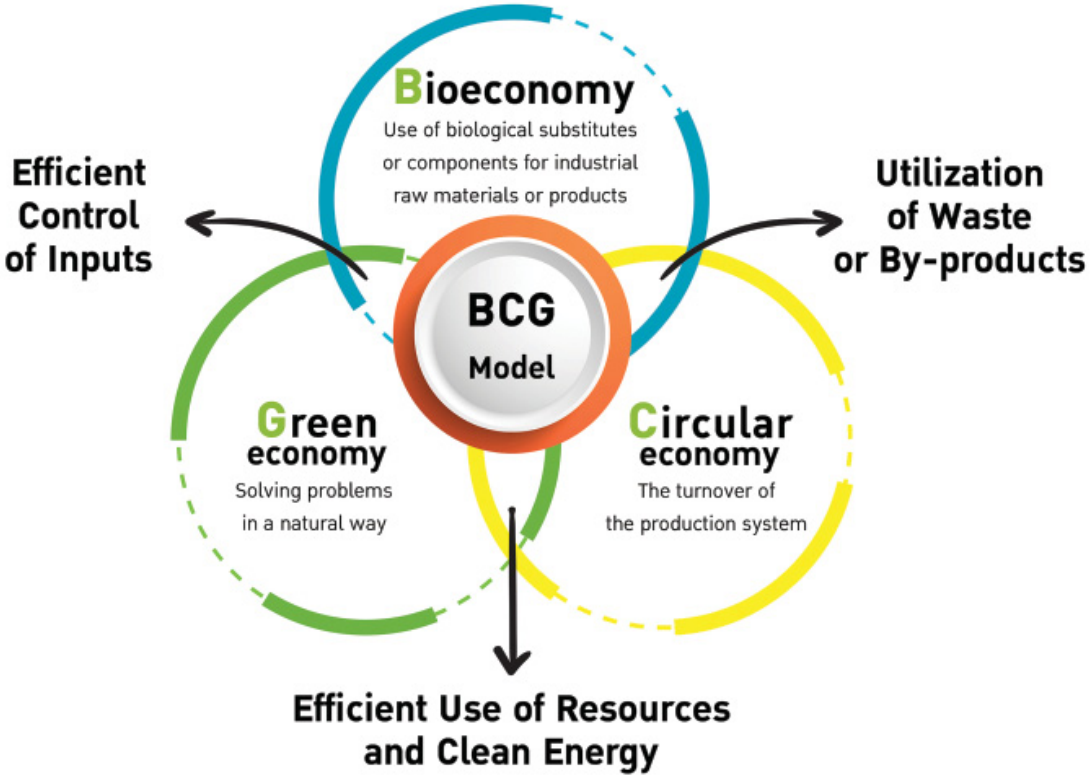
Driving Towards the Economy to Sustainable Growth (Bio-Circular-Green Economy-BCG)

Circular Economy, Green Economy and Bio Economy

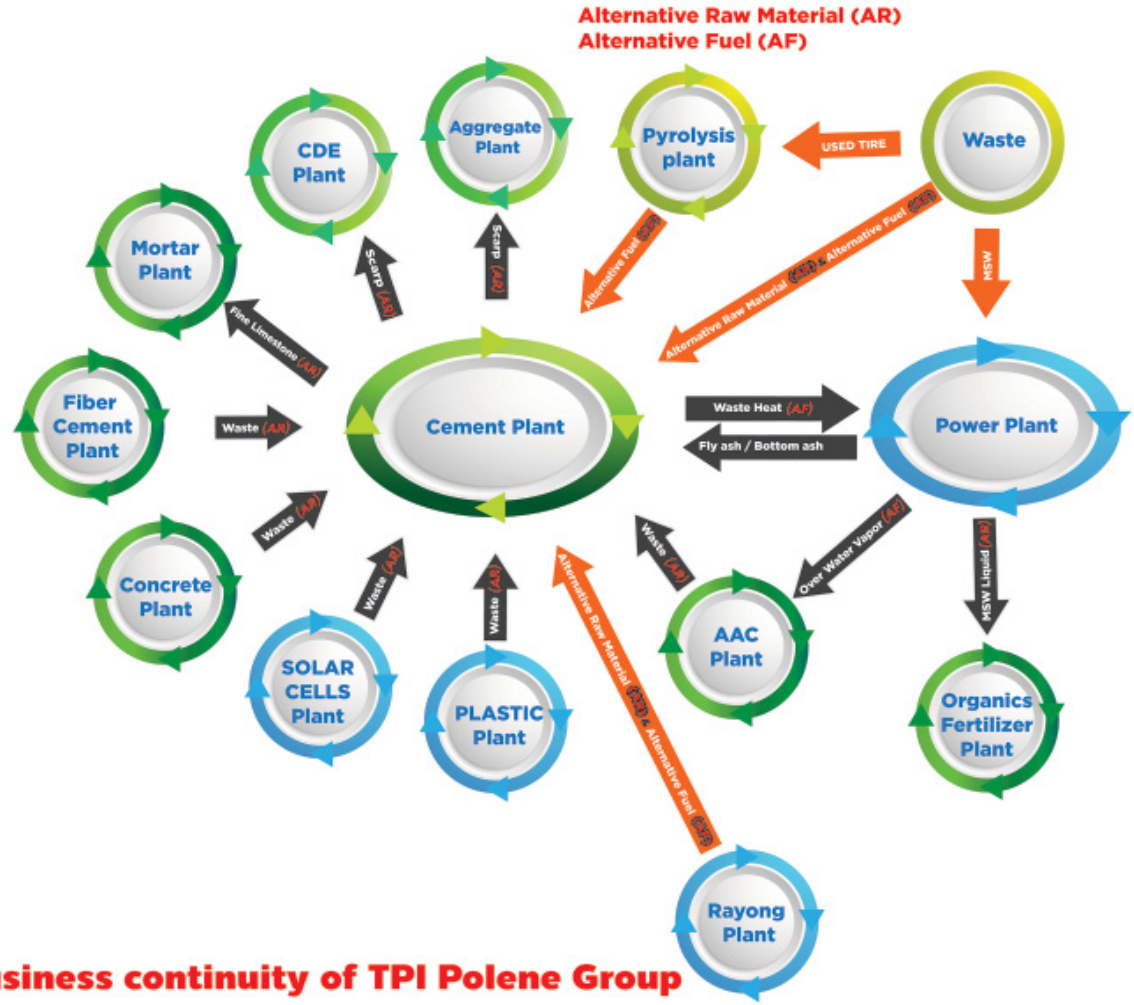
TPI Polene Power Group recognizes the importance of resource utilization amidst the accelerating growth rate of the world population. Meanwhile, supply of limited natural resources and an inefficient consumption lead to more waste and depletion of natural resources in economic cycles, which inevitably worsens the climate change problem, that in turn accelerates resource scarcity while greenhouse gas emissions result in global warming. This is primarily caused by waste from consumption, including the impact of marine waste.

"We are depleting the natural resources of the descendant's generation" - this sentence reflects the absolute necessity to realize more on the efficient consumption of natural resources, including raw materials energy as well as the measures to be taken for environmental impact reduction and waste overflow, all of which result in global warming. TPI Polene Power Group is committed to playing a role in solving such problems for our planet with a commitment to embrace the policy of the "Circular Economy", a global sustainability concept that will be completed at all stages of business operation, from research and development planning, production processes to the delivery of products to consumers. Waste from one process is a raw-material for another to maximize the benefits of resource utilization. In a bio-based economy, material cycles are efficient and sustainable in the supply chain in the business, social and community sectors.

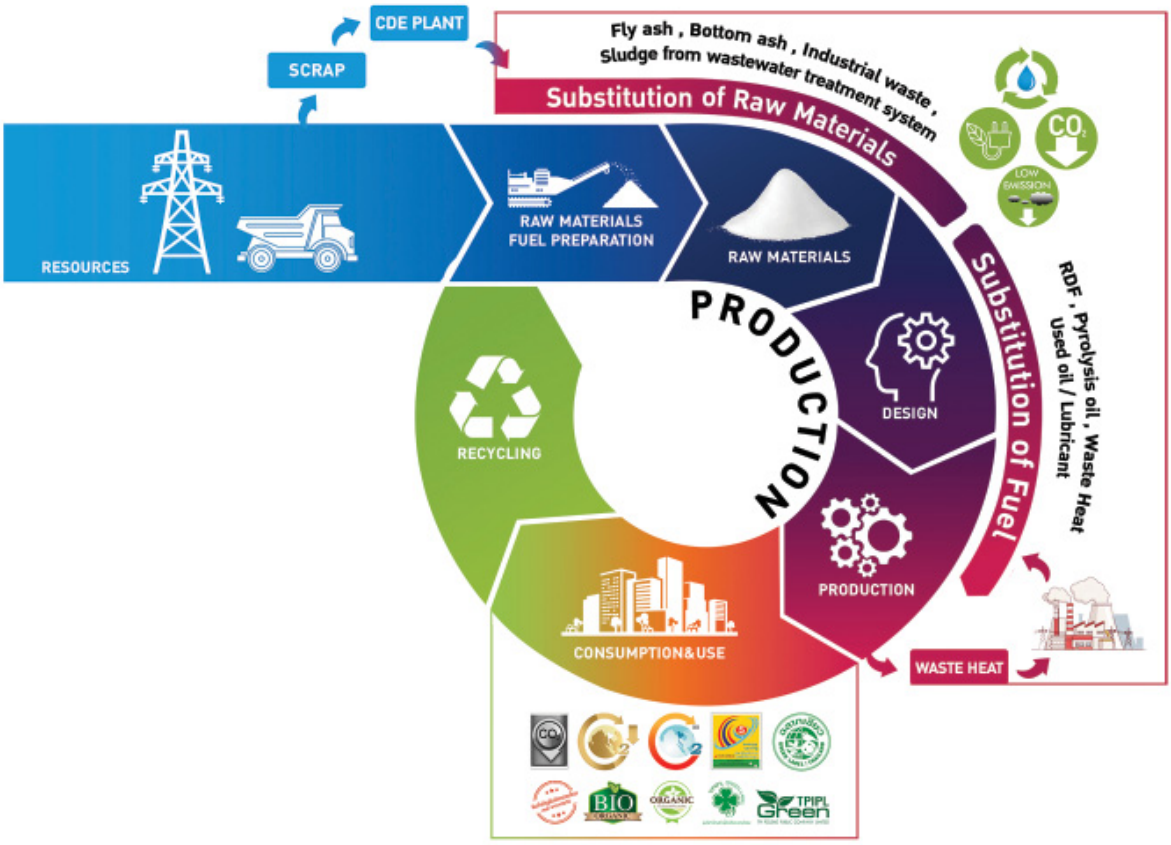
TPI Polene Power Group has established the policy for the group of companies, aimed at sustainable development by implementing "Circular Economy" to be mainstreamed as global sustainability concepts to maximize the benefits of resource utilization and the continual use of resources, eliminating waste. Circular systems employ reuse, remanufacturing and recycling to reduce environmental pollution, minimizing the use of resource inputs and the creation of waste, pollution and carbon emissions, with the key objective to reduce carbon dioxide emission in the atmosphere, which cause global warming by using renewable energy into the production process. In addition, TPI Polene Group aims to improve the group's production efficiency and products under the concept of renewable biological resources and the conversion of these resources and waste streams into value added products to support the country's agricultural sector in the country.



The joining of the three initiatives, the Circular economy, the Green economy and the Bio economy represents the implementation of the economy towards sustainable development, and as mutually supportive concepts, which is called Bio-Circular-Green Economy (BCG), a business model innovation to drive TPI Polene Power Group to grow with globally competitive advantages and to diversify income to communities by protecting the surrounding environment to further enhance the sustainable growth.



TPI Polene Power Group has taken every step of its business operations, from research and development, procurement of resources, raw materials and energy, and put it under circular systems by recycling and employing reuse methods to reduce environmental pollution. The production process is now efficient in both resource consumption and environmental protection. The key objective is to manufacture green products that are environmentally friendly, under the circular economy concept, and this objective continues in all areas including sales, logistic systems, and after sales services. Consumers are also a part of creating a green world. The business continuity of TPI Polene Power Group can be summarized as follows:



1. **Green Research and Development**
   - Product development with the use of Alternative Raw materials
   - Product development with the use of recycle raw materials
   - High quality product development to reduce consumer consumption
   - Product design to reduce to reduce energy consumption in production
   - Production of products for decoration to replace the use of natural resources
   - New product innovations to respond to the applications and as green products.

2. **Procurement of Raw materials and Energy Resource**
   - Use of raw material sources with minimal impact on resources and the environment such as:
     - Selection of raw materials from suppliers who use material, such as recycled paper, which are used to produce cement bags or spare parts that can be used with steel from the original parts to be re-reduced., etc.;
     - Construction of rainwater storage ponds instead of using water from natural sources.
   - Cost-effective use of all parts of the raw material by reusing and recycling, such as:
     - The rest or the low quality portion of the limestone from the cement production process will be used to produce construction stones, sand, construction soil, and mortar raw materials, etc. using all parts of limestone without creating waste;
     - Recycle sewage water from cooling towers will be improved to be reused instead of disposing of the wastewater;
     - Lubricants/oil for engines are reused as fuel.
   - Use of renewable raw materials from waste recycling, such as:
     - The use of bottom ash from power plants as substitute raw material in the cement production process;
     - The use of fly ash from power plants as a substitute for cement;
     - Recycling bottom ash in power plants to replace sand to fill bed levels.
   - Renewable Alternative Raw Material
     - The use of limestone left over from construction stone mills instead of using river sand in power plants;
     - The use of limestone dust as a substitute for the use of clinker in the cement production process;
     - Use of waste water in RDF plants in bio fertilizer production.

- Renewable Fuels
  - Processing of municipal waste as a substitute for fuel in RDF power plants and cement plants;
  - Lubricants, tires, or scrap material from processes in heating plants are used as fuel.
- Renewable Energy
  - Electricity generation from renewable power plants or RDF power plants;
  - Production of oil from tires in Pyrolysis plant.
- Heat Recovery
  - The use of recovery heat from production processes to warm the raw materials in raw meal and coal grinding machines;
  - The use of recovery heat from steam production process for electricity generation and light weight concrete production.

3. High efficiency and low emission process

- High efficiency production process and production machinery:
  - The use of machines with high energy efficiency such as invertor;
  - Modification of clinker cooler machine to produce clinker to reduce energy consumption;
  - Factory crater with Vertex design to reduce energy consumption;
  - The use of a belt conveyor to transport limestones from the quarry and being able to generate electricity back to the system instead of using trucks;.
  - The use of mobile crushers to lessen rock/aggregate transportation;
  - Implementation of various energy conservation projects.
- The use of process automation production control system for accuracy in the production process:
  - The use of process automation systems to control production from the central control room;
  - Combustion control program for fuel and power consumption reduction to obtain high quality clinker;
  - The use of IOT and data technology for data management to increase production efficiency.
- Controlling and reducing the environmental impact from the production process:
  - Installation of air quality monitoring systems to measure air emitted from the factory crater, by using Continuous Emission Monitoring (CEM);
  - Installation of filtration devices and electrostatic precipitators (ESP);
  - Installation of truck wheel washers in various transportation in the factory, including contractors' trucks;
  - Roof covering to store raw materials and coal to control dispersion.
- The use of automation machinery or robots in production process:
  - The use of automation machinery to store raw material samples, products for quality analysis to control production process;
  - Using robots to perform tasks such as products packaging;
  - Using robots to perform welding and maintenance work.

4. Green Products

- Products that have been certified under both domestic and international standards;
- High quality products that can reduce consumption to maintain job quality;
- Products that are convenient for transportation, storage, and use;
- Products that are environmentally friendly;
- Products that can save energy in real use;
- Products that can get rid of scrap with are no hazardous contamination in products and packaging.

5. Sales, Transportation and Services

- Packaging design in cargo transportation;
- Process Automation system to unload goods;
- Promoting efficient transportation and reducing environmental and community impact;
- Using digital platforms to sell and transport;
- Servicing customers in the use of products for optimal performance.
- Use of waste products from consumption for renewable use

Reduction of Greenhouse Gas Emissions and Disposal of Municipal Wastes

The Company is committed to conducting its business to cope with the intense pressure from the environmental effects of climate change, which increases the potential of the business by focusing on the reduction of greenhouse gas emissions by using energy and resources in production efficiently. The Company aims to reduce carbon dioxide emissions to be a zero global warming impact company by joining the Thailand Voluntary Emission Reduction Program (T-VER to obtain registration and receive carbon credits - T-VERs - and participate in the Low Emission Support Scheme or LESS). TPI Polene Group plans to implement projects such as renewable energy as well as renewable fuels, energy efficiency, tree planting and forest restoration and effective use of resources. From 2009- present, the Company has consistently created innovative technology for the manufacturing of products and made an investment in businesses related to the mitigation of environmental problems, totaling Baht 19,435 million, which can be summarized as follows:

	Project	Investment cost (Million Baht)	Benefit
1.	(40MW Waste Heat Recovery Power Plant in 2009	Baht 1,544 million	Reduce production costs by using waste heat recovery from cement production process to generate electricity. It does not cause any energy consumption but help reduces global warming. Co_2 emissions can be reduced as follows: In 2010, the equivalent CO_2 emissions = 146,094.27 tons. In 2011, the equivalent CO_2 emissions = 149,481.20 tons. In 2012, the equivalent CO_2 emissions = 146,105.00 tons. In 2013, the equivalent CO_2 emissions = 147,911.85 tons.
2.	The RDF fuel plant project in 2011 by using waste through a sorting process to produce RDF fuel. Presently in the process of expanding RDF production capacity in 2020-2021)	Baht 2,690 million Baht 1,400 million	It is a renewable fuel project to replace coal fuel to generate electricity or replace coal in cement plants. It also reduces environmental impact from waste disposal, which originally used landfill method, causing air pollution, unpleasant odors, and groundwater leakage. It also reduces space for landfill use and reduces the use of limited sources of energy, as well as reducing CO2 emissions, greenhouse gases and global warming. The project has been awarded "2014 and 2019 Thailand Energy Award for Renewable Energy : Projects to Off-Grid Systems The project was certified by the Greenhouse Gas Management Organization and T-VER registration and help reduce greenhouse gas content of 82,056 tons of carbon dioxide equivalent - Firstly certified in 2016 of 13,483 tons of carbon dioxide equivalent, and - Secondly certified in 2018 of 68,573 tons of carbon dioxide equivalent). In 2021, the Company will evaluate the receipt of carbon credits from T-VER.

	Project	Investment cost (Million Baht)	Benefit
3.	RDF fuel power plant project with total capacity 80MW (in 2015) and 100 MW (in 2018), totaling 180MW with back-up boilers	Baht 13,698 million	Renewable energy project by using waste as fuel. It is manufactured to sell electricity to EGAT and to reduce fossil power generation in the electricity generation system and to manage waste problems in the community. Garbage can be disposed of through a burning process to generate electricity. This reduces the effects of pollution and greenhouse gas emissions from piles of garbage All power plants can dispose of waste to local areas delivered in equivalent quantities of community waste of 10,000 tons per day or 3.65 million tons per year. If the waste is carried out using landfill methods, it will cause the release of greenhouse gases, of which 1 ton of waste will have a greenhouse gas emission of 2.32 tons of carbon. As a result, waste management by burning to generate power can reduce greenhouse gas emissions by 8.5 million tons per year. The project received Thailand Energy awards 2015, 2017, 2018 and 2020 from the Department of Alternative Energy Development and Conservation, Ministry of Energy, and was runner-up at the 1st ASEAN Energy Awards 2017 held at the ASEAN Energy Business Forum 2017 in Manila, Philippines.
4.	The project to return wastewater from the cooling tower in the electricity production process through filtration for re-use.	Baht 103 million	The project to enhance the use of resources and energy, by recycling wastewater through filtration for re-use. In 2020, 534,074 cubic meters of water can be filtered back to reuse. This helps cost reduction amounting to Baht 15.49 million/year.
	Total	Baht 19,435 million	

TPI Polene Power and Corporate Social Responsibilities (CSR)

TPI Polene Power Public Company Limited and its subsidiaries remain committed and are aware of conducting business with social responsibility, paying attention to the community, and being environmentally friendly. The Company also focuses on development to achieve sustainable performance in various aspects as follows:

1.Environmental Activities

- **TPIPP tree planting project to reduce global warming** was made for the conservation of nature and the environment by replacing degraded forests and increasing green areas and reducing global warming. The Company, with the goal of joining with villagers in the area, planted a community forest of 162 rai at Ban Tham Namphu Community Forest, Kaeng Khoi District, Saraburi Province; Khao Lom Community Forest, Ban Sap Prik School and Sap Prik Temple, Muak Lek District, Saraburi Province; and Ban Thai Community Forest, Kaeng Khoi District, Saraburi Province.
- **TPI Unite to Plant Trees for Environmental Conservation Project** TPI Polene Power executives and employees of the TPI Group jointly planted 700 trees at TPI Cement Plant, Kaeng Khoi District, Saraburi Province, to increase green areas to significantly reduce the global warming problem.
- **Donated 2,260 bags of TPI cement products** to the 2nd Army, Suranaree Camp, Nakhon Ratchasima Province, in "Army Volunteers Planting a Forest and Building a Dam Project Following the Royal Wishes" to build 250 dams in the Thap Lan National Park under the concept of "Water is Life, Water is Stability" for the people of Ban Mabkad so they can take advantage of the dam for water consumption.
- **Supported the "Waste Exchanges with Electricity" Community Development (Knowledge Enhancement) Project**, including a booth of waste recycling to exhibit products from recycled-waste, to demonstrate the making of cloth bags from old shirts in a campaign to stop the use of plastic bags, was held at the village headman's office, Moo 10, Thap Kwang Sub-district, Kaeng Khoi District, Saraburi Province. This project aims to promote health care and waste separation to create good hygiene and waste disposal management.

2. Academic and Youth Activities

The Company has contributed a total of Baht 9,020,910 to give as scholarships, and for research and development for educational personnel, as follows:

- Supported scholarships for Satri Setthabutbamphen School, Siam Technology College (Siam Tech), Rajamangala University of Technology Bangkok, Pathumkongka School, Thonburi Commercial College, Bangna Commercial College, Muang Nakhon Ratchasima School, Ladplakhao Pittayakom School, Wat Songtham School, Rattanakosin Sompoch Ladkrabang School, Takpittayakom School and Nawaminthrachinuthit Satriwittaya 2 School.
- Support for research and development of THEKA artificial cortex from synthetic materials, Faculty of Medicine Ramathibodi Hospital, Mahidol University.
- Supported the "Hiring Teacher Project" for Ban Subbon School, Kaeng Khoi District / Ban Khao Mai Kwian School, Muak Lek District, Saraburi Province to focus on promoting education for students for sustainable educational development.

  Donated funds for the purchase of TPI construction material products totaling Baht 3,138,445.84 to improve the school building and to repair roofs, walkways and roads for eight schools, such as giving a student house in the project "Ban Mai Sai Yai Sor Wor" to Ms Chompoonuch Kawanta (Class Mor 2/15), from Sao Hai "Wimon Wittayanukul" School, Saraburi Province, whose family was poor/ Ban Sapprik School to repair the roof of TPI Patana building / multi-purpose buildings, etc.

3. Social Activities

Winter blanket donation project for year 2020

Donated a total of 10,000 blankets: In the North, the Company donated a total of 7,000 blankets as follows: to students, teachers, and people who are affiliated with the Border Patrol Police Division 3 in Chiang Mai; the elderly and the disabled at Baan Doi Kaew and Ban Doi Luang, Doi Tao District, Chiang Mai; and to victims of the cold weather at Huai Ya Village - Huai Khiad Haeng Village, District of Kalayani Vadhana, Chiang Mai. In the Northeast, the Company donated 3,000 blankets to students, teachers and people under the Border Patrol Police Division 2, Khon Kaen. The company wishes to help provide warmth and help relieve the suffering caused by cold weather conditions.

Strengthened the community to be healthy The Company issued mobile medical services in the project in order to monitor for diseases, illnesses, and to provide health check-up services, and knowledge of health and lung health for people in the Hin Lap Sub-district, Muak Lek District, Saraburi; and visited bed-ridden patients and gave food and disposable diapers to improve the quality of the bed-bound patients in Tub Kwang Subdistrict, Tha Khlo Subdistrict, Kaeng Khoi District and Mittraphap Subdistrict, Muak Lek Subdistrict, Muak Lek District, Saraburi Province.

Supported the total budget of baht 13,031,638.07 for hospitals, the foundation and various organizations to promote and develop a good quality of life for Thai people, as follows:

- Public Health: the Company donated an ambulance with medical equipment to Saraburi Hospital; donated pressure gauges and medical equipment to public health volunteers at Thap Kwang Subdistrict, Tha

Khlo Subdistrict, Saraburi Province; donated a sugar-level detector, a medical tool bag, a digital fever meter, a foot-pedaled alcohol gel press stand for village health volunteers (VHV), Mittraphap Subdistrict, Muak Lek District, Saraburi Province, for all nine villages to carry out their duties for the community.

- Supported the Foundation and the Associations caring for people with disabilities to give them encouragement and an opportunity to live a better life, such as donating rocking tricycles for the disabled and the elderly at Bangkok's Disability Person Association; donating wheelchairs for the Disabled Of Thai with Disability Foundation; giving computers with Braille keyboards to Bangkok's Disability Person Association; Project for producing Digital Accessible Information System (DAISY) books for the blind and people with print disability of the Thai Association of the Blind Foundation.

- Donated Baht 6,140,690.48 to purchase TPI building material products for many agencies which lack a budget: for example, jointly constructed a nine-storey building at Ban Phaeo Eye Hospital, Samut Sakhon Province to support medical services for the community; new building construction projects of Sataban Saengsawang Foundation under the patronage of Her Royal Highness Princess Soamsawali Krom Muen Suddhanarinatha; home improvement for the elderly who have a hard time with their daily life for the community of Wat Wiset Kan - Wat Chimthayikawas; eight houses for health promotion work, Faculty of Medicine Siriraj Hospital, etc.

4. Religious Activities

TPI Polene Power Public Company Limited is committed to supporting and promoting Buddhism by continuously offering Kathin every year, through executives, employees and customers together donating money to make merit to support the restoration of religious places and buildings in ten temples. These donations totaled 2,570,000 baht. This support included co-hosting the Kathin ceremony at Sridon Moon Temple, Chiang Mai; co-hosting the Kathin ceremony at Ban Hin Lueb Temple, Saraburi; co-hosting the Kathin ceremony at Wat Tham Salika, Nakhon Nayok province, etc.

In addition to paying for Kathin robes, the Company also supports and encourages Buddhism in other areas as follows:

- Supported the project "Novice Rakkaew, religious heirs", together with Rama 9 Kanchanaphisek Temple, the dissemination of Dharma via Dharma Channel, Weruwan Temple, Kanchanaburi Province, and the spread of Buddhism on the World Buddhism TV Station of Thailand, Wat Yannawa (WBTV).
- Donated funds of Baht 6,381,285.49 to buy TPI concrete, TPI cement, and TPI building material products for fifteen temples, Christian churches and Islamic mosques for the construction of these religious places, including Misang Center and the mosque in order to maintain all religions.

The activities mentioned above are just part of TPI Polene Power's focus and aim to help improve the quality of life of people and society. The company is aware of the important role of CSR (Corporate Social Responsibility), and is ready to support society, education, youth, religion and the environment in order to create a supportive society, a good environment and a growing Thai economy.

Policy and Business Overview

1. Overview of Business Operations

The Company is a power plant operator in Thailand, with the largest waste-to-energy power plant operations in the country in terms of installed waste-to-energy power generation capacity, according to AWR Lloyd.

The Company operates three types of power plants, namely, RDF-fired power plants in connection with its waste-to-energy operations, waste-heat recovery power plants, and a coal-fired power plant. All of the Company's RDF-fired power plants also have the capacity to generate power from waste heat.

The Company's power off-takers are the Electricity Generating Authority of Thailand ("EGAT") and the Company's parent, TPI Polene Public Company Limited ("TPIPL"), a listed company principally engaged in the business of manufacturing and selling cement and low-density polyethylene/ethylene vinyl acetate plastic resin and selling construction materials.

As of 31 December 2020, the Company had eight commercially operating power plants with a total of 440 MW of installed power generation capacity, all of which are located in the same vicinity as TPIPL's cement production plants in Kangkhoy, Saraburi Province in Thailand:

- a waste heat recovery power plant with an installed power generation capacity of 40 MW ("WHPP-40MW" or "TG1&2"), consisting of two 20 MW power generation units;
- a RDF-fired power plant with an installed power generation capacity of 20 MW ("RDFPP-20MW" or "TG3");
- a RDF-fired power plant with an installed power generation capacity of 60 MW ("RDFPP-60MW" or "TG5");
- a RDF power plant of a total capacity of 100 MW ("RDFPP-100MW" or "TG4&6") comprising of a waste heat recovery power plant with an installed power generation capacity of 30 MW ("WHPP-30MW" or 'TG4") and a RDF-fired power plant with an installed power generation capacity of 70 MW ("RDFPP-70MW" or 'TG6");
- a mixed fuel-fired power plant with an installed power generation capacity of 70 MW ("MIXED FUEL-PP-70MW" or 'TG7") under an approved power generation capacity of 40MW.
- a coal-fired power plant with an installed power generation capacity of 150 MW ("Coal-PP-150MW" or "TG8"), which opened commercial operations (COD) on 25 January 2019.

The Company produces RDF from its own RDF production plants as fuel to generate power. The RDF production plants have a daily installed capacity to process up to 6,400 tons of MSW (and/or landfill waste, residual organic materials equivalent to the use of MSW in producing RDF) and produce up to 3,200 tons of RDF. Under the power generation process, the Company uses RDF from its RDF production plants as fuel to generate power.

Currently, the Company is in the process of expanding its RDF production capacity, which will be able to use RDF equivalent to 10,000 tons of municipal solid waste per day. The project will be completed in 2021, which will provide the company with a municipal solid waste disposal facility, which is located in the same area as the largest in the world. The project will reduce CO2 emissions (which cause global warming) by approximately 8.5 million tons per year and eliminate a total of 3.5 million tons of municipal waste per year.

In addition to MSW, the Company procures both unsorted landfill waste and pre-sorted landfill waste to ensure sufficient waste supply to support its RDF requirements.

The Company believes that its RDF-fired power plant operations are well-positioned to benefit from the Thai government's policy of promoting power generation from renewable fuel sources. The Thai government provides adders to renewable power producers at rates that vary based on the type of energy source. In selling power to EGAT, for example, each of the Company's RDF-fired power plants receives an adder at the rate of THB3.5 per kWh in addition to the base tariff.

The Company also operates petrol and gas stations and derives revenue from the sale of petrol, gas and convenience store goods from these stations. As of December 31, 2020, the Company had eight petrol stations, one gas station and three petrol and gas stations in Bangkok and other provinces in Thailand.

Sales Revenue Structure

Unit: Million Baht

Business	2018		2019		2020	
	Baht Mil.	%	Baht Mil.	%	Baht Mil.	%
Energy & Utilities	6,912.25	90.71	9,851.49	93.19	10,586.78	95.21
Petrol and gas stations	707.56	9.29	719.71	6.81	532.57	4.79
Others	-	-	-	-	-	-
Total Revenue from Sales	7,619.81	100.00	10,571.20	100.00	11,119.35	100.00

As of 31 December 2020, the revenue of the Company was mainly from Energy & Utilities, accounting for 95.21%, and from Petrol and Gas stations, accounting for 4.79%.

2. Vision and Mission

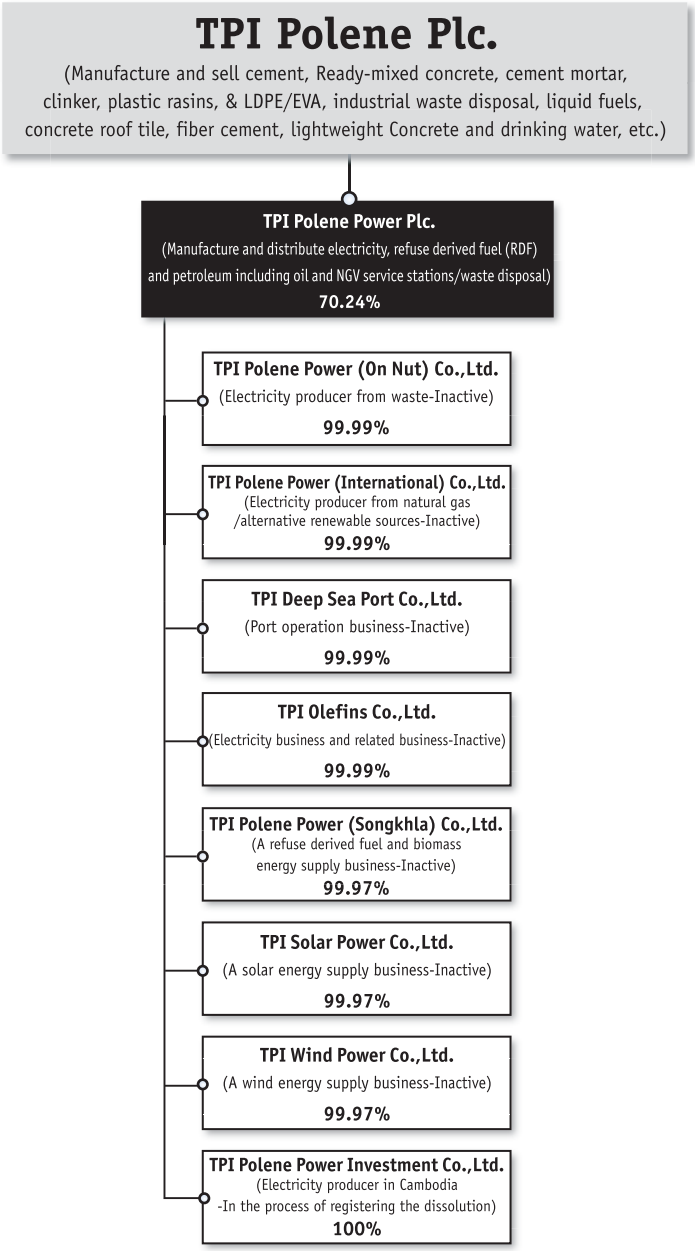
The Company is determined to follow a zero-waste plan and focuses on maintaining its position as a leader in the business of power generation using clean and efficient renewable energy sources, reducing greenhouse gas emissions and controlling the level of nitrogen oxides and sulfur dioxide. In addition, the Company intends to operate its businesses by adhering to the principle of good corporate governance and environmental responsibility.

The Company has a policy to expand its business growth in the waste power plant business by participating in bidding for government waste-to-energy power plant projects, which is the strength of the company because the company has experience and potential in all aspects of the industry, whether it is technology, personnel and finance in order to continue to expand the waste-to-energy power plant business.

In addition, the Company is in the process of studying and investing in the electric power business using other fuels such as natural gas, solar, and wind for future growth of the Company.

3. Company Group Structure

As of 31 De



Information of the Company Group as of 31 December 2020.

Company	Head Office	Type of Business	Registered Capital (Bath)	Paid-up Capital (Bath)	% Shareholding
Subsidiaries					
1. TPI Polene Power (On Nut) Co., Ltd.	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	Electricity producer from waste (Inactive)	750,000,000	187,500,000	99.99
2.TPI Polene Power (International) Co., Ltd. (Previous name: Zenith International Power Co., Ltd.)	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	Electricity producer from natural gas/ renewable sources (Inactive)	100,000,000	100,000,000	99.99
3. TPI Deep Sea Port Co., Ltd.	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	Port operation business (Inactive)	100,000,000	25,000,000	99.99
4. TPI Olefins Co., Ltd.	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	Electricity business and related business (Inactive)	1,000,000	1,000,000	99.99
5.TPI Polene Power (Songkhla) Co., Ltd.	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	A refuse derived fuel and biomass energy supply business (Inactive)	1,000,000	1,000,000	99.97
6. TPI Solar Power Co., Ltd.	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	A solar energy supply business (Inactive)	1,000,000	1,000,000	99.97
7. TPI Wind Power Co., Ltd.	26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120 Tel. Number (02) 285-5090-9 Fax Number (02) 213-1035	A solar energy supply business (Inactive)	1,000,000	1,000,000	99.97
8. TPI Polene Power Investment Company Limited	274, Phoum 1, Sangkat Tonle Basac, PHNOM PENH CENTER, Phnom Penh, Cambodia	Electricity producer in Cambodia (In the process of registering the dissolution)	USD 125,000	USD 125,000	100.00

4. Relationship with a major shareholder group

The businesses of TPIPL and the Company have been separated whereby the Company will be the TPIPL Group's flagship company for all types of power generation business domestically and outside Thailand. TPIPL and its other subsidiaries will not engage in any type of power generation business competing with that of the Company or its subsidiaries (if any).

Nature and Major Development of Business

1. Revenue structure of the Company Group

The Company's principal businesses are energy and utilities and petrol and gas stations. In its energy and utilities business, the Company primarily operates power plants with a focus on RDF-fired power plants and waste heat recovery power plants, that sell power to EGAT, and waste heat recovery power plants and coal-fired power plant that sells power to TPIPL. To support its RDF-fired power generation capacity, the Company operates its RDF production plants with the daily installed capacity to process up to 6,400 tons of MSW and produce up to 3,200 tons of RDF.

In its petrol and gas stations business, the Company operates petrol and gas stations in Bangkok and other provinces in Thailand and derives revenue from the sales of petrol, gas and convenience store goods from these stations.

Energy and utilities business contributed to 95.21 percent of the Company's revenue and 4.79 percent came from petrol and gas stations business, which is for supporting the Company's group businesses such as the cement business, building material business and others. The Company has no policy to expand the petrol and gas stations business.

The following table sets forth a breakdown of the Company and its subsidiary's revenue from sale of goods for the periods indicated:

Unit: Million Baht

Business	2018		2019		2020	
	Baht Mil.	%	Baht Mil.	%	Baht Mil.	%
Energy & Utilities	6,912.25	90.71	9,851.49	93.19	10,586.78	95.21
Petrol and gas stations	707.56	9.29	719.71	6.81	532.57	4.79
Others	-	-	-	-	-	-
Total Revenue from Sales	7,619.81	100.00	10,571.20	100.00	11,119.35	100.00

2. Nature of Business

2.1 Energy and Utilities

The Company currently operates three types of power plants: (i) waste heat recovery power plants, which use waste heat emitted during TPIPL's cement production process to generate power; and (ii) RDF-fired power plants, which generate power by burning combustible waste known as RDF as the primary fuel. (iii) coal-fired power plant. The Company believes that its waste heat recovery power plants and RDF-fired power plant operations are well-positioned to benefit from the trend towards renewable energy, and particularly, the Thai government's policy of promoting and supporting power generation from renewable fuel sources.

In selling power to EGAT, all of the Company's RDF-fired power plants in operation are entitled to an adder of THB3.5 per kWh, which is payable in addition to the base price of power under the power purchase agreements.

As of 31 December 2020, the Company had eight commercially operating power plants with a total of 440 MW of installed power generation capacity. All of these plants are located in the same vicinity as TPIPL's cement production plants in Kangkhoy, Saraburi province in Thailand. The details are as follows:

1. Power Plants

a) WHPP-40MW (TG1&2)

Located in the same vicinity as TPIPL's cement production plants, this waste-heat-recovery power plant commenced commercial operations in June 2009 and initially consisted of two power generation units each with an installed power generation capacity of 20 MW, totaling 40 MW and uses waste heat emitted during TPIPL's cement production process to generate power. The Company sells electricity it produces to TPI Polene Plc., under the power purchase agreement by charging the electricity charge according to the actual electricity sold in each month at the rate of baht per kilowatt-hour which is equal to the electricity rate per unit according to the time of use rate (TOU). This is the same rate as the power purchase agreement that TPI Polene Public Company Limited purchases directly from the Provincial Electricity Authority without having to charge the highest energy charge (Demand Charge) (the price does not include VAT). The power purchase agreement will expire at the end of the lease period of the land where this power plant is located. According to the lease agreement between the Company as the tenant and TPI Polene Public Company Limited as the lessor, the lease term according to the said lease agreement will end in July 2044. If the Company wishes to renew the contract, the Company must notify in writing to TPI Polene Plc at least 1 month in advance before the end of the original lease period to enter into a new lease agreement.

Under the purchase and service agreement, TPI Polene PCL agrees to sell the waste heat in the form of hot gas released from the cement production process to the company for use in the production of electricity from the waste heat energy of the WHPP-40MW (TG1 & 2).

In addition to the production and distribution of electricity, WHPP-40MW (TG1&2) also derives income from the sale of steam to TPIPL.

b) RDFPP-20MW (TG3)

RDFPP-20MW (TG3) generates power by burning RDF as well as partially utilizing waste heat emitted from TPIPL's cement production process. The power plant has an installed power generation capacity of 20 MW. RDFPP-20MW commenced commercial operations in January 2015. The Company sells power generated from RDFPP-20MW to EGAT pursuant to the RDFPP-20MW PPA, which specifies a contracted power generation capacity of 18 MW. The Company's sale of power from RDFPP-20MW to EGAT is on a non-firm basis, and as such, while EGAT is required to offtake power supplied to it from RDFPP-20MW, RDFPP-20MW is not obligated to supply a minimum amount of power to EGAT under the RDFPP-20MW PPA.

Under the RDFPP-20MW (TG3) PPA, the Company shall receive a monthly power tariff from EGAT consisting of an energy payment and an adder, subject to value-added tax:

- **Energy payment:** The Company receives an energy payment which is calculated as the product of the actual amount of power supplied to EGAT and an energy payment rate. The energy payment rate is the aggregate of (i) the bulk supply purchase price at which EGAT sells power to power distribution agencies such as the PEA and the Metropolitan Electricity Authority (the **"MEA"**), subject to adjustments by EGAT; and (ii) a fuel adjustment surcharge for bulk power supply (**"Ft"**), which is adjusted and announced by the Energy Regulatory Commission of Thailand (the **"ERC"**) every four months.
- **Adder:** The Company also receives an adder at the rate of BHT 3.5 per kWh of power supplied to EGAT for a period of seven years from the commencement of commercial operations of RDFPP-20MW in January 2015.

The RDFPP-20MW PPA (TG 3) has a term of five years from the date on which RDFPP-20MW first sold power to EGAT and will expire in January 2020. As of the expiration of the initial term, this agreement may be renewed for successive five year terms by mutual written agreement of the parties, executed not less than 30 days prior to the expiration of the initial term (On 22 November 2019, the company sent a written notice to EGAT to inform the intention to extend the power purchase contract for a period of five years from January 1, 2020). The Company will receive the adder during the first two years of the next five-year term and the adder for RDFPP-20MW (TG 3) will expire in January 2022. After the period, the Company will only receive Energy Payment.

The Company completed the installation of an additional RDF boiler of 75 ton per hour capacity at RDFPP-20 MW (TG3) in December 2016 which will maximize the utilization rate of power generation and could deliver excess steam to WHPP-40MW (TG1&TG2) to increase the utilization rate of production.

c) RDFPP-60MW (TG5)

RDFPP-60MW (TG5) generates power by burning RDF as well as partially utilizing waste heat emitted from TPIPL's cement production process. RDFPP-60MW commenced commercial operations in August 2015. The power plant has an installed power generation capacity of 60 MW. The Company sells power generated from RDFPP-60MW (TG5) to EGAT pursuant to the RDFPP-60MW PPA, which specifies a contracted power generation capacity of 55 MW. The Company's sale of power from RDFPP-60MW to EGAT is on a non-firm basis, and as such, while EGAT is required to offtake power supplied to it from RDFPP-60MW (TG5), RDFPP-60MW is not obligated to supply a minimum amount of power to EGAT under the RDFPP-60MW PPA.

Under the RDFPP-60MW (TG5) PPA, the Company shall receive a monthly power tariff (Excluding VAT) from EGAT consisting of an energy payment and an adder since the Commercial Operation Date of the RDF-60MW (TG5) in August 2015. The adder will expire in August 2022 and only Energy Payment will be paid to the Company.

The RDFPP-60MW PPA (TG5) has a term of five years from the date of which RDFPP-60MW first sold power to EGAT and will expire in August 2020. As of the expiration of the initial term, this agreement may be renewed for successive five year terms by mutual written agreement of the parties, executed not less than 30 days prior to the expiration of the initial term (The Company and EGAT have renewed the agreement for a period of five years starting from January 1, 2020). The Company will receive the adder during the first two years of the next five-year term and the adder for RDFPP-60MW (TG5) will expire in August 2022. After the period, the Company will only receive Energy Payment.

In addition, the Company completed the installation of the Grate Boiler in August 2018, which can use unsorted waste and/or RDF as fuel. The capacity is 75 tons per hour which have the ability to receive waste of 750 tons per day to increase the amount of steam production to maximize the utilization rate of RDFPP-60 MW (TG5).

RDFPP-60MW (TG5) has been granted a promotion certificate from the BOI, which entitles it to a number of benefits including exemptions from certain taxes.

d) RDFPP-70MW (TG6) and WHPP-30MW (TG4), totaling 100MW, combined as RDFPP-100MW (TG4 & TG6)

RDFPP-100MW consists of (i) WHPP-30MW (TG4) and (ii) RDFPP-70MW (TG6) to become a RDF power plant of a total capacity of 100 MW (TG4&TG6) to sell electricity to Electricity Generating Authority of Thailand (EGAT) under the power purchase agreement of 90 MW which commenced commercially operation on April 5, 2018.

Under the RDFPP-100MW (TG4 and TG6) PPA, the Company shall receive a monthly power tariff (Excluding VAT) from EGAT consisting of an energy payment and an adder since the Commercial Operation Date of the RDF-100MW (TG 4 and TG 6) in April 2018. The adder will expire in April 2025 and only Energy Payment will be paid to the Company.

The RDFPP-100MW (TG4 & TG6) has a term of five years from the date of which RDFPP-100MW first sold power to EGAT and will expire in April 2023. As of the expiration of the initial term, this agreement may be renewed for successive five year terms by mutual written agreement of the parties, executed not less than 30 days prior to the expiration of the initial term. The Company will receive the adder during the first two years of the next five-year term and the adder for RDF-100MW (TG4 and TG6) will expire in April 2025. After the period, the Company will only receive Energy Payment.

The Company improved the efficiency of operations of WHPP-30MW (TG4) when recovering waste heat from TPIPL's cement production process. This improvement increases WHPP-30MW's utilization rate and was completed in June 2017.

The Company also installed a RDF steam boiler of 75 tons per hour to increase the amount of steam to increase the utilization rate of WHPP-30MW (TG4) for maximum efficiency which can still send the remaining steam to the WHPP-40MW power plant project (TG1 & TG 2).

In addition, the Company installed the Grate Boiler, which can use unsorted waste and/or RDF as fuel. The capacity is 75 tons per hour with the ability to receive direct waste of 750 tons per day for a steam boiler to increase the amount of steam production in order to increase the utilization rate of RDFPP-70 MW (TG6) for maximum efficiency which commenced operation in December 2018.

WHPP-30MW (TG4) and RDFPP-70MW (TG6) have been granted a promotion certificate from the BOI, which entitles it to a number of benefits including exemptions from certain taxes.

e) MIXED FUEL-PP-70MW (TG7)

MIXED FUEL-PP-70MW (TG7) is designed and constructed to enhance the Company's operational flexibility. In the event that any of the Company's RDFPP-60MW (TG5) or RDFPP-70MW (TG6) operates at less than full capacity due to machinery breakdown, maintenance or otherwise, PP-70MW can be used as a backup power plant to provide power for such power plants, where necessary. The Company believes that PP-70 MW allows it to minimize tariff losses during operational interruption of its RDF-fired power plants. The Company estimates that the switching period in configurations to allow PP-70MW to act as a backup power plant will take approximately one to two weeks.

In the case of the generator of this power plant has not yet used for the RDFPP-60MW (TG5) or the RDFPP-70MW (TG6), the Company is able to produce electricity by using boilers that has 150 tons of steam per hour capacity which currently produces steam to sell to the Autoclaved Aerated Concrete Plant of TPI Polene Plc. Or when the aerated brick factory does not use steam, the Company will use steam for this MIXED FUEL-PP-70MW (TG7), which will generate about 40 MW of electricity.

In January 2016, the Company entered into a power purchase agreement for a MIXED FUEL-PP-70MW (TG7) with TPI Polene Plc. to sell electricity produced from the said power plant to TPI Polene Plc. It started selling electricity since 18 August 2018, with an approved capacity of 40 MW, according to the said power purchase agreement. The company charges electricity from TPI Polene based on the electricity sold by the Company to TPI Polene each month at the rate of Baht / Kwh which is equal to the tariff per unit according to time of use rate (TOU). This is the same rate as the electricity purchased by TPI Polene Plc directly from the Provincial Electricity Authority with no Demand Charge (The price is exclusive of VAT), based on the amount of electricity traded.

The term of MIXED FUEL-PP-70MW (TG7) Power Purchase Agreement will end upon the expiration of the lease agreement for MIXED FUEL-PP-70MW (TG7) entered into between the Company as lessee and TPIPL as lessor. The lease agreement will expire in July 2042.

f) Coal-PP-150MW (TG8)

Coal-PP-150MW (TG8) has been completed and commenced commercial operations and sold electricity to TPI Polene PCL on January 25, 2019. Under the Coal-PP-150MW Power Purchase Agreement between the Company and TPI Polene Plc, Coal-PP-150MW is obligated to supply and TPIPL is obligated to offtake at least 30% of power generated by Coal-PP-150MW each year to TPIPL. The Company shall receive a monthly power tariff from TPIPL at the same rate per kWh of power according to the time of use rate (TOU) as the average tariff rate at which TPI Polene Plc purchases electricity from the PEA each month without charging the highest energy charge (Demand Charge), subject to any value-added tax. The power tariff is determined based on the actual amount of power delivered each month. The term of Coal-PP-150MW Power Purchase Agreement will end upon the expiration of the lease agreement for Coal-PP-150MW entered into between the Company as lessee and TPIPL as lessor. The lease agreement will expire in July 2042.

Coal-PP-150MW has been granted a promotion certificate from the BOI, which entitles it to a number of benefits including exemptions from certain taxes.

In addition to the eight power plants (as mentioned above), the Company continuously improves the efficiency of the power plants. In 2020, the Company completed the installation of two Grate Boilers which can use unsorted waste or/and RDF as fuel to deliver additional steam to the power plants in case of need or whenever the other boilers are under maintenance. After the Company completed installation of the additional Grate Boilers, the utilization of the power plants and electricity sales to EGAT (TG5 and TG6) will significantly increase to the maximum amounts of contract capacity.

2. Production Processes

The Company's waste heat recovery power plants generate power by using waste heat emitted from TPIPL's cement production process to convert water into steam to drive steam turbine power generators.

The Company's RDF-fired power plants, on the other hand, generate power by using the steam derived from burning RDF as primary fuel and using waste heat as co-fuel to drive steam turbine power generators.

Set forth below is a description of the processes of generating power from waste heat and RDF.

a). Power Generation from Waste Heat

The Company produces power by capturing waste heat emitted during TPIPL's cement production process and converting the waste heat into power. In the cement production process, the raw meal undergoes a series of heat exchanges with hot exhaust gas before entering the rotary kiln for the production of clinker. At the rotary kiln, a series of complex physical and chemical reactions take place, and the raw meal is turned into clinker. To help the hot clinker solidify and prevent liquid formation, air quenching chamber coolers ("AQCs") quickly lower the temperature of the hot clinker with cool air. The cooling process results in the emission of hot exhaust gas from the AQCs. Detail of the power generating process from waste heat recovery power plant is as follows:-

1. **Recovery of Hot Exhaust Gas from Preheater Tower:** Suspension preheater boilers recover hot exhaust gas from the preheater tower and produce steam by heating condensate water with the recovered waste heat.
2. **Recovery of Hot Exhaust Gas from AQCs:** AQC boilers recover hot exhaust gas from the AQCs and produce steam by heating condensate water with the recovered waste heat.
3. **Power Generation:** The steam from the suspension preheater boilers and the AQC boilers is then fed into steam turbines that drive power generators to produce power.

b). Power Generation from RDF

The Company's RDF-fired power plants generate power by burning RDF as a heat source to boil water to produce steam. The steam is then used to drive the steam turbine power generator. All of the Company's RDF-fired power plants also have the capacity to generate power by using waste heat as heat source. Details of the power generating process from RDF power plant are as follows:-

1. **Burning of RDF:** RDF is burned in the RDF boiler to boil water to produce steam.
2. **Power Generation:** The steam from the RDF boiler is then fed into steam turbines that drive power generators to produce power.
3. **Condensation of Steam into Water:** The condenser captures steam from the steam turbine and condenses the steam into water. Water derived from the condensation process is reused as feed water in the RDF boiler.
4. **Deaeration:** As dissolved oxygen in water can cause corrosion damage in metal equipment by forming rust, the Company has installed deaerators to remove oxygen from feed water before the water re-enters RDF boilers for steam production.

c). Production of RDF

The majority of RDF used in the Company's RDF-fired power plants is produced by processing MSW and unsorted landfill waste, and the remaining RDF is sourced directly from waste management companies in the form of pre-sorted landfill waste, which can be used directly as RDF with minimal processing. The Company sources pre-sorted landfill waste, unsorted landfill waste and MSW from an extensive network of suppliers.

The Company has developed a deep understanding of the characteristics of landfill waste and MSW in Thailand, which typically have high moisture content and low heat content. The Company has developed its proprietary technologies to process such waste into RDF.

The waste supplied to the RDF production plants is sorted into MSW and landfill waste. With respect to the MSW, the Company checks the waste quantity with weighing machines each time, collects samples for its component analysis to meet the qualifications and conditions of RDF production, and enters the RDF production process. With respect to the landfill waste, most of it is of a higher quality than MSW and therefore, are lightly processed in the RDF preparation facilities machines to enhance the quality of the RDF produced that will be used as fuel to generate electricity.

The Company's RDF production plants currently have the daily installed capacity to process up to 6,400 tons of MSW and produce up to 3,200 tons of RDF. During the course of waste processing, the waste undergoes a pre-shredding process to be reduced in size. The Company then uses a separator to collect light fraction waste such as plastic, which is more suitable for the production of RDF than heavy fraction waste. The light fraction waste undergoes dehydrating, as well as further processing and shredding, to achieve optimal size and heat content for RDF production. The RDF produced is then used as fuel to generate steam to drive power generators. The Company is in the process of expanding another RDF line to increase the RDF production capacity of 1,600 tons per day to support the increasing demand of RDF for electricity generation of power plants.

The Company has established RDF storage facilities which can store up to 100,000 tons of RDF. The RDF storage facilities can store sufficient RDF to sustain the Company's RDF-fired power plant operations for up to approximately one month.

d). Operation and Maintenance

The maintenance of power plants and RDF production plants is a critical aspect of the Company's business. In 2020, the Company has invested in maintenance projects and machinery improvement projects to reduce breakdown maintenance time and improve the efficiency of power production. As a result, the Company was able to increase the amount of electricity sold to EGAT under the power purchase agreement, compared to the year 2019.

Proper maintenance not only allows the Company to operate more efficiently and generate more power with higher efficiency but also protects the Company's facilities against the risk of major breakdowns and failures. The Company performs its own operations and routine maintenance and inspections.

Major overhauls usually take place at steam turbines and involve the shutdown of every boiler of a power plant. Major overhauls are carried out once every five years in accordance with the guidelines of equipment manufacturers and generally take 30 to 60 days. Between major overhauls, routine maintenance and inspections are scheduled once a year and generally take approximately 15 to 30 days. Routine maintenance and inspections can be carried out without shutting down the power plants. In addition, each boiler is subject to scheduled shutdown for 30 to 45 days per year for maintenance. In order to minimize disruption to the Company's power generation operations, to the extent that multiple boilers are installed on a power plant, the Company generally performs maintenance on the boilers in turn in order to ensure continuous operation of its power plants. The maintenance schedule of the Company's waste heat recovery power plants is also well integrated with that of TPIPL's cement production lines.

3. Supply of Raw Material

a). Waste Heat Supply

The Company purchases waste heat from TPIPL pursuant to the TPIPL Framework Agreement. The waste heat is applied to the clinker production process in the kiln, which the amount of the waste heat cannot be determined exactly depending on the operating conditions and the number of operating hours of the cement plant.

b). Waste Supply

The Company's RDF-fired power plants generate power by burning RDF which the Company produces from waste in its RDF production plants, in addition to partially using waste heat. The Company procures three primary types of waste, (i) pre-sorted landfill waste generally supplied by waste management companies; (ii) unsorted landfill waste supplied by waste management companies; and (iii) MSW transported to the Company by municipal governments and waste management companies authorized by municipal governments to dispose of MSW. Pre-sorted landfill waste is waste from landfills that has been processed by waste management companies to remove items with low combustion value, such as sand, stone and metal. Substantially all pre-sorted landfill waste can be used for burning in RDF boilers as RDF with minimal processing. Unsorted landfill waste is waste from landfills that has not been processed. Unsorted landfill waste requires processing by the Company before it can be used for burning in RDF boilers as RDF.

c). Coal Supply

There is currently no need for a substantial amount of coal as the coal-fired power plant, Coal-PP-150MW, is still under construction. Nevertheless, under the TPIPL Framework Agreement, TPIPL supplies coal to the Company as part of the initial stages and in preparation for the commercial operation of Coal-PP-150MW. Furthermore, considering that TPIPL procures a substantial amount of coal for its cement manufacturing business, TPIPL has more bargaining power in negotiating coal purchases. Thus, the Company purchases coal from TPIPL.

According to the TPIPL Framework Agreement, the Company is not prohibited from procuring coal from other suppliers. With the commencement of the commercial operations of the Coal-PP-150MW, the Company will have more demand for coal supply and will be in a better position to negotiate coal supply arrangements independently. At such time, the Company can deal directly with the coal suppliers. The Company plans to obtain coal from various sources and suppliers and to enter into various procurement arrangements in view of fluctuations in the price and supply of coal.

4). Sales and Marketing

The Company's off-takers are EGAT and TPIPL, which are a parent company and a listed company in the Stock Exchange of Thailand.

2.2 Petrol and Gas (NGV) Stations Business

The Company also operates petrol and gas stations and derives revenue from the sale of goods from these stations. Currently, the Company had eight petrol stations, one gas station and three petrol and gas stations under the "TPIPP" brand. The Company's petrol stations are located in Bangkok and other provinces in Thailand and primarily sell petrol, gas and other products to retail customers.

The Company was granted the license to use the TPIPL trademark in accordance with the "TPIPL Trademark Agreement" entered into on March 7, 2016 (which was approved by the Department of Intellectual Property of Thailand on April 4, 2018) in connection with the Company's sales of certain petrol and gas products.

The Company procures petrol for its petrol stations from oil companies such as Bangchak Petroleum Public Company Limited, Esso (Thailand) Public Company Limited, IRPC Public Company Limited and Shell Oil Company Limited at market price on a spot basis.

The Company procures gas for its gas stations from PTT Public Company Limited ("PTT") under long-term gas sale and purchase agreements.

For an overview of the natural gas (NGV) industry in the year 2020, natural gas consumption fell since the first months of 2020 and dropped by 25% in 2020 compared with 2019 mainly due to the Covid-19 pandemic. As a consequence of the Covid-19 crisis, economic activities, mobility and trade across the country have been slowed, which directly affect oil and gas station business as well as car sales. However, in 2020, the Company's oil and NGV sales slightly decreased compared to the sale numbers in the year 2020 as a result of the pandemic. If the overall economy recovers in 2021, it will reduce the negative impacts on the Company's oil and NGV business accordingly. The Company also maintains a promotion campaign so customers can use a discount coupon to purchase the Group's products in the Company's shops. This helps to consistently promote and advertise the Group's products.

3. Board of Investment Privileges

The Company has been granted promotional privileges under the Investment Promotional Act, B.E. 2520 (as amended) by the Thai Board of Investment ("BOI").

Subject to the conditions prescribed in the promotional certificates, the principal BOI privileges for the Company's power plants, RDF production plants and gas station include the following:

- permission to own land in order to carry on the promoted activities as the BOI deems appropriate;
- exemptions from import duties on machinery as approved by the BOI;
- an exemption from corporate income tax on net profits derived from the promoted business for a period of eight years commencing from the first date on which the promoted business earned operating income;
- a reduction in the normal rate of corporate income tax on net profit by 50.0% for a period of five years after the expiry date of the corporate income tax exemption period; and
- exemptions from withholding tax on dividends paid from the profit of the promoted business for a period of eight years.

As of 31 December 2020, the following table sets forth a summary of the board of investment privileges of the Company's power plants, RDF production plants and gas station as follows:

Plant / Gas Station	Month on which Income was First Derived from Promoted Activity	Expiration of Full Income Tax Exemption	Expiration of 50% Income Tax Reduction
WHPP-40MW	June 2009	Card expired	N/A(1)
RDFPP-20MW	June 2009	Card expired	N/A(1)
RDFPP-60MW	September 2015	September 2023	September 2028
WHPP-30MW	January 2016	January 2024	N/A(1)
RDFPP-70 MW	May 2018	May 2026	N/A(1)
Coal-PP-150MW	January 2019	January 2027	N/A(1)
RDF production plants	July 2011	Card expired	June 2024
Gas Station	July 2009	Card expired	July 2022

Notes:(1) The 50% income tax reduction does not apply after the expiry date of the full corporate income tax exemption period.

4. Environmental, Health and Safety Matters

The Company is subject to the Enhancement and Conservation of National Environment Quality Act B.E. 2535 (1992), and the Office of Natural Resources and Environmental Policy and Planning has approved environmental impact assessments for each of the Company's operating facilities. The Company is liable for breaches of environmental laws and would be responsible for making any improvements and/or modifications to its facilities which may be required to continue to comply with environmental laws. Currently, each of the Company's plants is in compliance, in all material respects, with existing environmental regulations and standards applicable to them. The Company also believes that its operations are fully in compliance with World Bank guidelines set forth for power generation. The Company has not been party to any litigation, arbitration, suit, or proceeding in relation to environmental matters or compliance with any environmental regulation.

The Company is determined to follow a "zero waste" plan and works continuously to supervise, control, and improve its processes in order to ensure that regulated emissions from its operations are within and below stipulated maximum levels. The Company uses continuous emission monitoring systems to monitor emissions from the combustion processes of its plants. The Company also monitors ambient air quality at several locations within the vicinity of its plants. For each combustion process, the Company monitors and controls oxides of nitrogen ("NOx") and sulfur dioxide ("SO_2"). The temperature and the fuel/air ratio are controlled during the combustion process in order to maintain emissions within applicable limits. The Company periodically monitors the quality of effluent discharge and compares it to the environmental impact assessment mitigation and monitoring programs to ensure that it complies with regulatory standards. For its emissions and discharge, the Company is well within regulatory requirements.

The following table sets forth the Company's policy for the emission of SO_2 and NOx, as compared to World Bank guidelines and Thai regulatory requirements:

	SO_2	NO_x
	(mg/Nm³)	
The Company	30	120
World Bank guidelines	230	510
Thai regulatory requirements	320	350

The Company has implemented policies, procedures and control mechanisms in order to reduce the risk of chemical leakages and employee exposure to hazardous chemicals. The Company carefully selects chemicals for its processes and seeks to rely only on chemicals that have a minimal adverse impact on the environment and on employee health.

The Company has put in place an environmental, health, and safety training program to heighten employee awareness of environmental, health, and safety issues. The Company also has a chemical leakage contingency plan in place and provides training for employees, including emergency drills in relation to this plan. The Company prepares, on a regular basis, reports for government agencies on the disposal of the Company's hazardous and non-hazardous waste. The Company also has in place a classification and storage program for waste products. The Company has contracts with noise control specialists who periodically monitor noise levels to ensure compliance with government regulations.

5. Industry Overview

Status of Power Purchase Agreement of Waste Electricity Generating Project as of December 2020

Status	SPP			VSPP			Total		
	Project	Installed Capacity (MW)	Contracted Capacity (MW)	Project	Installed Capacity (MW)	Contracted Capacity (MW)	Project	Installed Capacity (MW)	Contracted Capacity (MW)
The proposal has been submitted for approval	0	0	0	0	0	0	0	0	0
The approval has been accepted, but PPA has not been signed	0	0	0	0	0	0	0	0	0
PPA has been signed, but COD have not been started	**0**	**0**	**0**	**5**	**38.95**	**33.498**	**5**	**38.95**	**33.498**
Started COD	**3**	**180**	**163**	**39**	**188.141**	**166.44**	**42**	**368.14**	**329.44**
The approval has been cancelled	0	0	0	6	3.034	2.93	6	3.034	2.93
The proposal has been cancelled	0	0	0	39	230.907	202.4	39	230.91	202.4
The contract has been cancelled	0	0	0	33	167.363	142.832	33	167.36	142.832
In a legal proceeding	0	0	0	0	0	0	0	0	0
In an appeal proceeding	0	0	0	0	0	0	0	0	0
Total	**3**	**180**	**163**	**122**	**628.4**	**548.1**	**125**	**808.4**	**711.1**

Under Thailand Power Development Plan 2015 (PDP2015), the government announced to purchase 500 megawatts of power generated by waste-to-energy projects and the total of 628.4 megawatts has been submitted for a proposal. Approved projects have a total capacity of 362.938 megawatts, or 72.59 percent of the target, which consisted of 329.44 megawatts from the operating projects and 33.498 megawatts from the constructing projects, as of December 2020.

The Data of Waste-To-Energy plant operators who began commercial operations (As of December 2020)

Company/Individual	Installed Capacity (MW)	Contracted Capacity (MW)	Scheduled Commercial Operation Date (SCOD)	Commercial Operation Date (COD)
TPI Polene Power Company Limited (Project 1) Kaeng Khoi District, Saraburi Province	60	55	01/07/2015	06/08/2015
TPI Polene Power Company Limited (Project 2) Kaeng Khoi District, Saraburi Province	100	90	02/10/2017	05/04/2018
TPI Polene Power Company Limited (Project 3) Kaeng Khoi District, Saraburi Province	20	18	01/12/2014	16/01/2015
C&G Environmental Protection (Thailand) Company Limited Nongkhaem District, Bangkok	9.8	9.8	30/06/2015	15/03/2016
Bangpoo Environmental Complex Company Limited Samut Prakan City Samut Prakan Province	1.6	0.8	31/12/2012	01/12/2012
Bangkok Thanakom Company Limited Prawet District, Bangkok	3	3	31/12/2021	31/03/2020
Boon Energy Company Limited Sai Noi District, Nonthaburi Province	6.24	5	31/12/2021	16/04/2020
Ratchaburi-EEP Renewable Energy Company Limited (Eastern Energy Plus Company Limited) Samut Prakan City Samut Prakan Province	9.9	8	31/12/2016	30/06/2017
Charoen Sompong Company Limited Bang Phli District, Samut Prakan Province	1.04	1		30/08/2007
Waste gas power generation project under the royal initiative Kamphaeng Saen District, Nakhon Pathom Province	0.23	0.21		09/01/2
Nakhon Ratchasima Municipality Mueang Nakhon Ratchasima District, Nakhon Ratchasima Province	0.8	0.3	15/08/2013	15/07/2013
Crane Renewable Energy Company Limited Kamphaeng Saen District, Nakhon Pathom Province	8.536	8	30/09/2017	01/08/2017
Mae Sot Power Plant Company Limited Phop Phra District, Tak Province	0.9	0.9	31/05/2016	09/05/2017
Green Power Energy Company Limited Mueang Sa Kaeo District, Sakaeo Province	9.9	9	30/06/2018	14/06/2018
Koh Kaew Green Energy Company Limited Sub-district, Sak Lek District, Phichit Province	0.24	0.2	31/01/2012	01/08/2012
Gidec Company Limited Hat Yai District, Songkhla Province	7	6.5	27/12/2013	11/12/2014
Genius Energy Company Limited Mae Sot District, Tak Province	0.4	0.35	01/09/2016	06/01/2016
Charoen Sompong Company Limited Phanom Sarakham District, Chachoengsao Province	2.5	2.4	30/12/2009	06/05/2010
Chonburi Clean Energy Company Limited Sriracha District, Chonburi Province	8.63	6.9	31/12/2019	07/11/2019
Zenith Green Energy Company Limited Kamphaeng Saen District, Nakhon Pathom Province	8.515	8	01/12/2009	01/05/2010
Super Earth Energy 6 Company Limited Wachirabarami District, Phichit Province	9.8	9	08/12/2019	30/04/2020
Tha Xieng Thong Company Limited Hot District, Chiang Mai Province	1.051	1		04/05/2010
Bangkok Green Power Company Limited Kamphaeng Saen District, Nakhon Pathom Province	8.504	8	01/12/2009	03/06/2010
Progress Interchem (Thailand) Company Limited Photharam District, Ratchaburi Province	4.8	4	31/12/2019	27/12/2019
Self Sufficiency Energy Company Limited Mueang Samut Sakhon District, Samut Sakhon Province	0.2	0.2		16/07/2009
PJT Technology Company Limited Mueang Phuket District, Phuket Province	7	6.5	31/12/2012	19/07/2012
PJT Technology (kiln 1) Company Limited Mueang Phuket District, Phuket Province	7	6.5	31/12/2012	11/07/2012
Rak Ban Rao Company Limited Khlong Luang District, Pathum Thani Province	6.12	6	31/12/2552	15/12/2552
Recovery House Company Limited Nakhon Luang District, Phra Nakhon Si Ayutthaya Province	7	5.5	31/12/2019	24/09/2019
Ban Tan Power Plant Company Limited Hot District, Chiang Mai Province	1.051	1	01/09/2012	10/08/2012
Thungsong Renewable Energy Power Plant Company Limited Thung Song District, Nakhon Si Thammarat Province	0.32	0.3		09/04/2010
West 4 Power Company Limited Kamphaeng Saen District, Nakhon Pathom Province	8.504	8	05/02/2018	01/09/2017
Sbang Sustainable Phichit Company Limited Wachirabarami District, Phichit Province	2	1.88	04/12/2020	30/10/2020
Si Mum Power Company Limited Kamphaeng Saen District, Nakhon Pathom Province	4.252	4	05/02/2017	05/10/2016
Ayutthaya Clean Energy Company Limited Maharat District, Phra Nakhon Si Ayutthaya Province	3	2.8	15/08/2017	30/11/2017
Alliance Clean Power Company Limited Mueang Khon Kaen District, Khon Kaen Province	6	4.5	26/12/2016	29/11/2016
Intarachan Clean Energy Company Limited Mueang Kamphaeng Phet District, Kamphaeng Phet Province	0.24	0.2	30/04/2014	10/07/2014
AVA Grand Energy Company Limited Wachirabarami District, Phichit Province	4	3	31/12/2019	25/12/2019
SCG Paper Energy Company Limited Ban Pong District, Ratchaburi Province	9.9	8	22/03/2018	19/10/2018
Earth Tech Environment Company Limited Kaeng Khoi District, Saraburi Province	9.4	8	30/06/2017	09/03/2017
SCG Cement Company Limited Mueang Rayong District, Rayong Province	8	7	31/12/2019	24/12/2019
Wanon Niwat Agricultural Cooperative Wanon Niwat District, Sakon Nakhon Province	0.768	0.7	30/09/2014	30/09/2015
Total	**368.1**	**329.4**		

As in the above table, the total contracted capacity of the operating waste-to-energy plant operators is 329.4 megawatts. Among the operators, the contracted capacity of the Company is counted as 163 megawatts, or 49.5% of the total contracted capacity and the Company is the only waste-to-energy plant operator to have signed Small Power Producer (SPP) contracts.

The Data of Waste-To-Energy plant operators who signed PPA but have not commenced commercial operations (As of December 2020)

Company/Individual	Installed Capacity (MW)	Contracted Capacity (MW)	Approval Date	PPA signing Date	Scheduled Commercial Operation Date (SCOD)
Siam Power Company Limited Sai Noi District, Nonthaburi Province	9.5	8	19/03/2019		30/11/2020
Super Energy Group Company Limited Ban Lat District, Phetchaburi Province	9.65	8	N/A	23/01/2017	23/12/2020
WPGE Phetchaburi Company Limited Tha Yang District, Phetchaburi Province	7	5.998	N/A	06/07/2015	10/11/2020
True Energy Company Limited Nong Bua District, Nakhon Sawan Province	9.8	9	N/A	24/09/2014	24/05/2021
PG & C 5714 Company Limited Nakhon Luang District, 39 Phra Nakhon Si Ayutthaya Province	3	2.5	N/A	24/02/2017	31/10/2020
Total	**39**	**33.5**			

Source: Energy Regulatory Commission (ERC)

The Thailand Power Development Plan 2018 - 2037 Revision 1 (PDP 2018 Revision 1)

The Thailand Power Development Plan 2018 - 2037 Revision 1 (PDP 2018 Rev. 1) is a power system development framework to cope with the increasing power demand to correspond to national economic and social development. The PDP was endorsed by the National Energy Policy Council (NEPC) on January 24, 2019 and acknowledged by the Cabinet on April 30, 2019. The PDP is written from the consideration of power system reliability of subsystem areas in terms of generation, transmission and distribution. The PDP also includes the establishment of power plants to enhance system security in response to the energy demand, which is consistent with the rate of economic growth, the future changes in power generation technology, government policies, and the National Strategy (2018-2037). Furthermore, the PDP takes into account the cost effectiveness of the power system and the promotion of economic competitiveness for maximum efficiency and stability.

Main energy policies from the PDP are summarized as follows: (1) promoting the renewable energy from agricultural waste to improve agricultural industries, (2) developing infrastructures and strengthening energy system security in order to become more self-reliant by lessening dependence on fossil fuels, supporting community self-management energy systems, and setting up appropriate energy market structures to reflect the true cost of production, (3) enhancing technologies and power grids to serve increasing demand and stabilize the energy system.

Thailand energy development strategies and guidelines on the PDP focus on sustainable, affordable and *Energy for All* by promoting renewable electricity for self-consumption to communities. As a result, people will have wide access to electrical energy and at reasonable prices.

The Thailand Power Development Plan 2018 - 2037 (PDP2018) aims for three important goals as follows:

1. Energy Security: strengthening energy systems and coping with the increasing power demand to correspond to the National Economic and Social Development Plan, including establishing power plants to enhance system security with the appropriate levels of support to protect the system in the event of an energy crisis;
2. Economy: maintaining an appropriate cost of power generation and promoting the reduction of the cost to reduce the burden on energy consumers for long-term economic and social development, including preparing the appropriate energy system to increase the competitiveness of the industry and to reflect the actual cost of production;
3. Ecology: reducing environmental and social impacts by supporting renewable energy production and increasing the efficiency of energy systems in terms of both power generation and market potential by developing smart grid systems.

The PDP2018 was formulated in line with social and economic development directions addressed by the office of National Economic and Social Development Board (NESDB). The average growth of projected long-term Thai Gross Domestic Products (GDP) estimated by the NESDB was 3.8 percent.

Key Assumptions and Frameworks of the National Power Development Plan (PDP), 2018-2037

Key Assumptions and Frameworks consist of four main elements as follows:

1. Government-promoted power plant: There are two types of government-promoted power plants: community-based power plants designed to help stimulate the grassroots economy; and renewable power plants such as waste to energy plants and biomass power plants in the three Southern border provinces.
2. Fossil fuel main plants: A main source of energy is supplied by fossil fuel power plants such as EGAT Power Plants, IPPs and power purchases from neighboring countries with contracted capacities and scheduled CODs in accordance with PDP2018. In order to maintain system security, the electricity system as a whole is divided into 7 regions: North, Northeast, East, West, Central, South and Capital. Each region requires a sufficient level of energy supply to maintain the stability of the power system in its own region. EGAT still serves as the System Operator for the National Control Center.
3. Renewable power plants under the Alternative Energy Development Plan: Renewable power plants generate electricity from renewable resources such as biomass, biogas, solar, Hydro-Floating Solar Hybrid System, EGAT's Small Hydropower Plant and others. According to the Alternative Energy Development Plan, the annual purchase target shall be reconsidered annually and electricity will be purchased at the price which shall not exceed the price of the Grid Party.
4. Energy conservation policies under the Energy Efficiency Plan: The policy is to control the quality of supplied energy at a competitive price which shall not exceed the price of the Grid Party.

Thailand Power Development Plant 2018-2037 (PDP2018 Revision 1) for the power system security are shown as below:

- Power Generating capacity during 2018-2037

- Existing capacity as of December 2017	46,090	MW
- New capacity during 2018-2037	56,431	MW*
- Retired capacity during 2018-2037	(25,310)	MW
Total capacity in 2037	77,211	MW

- *New capacity added during 2018 to 2037 of 56,431 MW can be classified as follows:

- Renewable power plant	18,833	MW
- Community-based power plant	1,933	MW
- Pump-storage hydropower plant	500	MW
- Cogeneration power plant	2,112	MW
- Combined cycle power plant	15,096	MW
- Coal/Lignite power plant	1,200	MW
- Power purchase from neighboring countries	5,857	MW
- Power Plant Replacement Project	6,900	MW
- Energy conservation policy	4,000	MW
Total	**56,431**	**MW**

- New capacity added during 2018 to 2025

New capacity added from 2018 to 2025 is from committed or PPA-signed projects, pilot projects for electric power management, and government-promoted projects including main plant projects and new renewable power projects with a total capacity of 20,343 MW. The details of the projects are summarized as follows:

- Renewable power plant	3,185	MW
- Community-based power plant	1,933	MW
- Pump-storage hydropower plant	500	MW
- Cogeneration power plant	2,112	MW
- Combined cycle power plant	9,656	MW
- Coal/Lignite power plant	600	MW
- Power purchase from neighboring countries	2,357	MW
Total	**20,343**	**MW**

- New capacity added from 2018 to 2037

The details of the total 36,088 MW of future power projects, such as domestic power projects and neighboring country power purchases projects which were planned to cope with an increase in power demand and to replace the retired capacities, are summarized as follows:

- Renewable power plant	15,648	MW
- Combined cycle power plant	5,440	MW
- Coal/Lignite power plant	600	MW
- Power purchase from neighboring countries	3,500	MW
- Power Plant Replacement Project	6,900	MW
- Energy conservation measures	4,000	MW
Total	**36,088**	**MW**

- The details of government-promoted power projects are summarized as follows:

- Waste-to-energy plant	400	MW
- Pracharath biomass power plant	120	MW
- Community-based power plant (Biomass)	600	MW
- Community-based power plant (Biogas-Energy Crop)	600	MW
- Community-based power plant (Biogas-Wastewater)	183	MW
- Community-based power plant (Solar Hybrid)	550	MW
Total	2,453	MW

- The details of Renewable power plants under the Alternative Energy Development Plan are summarized as follows:

- Biomass power plant	2,780	MW
- Biogas power plant	400	MW
- Solar plant	2,725	MW
- Wind power plant	1,485	MW
- Industrial waste to energy plant	44	MW
- EGAT's small hydropower plant	69	MW
Total	16,243	MW

Source: Thailand Power Development Plan 2018 Revision 1(2018-2037A.D.)

6. Competitive Strengths

The Company believes that it possesses the following competitive strengths which differentiate it from its competitors in the waste-to-energy industry in Thailand.

6.1 Largest waste-to-energy power plant operator in Thailand, with a proven track record of in-house project development

The Company is the largest waste-to-energy power plant operator in Thailand in terms of installed power generation capacity according to AWR Lloyd (published in 2017). The Company is also one of the first companies in Thailand to have commenced waste-to-energy power generation operations, according to AWR Lloyd. As such, the Company has the advantage of being a first-mover with its know-how that enables it to efficiently address challenges in the waste-to-energy industry in Thailand.

The Company believes that its proven project execution capabilities and contracted sales arrangement in the waste-to-energy industry position it as the leading waste-to-energy power plant operator in Thailand. With its market-leading position and strong operational track record, the Company has received several awards from established institutions both domestically and internationally, including the High Quality Clean Development Mechanism (**"CDM"**) Projects "Crown Standard," the Thai Energy Awards 2014 2015 2017 2018 and 2019, and International Standards under ISO9001:2015, ISO14001:2015 and ISO50001:2011. The Company believes that it is able to compete effectively with other waste-to-energy power producers in securing additional power purchase agreements with EGAT and expand its business.

6.2 Established track record and expertise in waste management and proprietary technologies well adapted to waste-to-energy operations in Thailand

The Company has an established track record and expertise in waste management and possesses proprietary technologies that are well adapted to waste-to-energy operations in Thailand. The Company has developed a deep understanding of the characteristics of landfill waste and MSW in Thailand, which typically have high moisture content and low heat content. The Company has developed its proprietary technologies to process such waste into RDF.

The Company's RDF production plants currently have daily installed capacity to process up to 6,400 tons of MSW and produce up to 3,200 tons of RDF. In 2020, the Company added more RPF production machines with the daily installed capacity of 1,200-1,300 tons of RDF for supplying RDF to cement plants.

The Company believes that such technological know-how constitutes one of its key competitive strengths and allows it to maintain its competitive advantage. The Company competes with other waste-to-energy power producers to enter into power purchase agreements with EGAT. The Company competes with other power producers in terms of, among others, technological capabilities. In this regard, the Company believes that its track record and expertise in waste management, as well as its proprietary technologies in waste-to-energy operations, represent one of its key competitive advantages over its competitors.

6.3 Strong relationships with key players in the waste-to-energy industry value chain

The Company has established strong relationships with key players in the waste-to-energy industry value chain. In terms of waste supply, the Company competes with its competitors primarily in terms of waste procurement. The Company has developed an extensive network of suppliers from which it sources pre-sorted landfill waste, unsorted landfill waste and MSW for further processing into RDF to be used as fuel in power generation. In addition, the Company has also maintained a good relationship with EGAT including providing cooperation, consultation, promotion and development of electricity production technology for community waste disposal in the country as well.

6.4 Supportive government policies in the renewable power generation industry in Thailand

The Company believes that its RDF-fired power plant operations are well positioned to benefit from the trend towards renewable energy, and particularly, the Thai government's policy of promoting power generation from renewable fuel sources.

Consistent with the Power Development Plan 2015 and the Alternative Energy Development Plan 2015, the Thai government promotes power generation from renewable energy sources by providing incentives to power producers. ERC and EGAT announced the payment of an adder provided to power producers in addition to energy payment for power generation from biomass, biogas, waste, wind, and solar. The adder provided to SPPs who generate electricity from waste by a thermal process shall be at a rate of BHT3.5 per kWh for a period of seven years from the commercial operation date of the relevant power plant.

The Company has benefited from these policies. In selling power to EGAT, all of the Company's RDF-fired power plants in operation are entitled to an adder of BHT3.5 per kWh, which is payable in addition to the base price of power under the power purchase agreements. The Company believes that the strong government support provides it with significant opportunities to expand its business operations.

The government is in the process of formulating future policies in relation to its support of the development of the renewable energy industry such as solar and wind energy, by wanting to buy electricity at a cheaper price in order to reduce the price subsidy for purchasing electricity. However, regarding waste-to-energy power plants, the government's policy still gives priority to the establishment of waste-to-energy power plants, which was driven by the Ministry of Interior supporting various provinces with the potential to accelerate the procurement of the private sector to invest and carry out the project in the form of Build-Operate-Transfer (BOT). In this BOT framework, the investor will receive the revenue using the FIT (Feed-in Tariff) scheme and also receive income from the additional tipping fee where the price will depend on the reference price and the price bidding. It is believed that domestic waste-to-energy power plant projects have the potential to grow at least 400 MW according to the PDP 2018 draft (excluding the projects that have signed PPAs; or the projects that are in the process of requesting PPA according to the original PDP2015; but these projects are unable to sell power to the system and have a tendency to be canceled in order to find new investors)[DO6]. In 2019, there were government projects that were in the process of starting operations, namely, the On Nut waste-to-energy power plant, and the Nong Khaem waste-to-energy power plant. Other power plants that are in the process of starting operations and are expected to be able to start bidding in 2020, are in Nakhon Ratchasima and Songkhla province, etc.

6.5 Future growth driven by strong growth pipeline of power generation projects and projected GDP growth and growth in power demand in Thailand

The Company has a number of power generation projects, including RDF-fired power plants, coal-fired power plants, waste heat recovery power plants, and coal and RDF- fired power plants.

The favorable macroeconomic conditions in Thailand also allow the Company to grow its operations. According to AWR Lloyd, power demand in Thailand is estimated to grow at an average of 2.7% annually between 2014 and 2036, underpinned by an average population growth of 0.03% and an expected real GDP growth of 3.5% for 2017. The Company believes that it can take advantage of the strong economic growth outlook in Thailand and the resulting growth in energy demand to develop its business sustainably.

6.6 Strong support from TPIPL

The Company enjoys strong and continuing support from its major shareholder, TPIPL.

The Company believes that the strong relationship between the Company and TPIPL in all respects under a special reciprocal business operations agreement will further strengthen the business of both to grow continuously and create sustainability within the group.

6.7 Experienced and forward-looking management team and dedicated operations and technical staff

The Company's management team has extensive experience in the power industry and a proven track record of successfully developing, operating, and expanding power plants. According to AWR Lloyd, waste management practices in Thailand are relatively underdeveloped, compared to other developed countries. The Company's management team believes waste management issues in Thailand present an opportunity for the Company to enter into the waste-to-energy industry.

7. Business Strategies

The Company seeks to consolidate its leading position in the waste-to-energy industry in Thailand and has adopted the following strategies to attain this goal:

7.1 To achieve and maintain optimal efficiency in power plant operations through ongoing research and development initiatives

The Company seeks to enhance its competitiveness by achieving and maintaining optimal efficiency in its power plant operations. The Company is continuously exploring the development of new technologies and processes to optimize its operational efficiency. The Company believes that such technological know-how constitutes one of its key competitive strengths, and to maintain its competitive advantage, it places emphasis on the continuous improvement and innovation of its technological know-how.

7.2 To continue to be a socially responsible and environmentally friendly enterprise by reducing green-house gas emissions and minimizing residual waste from operations

The Company is a socially responsible enterprise dedicated to the environmentally-friendly treatment of solid waste and promoting environmental awareness. The Company believes that using waste as a fuel source for power generation represents an effective waste treatment method for reducing the toxicity and volume of waste and transforming it into a useful resource. The Company prioritizes the control of environmental emissions from its power plants, and its operations strive for strict compliance with all applicable environmental regulations.

The company's "zero waste" plan aims to fully utilize all the resources used in the production process, thereby increasing the company's operational efficiency while reducing any potential environmental impact.

The Company has been recognized for its efforts in promoting environmentally-friendly production and energy efficiency and strives to continue to be a socially responsible and environmentally friendly enterprise.

7.3 To maximize shareholder value through prudent capital management and business expansion

The Company seeks to continue its prudent capital management by optimizing its debt level and to strengthen its financial position by increasing revenue through its solid pipeline of power generation projects.

The Company is also actively expanding its power generation operations. In addition, the Company plans to diversify its fuel source, including coal, to expand its power generation capacity.

7.4 To maintain fair and sustainable relationships with stakeholders in the waste-to-energy value chain

The Company strives to maintain fair and sustainable relationships with all stakeholders in the waste-to-energy value chain in Thailand. The Company has entered into some MSW deposit agreements with local governments in Saraburi province as part of its corporate social responsibility initiatives. Under such an agreement, the Company agrees to pay the waste management companies a transportation fee, provided that the Company is satisfied with the quality of the MSW. The Company believes that such waste procurement arrangements are fair and sustainable and allows it to maintain long-term relationships with waste suppliers.

Furthermore, the Company seeks to build positive relationships with the community by adhering to good corporate governance practices. In this regard, the Company has published conflicts of interest policies as guidelines for employees to interact properly with related parties with conflicts of interest.

The Company also strives to create a sustainable relationship with its employees by providing comprehensive training and following a policy of fair treatment and rewards.

Risk Factors

1. Uncertainties and adverse changes in the Thai government's initiatives, incentives and policies that affect the waste-to-energy industry may unfavorably affect the Company's business and results of operations.

In selling power to EGAT, all of the Company's RDF-fired power plants in operation are entitled to an adder of BHT3.5 per kWh, which is payable in addition to the base price of power under the power purchase agreements. Consistent with the current policies of the Thai government, the adder is available to each of the Company's RDF-fired power plants for a period of seven years from the commencement date of commercial operations of the respective power plants.

Presently, the Thai government is in the process of formulating future policies in relation to its support of the development of the renewable energy industry by replacing the adder rate payment structure with a feed-in tariff scheme or a fixed amount per KwH which is paid during the life of the PPA or a fixed amount per KwH which is paid during the life of the PPA plus tipping fee.

In the past, operators who had power purchase agreements with adder with the authorities that were about to expire have submitted to the Ministry of Energy the application for permission to renew the contract with an adder as before. However, the Ministry of Energy has no policy to renew contracts with an adder. As a result, the company will not have revenue from an adder.

In the event that the power purchase agreement with an adder is about to expire after the end of the seventh year of the power purchase agreement, the company has considered the guidelines by reducing the production cost of RDF and may consider collecting waste disposal (tipping fee) as income for compensation of the adder that is not received from the electricity charge.

2. Full energy payment and adder rates from EGAT depend on the Company meeting the requirements specified in the power purchase agreements.

Under the power purchase agreements with EGAT for the Company's RDF-fired power plants, the Company must satisfy certain requirements with respect to the fuel source. The Company is required to use waste as the primary fuel. The power purchase agreements with EGAT also allow the Company to use other types of fuel as co-fuel, including waste heat emitted from TPIPL's cement production process, but the Company may not use coal as co-fuel. The use of such other types of fuel must not exceed 25.0% of the total amount of thermal energy used in power generation in any contract year.

The Company has placed an emphasis on the above issue as a top priority, in compliance with regulations imposed for the use of fuel sources and has always received the full energy payment and adder rates throughout the life of the PPA terms.

3. The Company has a small number of offtakers.

The Company substantially sells all of the power produced for EGAT and TPIPL. EGAT is the Company's largest and most important customer and the Company's power purchase agreements with EGAT are material to its business.

The power purchase agreements with EGAT are on a non-firm basis and as such, while EGAT is required to offtake power supplied to it, these plants are not obligated to supply a minimum amount of power to EGAT.

The Company's offtakes are primarily state enterprises and creditable private companies: EGAT is one of the [DO7]Company's offtakers, a state enterprise with a strong foundation, while TPIPL, which is an investment grade company.

4. The Company's competitors compete with the Company for waste supply and entry into power purchase agreements with EGAT, and the competition could intensify as waste processing technology matures and as new competitors enter the market.

There is intense competition in waste sourcing. In the event that the Company's competitors' waste processing technology enables them to process waste in a more cost-effective manner than the Company, they may be able to make waste-sourcing arrangements with local governments and waste companies on terms that are more attractive to these parties than the Company is able to offer. Such competition may intensify further as new domestic and international waste-to-energy power generation companies enter the market.

In addition, the Company competes with other power producers to enter into power purchase agreements with EGAT. Once a power producer has entered into a power purchase agreement with EGAT, it benefits from a stable stream of power sales income for a fixed number of years as specified in the agreement in exchange for supplying power to EGAT. As such, most competition in the waste-to-energy industry occurs during the contract bidding phase. The Company typically secures power purchase agreements through a public tender process with EGAT. The Company faces strong competition mainly from domestic waste-to-energy companies which compete in terms of technology, reliability and project execution capability, among others.

With a long-established proficiency to consistently pursue its waste-to-energy power plant operations and successfully generate operational profits, the Company remains a leading and a large RDF power plant operator in the country and continues to strengthen its competitive advantages over its competitors. With the readiness of its capital investment, together with its long experience to manage production plants and modern production technology as well as its creditability, TPI Polene Power has accomplished and successfully implemented sustainable power plant projects throughout the period.

5. The Company poses the risk of a decrease of power income due to a reduction of a fuel adjustment tariff (Ft)

The COVID-19 pandemic in 2020 that adversely affected the economy has resulted in lower demand for power in the country. The government wanted to stimulate the economy and help reduce the people's cost of living by reducing the fuel adjustment tariff (Ft). Throughout 2020, the EGAT's tariff rate under the Non-firm Power Purchase Agreement, decreased approximately Baht 0.0083 per unit while the PEA's tariff rate, which is the rate at which the company sells power to cement plants decreased by Baht 0.2021 per unit. Although the power sales volume and sales revenue in 2020 increased compared to 2019, the profit margin was lower due to the decrease in the tariff rate. In 2021, it is predicted that the Ft tariff will more likely decrease due to the domestic economy. The Ft tariff also depends on foreign exchange rates, inflation, and world fuel prices.

6. The Company's generation of power from RDF depends on a steady supply of waste with sufficient heat content

The Company relies on a steady supply of landfill waste and MSW for the generation of power from RDF.

The amount of power which the Company can generate from RDF depends on the heat content of RDF that the Company produces from waste. RDF with higher heat content produces more power.

The Company purchases MSW and landfilled waste to be processed at the Company's RDF plants with a daily processing capacity of up to 6,400 tons of MSW, representing up to 3,200 tons of daily production of qualified RDF. Presently, average heat content of RDF that the Company can generate power from has increased consistently. In this regard, the Company has arranged the waste sourcing by entering into waste deposit agreements with local governments and waste management companies, all of which supply ample landfill waste and MSW to the Company. In 2020, the Company invested in machinery to increase additional RDF's capacity of 1,200 - 1,500 tons per day to sell RDF to cement plants.

In addition, to diversify risk for the waste sourcing arrangement, the Company has made an investment to construct and install semi-mobile waste-sorting machines at the landfill sites in Samut Sakorn province, Ayuthaya province, Chonburi province, and Rayong province, to ensure sufficient supplies of raw material sources and to further reduce production costs. In addition, the Company purchases sorted landfill with heat content not lower than 2,500 Kcal from waste management companies.

The Company also has RDF storage facilities which can store up to 100,000 tons of RDF. The RDF storage facilities can store sufficient RDF to sustain the Company's RDF-fired power plant operations for up to approximately one month, which can mitigate risk associated from raw material procurement to some extent.

7. The Company's generation of power from waste heat depends on a steady supply of waste heat from TPIPL

The Company relies on a steady supply of waste heat for the generation of power from its waste heat recovery and RDF-fired power plants. The Company sources all its waste heat requirements from TPIPL by recovering hot exhaust gas emitted from TPIPL's cement production process. In the event of a disruption in TPIPL's cement production process, or a decrease or slowdown in TPIPL's cement production or gas recovery equipment breakdown, the Company may not have sufficient waste heat supply to generate power from its waste heat recovery power plants and RDF-fired power plants. In such an event, the Company's power production could be disrupted and its business, financial condition, and results of operations may be materially and adversely affected. In addition, technological changes in the cement production process reducing waste heat emission may render the Company's waste heat recovery power generation capacity inefficient and therefore, materially and adversely affecting the Company's business and prospects.

However, the Company has modern production technology for power generation that is separated entirely from the cement production process of TPIPL, its parent company. In this regard, the Company can manage whether to use RDF or waste heat or coal as fuel to generate power, aiming for the ultimate benefit of the Company. As for the electricity that the Company sells to the parent Company, the Company opts to use waste heat or RDF or coal at 100% as fuel to generate power whenever there is no waste heat emitted from cement production plants of the parent company. The Company can also choose to shut down its power plant for maintenance to be in line with planned shutdowns of the cement plants of the parent company.

8. A failure to secure commercially reasonable coal supply arrangements or any interruptions in coal supplies may adversely affect the Company's operations of its coal-fired power plants.

The Company completed the construction of a coal-fired power plant. The success of the Company's operations of these power plants depends on, among others, the ability to source a sufficient amount of coal at competitive prices. The Company has entered into the TPIPL Framework Agreement to purchase coal at a fixed price from TPIPL.

The Company group has long experience over 20 years in purchasing coal from various sources and has maintained a policy of purchasing coal in a large quantity, enabling us to gain more bargaining power to purchase qualified coal at relatively low costs with a low bituminous.

9. Investments in research and development may not necessarily lead to timely improvements in technology and the Company may be unable to keep pace with technological changes in the industry.

An important factor for the Company's success is the timely development of important new technologies to ensure that the Company's power plants, particularly its RDF-fired power plants, and RDF production can keep pace with technological developments. Each successive improvement in waste processing techniques generally involves an increase in complexity that may enhance the required level of investment and demand more development effort. In addition, the Company may devote research and development resources to technologies that turn out to be unsuccessful or do not yield the expected results in a timely manner.

The Company has long experience in managing RDF production plants to produce qualified RDF with high heat content for power generation. The Company maintained its position as the leading power plant operator in Thailand, with the largest waste-to-energy power plant operations in the country, so we are confident that the Company is able to adapt its production process to be in line with technology changes.

In addition, the Company Group develops staff at all levels to optimize teamwork, including production and maintenance staff. The Company schedules training programs to educate employees to be able to fully perform their own tasks as well as work in place of others.

10. The Company may be adversely affected if there is any significant downtime at any of the Company's plants.

Normal wear and tear of the power plants is a natural consequence of operations in the Company's industry and results from exposure to the elements and deterioration of equipment. The Company cannot ensure that repairs and maintenance activities will be conducted in a timely manner or at all, and any extensive downtime at any of the Company's plants could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company has developed and improved production efficiency as planned by investing in additional boilers as back-up boilers when the existing boilers undergo maintenance and in order to increase steam production capacity to greater than 150% for the turbine generators of all power plants. In addition, the Company prepares and reserves various machines and spare parts to be ready for emergency or unplanned shutdown of power plants, thus reducing impact from plant shutdown. The Company has a continuous plan for repair and maintenance of its power plants. This aims to enhance high utilization rate of all power plants and mitigate risk of downtime impact.

11. For the Company's projects under development, the estimated time frame and budget for the completion of critical tasks may be materially different from the actual completion date and costs, which may delay the date of commercial operations of the projects or result in cost overruns.

The Company's power plants involve commission risks, which may result in delays or performances that are below expected levels of output or efficiency. In addition, projects under construction may be affected by the timing of the issuance of permits and licenses by government agencies. Furthermore, adjustments to the scope of work may occur from time to time due to incidents of force majeure.

12. The Company may be unable to fully comply with the laws and regulations relating to regulatory approvals for business operations with relevant authorities, laws and regulations regarding health, hygiene, safety, and environmental and other laws and regulations as well as the conditions under relevant licenses.

Because of the nature of the Company's power plants and petrol and NGV gas operations, the Company is subject to the laws and regulations relating to regulatory approvals for business operations, construction of power plants, and installation of machinery with relevant authorities, laws and regulations regarding health, hygiene, safety, environment and other laws, and conditions under licenses required for business operations and regulations of Thailand. Such laws and regulations govern, among other matters, air emissions, wastewater discharges, solid and hazardous waste management, and the use, composition, handling, distribution, and transportation of hazardous materials.

The Company implemented Quality Standard System ISO9000 for all products of the Company, International Environmental Standard System ISO14000 as well as Energy Management Standard System ISO50001, certifying that it has conducted its business operations according to all the rules and regulations related to health and safety for production plants to be environmentally friendly, including an assessment of operations and risks to ensure that the Company's operations are in compliance with related governing laws.

13. Under the power purchase agreement that the Company sells to the Electricity Generating Authority of Thailand, the Company has received the power tariff comprising of an energy payment and an adder at the rate of Baht 3.50 per kWh, totaling approximately Baht 6.50 per kWh for a period of 7 years. After 7 years of each said power purchase agreement, the Company can continue to sell power to the Electricity Generating Authority at the specified basic power tariff. Due to the fact that the adder of two contracted power purchase agreements with a total power generation capacity of 73 MW (from 3 power purchase agreements, total 163 MW) will expire in 2022, and the adder of another power purchase agreement with a total of power generation capacity of 90 MW will expire in 2025, which will reduce the company's future performance and cash flow. This will result in the Company losing EBITDA revenue of approximately Baht 700 million in 2022 and Baht 2,000 million in 2023 onwards. However, the Company expects to have revenues from the expansion of power generation to sell power to the Electricity Generating Authority of Thailand, which will increase EBITDA in 2022 approximately Baht 900 million and Baht 2,200 million in 2023 onwards, excluding the additional revenue from the power plant in the futuristic advanced industrial city in Chana District, Songkhla Province.

Research and Development

The Company's has developed proprietary technologies to adapt its RDF-fired power generation operations to suit the type of waste in Thailand, which typically has high moisture content and low heat content. The Company believes that such technological know-how constitutes one of its key competitive strengths, and to maintain its competitive advantage, it places emphasis on the continuous improvement and innovation of its technological know-how. The Company's research and development efforts focus on improving and adapting its existing technologies as well as waste sorting and processing techniques so as to increase the operational efficiency of its plants and reduce the environmental impact from its operations. The Company's current research and development initiatives include:

- improvement and development of sorting machines to enhance the efficiency of RDF production from waste;
- design and development of materials for use in steam pipes in boilers;
- design and development of boiler cleaning systems;
- development of the generator's control system to reduce the emergency stop due to external power system's failure;
- research and development of the heavy ash produced from the combustion process of grate incinerator to be used as a substitute raw material in the production of cement;
- improvement in efficiency in converting organic matter into fuel;
- reduction of sulfur dioxide emission with the use of limestone sand in boilers;
- use of low nitrogen oxide burners;
- improvement of the RDF input system into the combustion system in the steam boiler to increase the efficiency of combustion and reduce the problem of air pollution from incomplete combustion;
- improvement of the efficiency of dust settling chambers so as to increase the useful life and efficiency of the steam pipes in the Company's waste heat power plants and reduce dust emissions to the outside;
- development of information systems for maintenance by using the Cloud system to store data.

By investing in the development of technologies and processes that increase its operational efficiency and reducing its environmental impact, the Company seeks to solidify its competitive position and maintain its technological advantages.

In addition, the Company has entered into a TPIPL Framework Agreement with TPIPL, whereby TPIPL shall, among others, provide research and development services to the Company. With a research and development team of more than 150 scientists, engineers and technicians, TPIPL has provided the Company with research and development support in the past and is expected to continue to do so in the future. TPIPL also regularly engages professors from local universities, including Chulalongkorn University, Suranaree University of Technology and Kasetsart University, to assist with its research and development initiatives.

Property Used In Business

1. Major Fixed Assets of the Company and its subsidiaries

As at 31 December 2020, the Company and its subsidiaries have property, plants, and equipment as follows:

Asset	Ownership style	Value at cost (Million Baht)	Net value (Million Baht)	Obligation
1. Plants	Owner	1,584.64	1,438.00	- none -
2. Land	Owner	9,545.23	9,545.23	- none -
3. Machinery	Owner	24,290.11	20,332.64	- none -
4. Tools and factory equipment	Owner	242.85	120.90	- none -
5. Furniture, fixtures and office equipment	Owner	53.10	25.63	- none -
6. Major spare parts	Owner	200.51	200.51	- none -
7. Assets under construction and installation	Owner	3,729.75	3,729.75	- none -
8. Vehicles	Owner	0.58	0.47	- none -
9. Decommissioning assets	Owner	239.42	212.49	- none -
	Total	39,886.20	35,605.61	

2. Intangible Asset

- None -

3. Investment Policy in Subsidiary and Associated Company

The Company has prepared investment policies for subsidiaries and associates by investing in subsidiaries and/or associates with an investment policy that is consistent with the vision and growth plans of the Company Group. This policy will make the company perform better, or more profitably, or invest in a synergy business for the company to increase the competitive advantage of the company and to enable the Company to achieve its goal of becoming a leading company in the core business of waste-to-energy power plants. The Company and subsidiaries and/or associates may consider investing in other businesses if the business has potential growth or is beneficial to the business of the Company Group, and which can generate a good return on investment. The investment of the company, subsidiary and/or associated company must be approved in the Board of Directors meeting or the shareholders' meeting of the company (depending on the case).

Future Projects

The Company focuses on the growth of the power plants, in which the Company has expertise in technology and personnel, by expanding the business in accordance with government policy, especially the waste management project to generate power. The project can be summarized as follows:

1. The Company has a policy to expand the additional production capacity of RDF with an investment of approximately Baht 400 million to support increased power generation from the existing power plants currently in operation. This involves adding another RDF production line (the 9th production line) from the beginning of 2020, with production starting from December 2020. The Company has also installed additional machinery at four current production lines (production lines 1, 2, 5 and 6) to increase RDF production capacity by approximately 600 tons per day. This initiative is expected to be completed in mid-2021.

2. The Company has expanded its production base to provide sorted waste to support power generation that requires additional raw materials.

3. The Company has installed three additional RDF production lines in RDF production plants (production line 10 -12) to supply RDF to the cement plant of TPI Polene Plc. so it can reduce coal consumption, with an investment of approximately Baht 1,000 million. The installation was started in 2019 and is expected to be completed in early 2021 to support the production of RDF for distribution to cement plants. It is expected that the demand for RDF in cement plants is approximately 1,200-1,500 tons per day and the Company's revenue will increase by approximately Baht 450 million per year.

4. The Company plans to participate in bidding for the power plant according to the Power Development Plan (PDP2018, revision1), which is scheduled to add an additional 400 MW in 2021.

In January 2021, the company was selected as the winning bidder to procure private sector investment in the construction and management of the waste disposal system of Songkhla Provincial Administrative Organization by operating the very small waste-to-energy power plant (VSPP) project of the Songkhla Provincial Administrative Organization. This power plant will have a capacity of 7.92 MW. The construction period is expected to be approximately two years and the power plant is expected to be able to sell power commercially by 2023.

In the same month, the Company submitted bidding for a waste disposal project and a VSPP waste-to-energy power plant project in Nakhon Ratchasima Municipality with an investment of approximately Baht 2,000 million. The bidding results are expected to be announced in March 2021.

5. The company aims to participate in the bidding of many government's municipal waste disposal projects and waste-to-energy power plants from 2021 to 2027. The company is considering the feasibility of acquiring other power plant operators which have a license or already have a PPA of waste-to-energy power plants.

In addition, according to the Cabinet's resolution, the Southern Coastal Area Development Project of the future advanced industrial model city project at Chana District, Songkhla Province, by the Southern Border Provinces Administration Center (SSA), will be developed for the stability and sustainability of the southern border provinces. The project will consist of an industrial park covering 16,753 rai, a deep water port project, a power plant project for security, and renewable energy power plants with a total capacity of 3,700 MW. The Company has volunteered to join and invest in the project in response to government policies that will bring good welfare, peace, and happiness to the people in the southern border provinces according to the development of the three economic zones, also called the Indonesia-Malaysia-Thailand-Growth Triangle (IMT-GT). The governments of the three countries in this region reached this agreement during the time of Prime Minister Chuan Leekpai.

Overall, the project area of approximately 16,753 rai will be categorized into the following six types of activities:

1. Agricultural and light industry, 4,253 rai
2. Heavy industry, 4,000 rai
3. Electric power industry, 4,000 rai
4. Deep seaport, 2,000 rai
5. Logistics center (Container Yard), 2,000 rai
6. Smart City, residential area of 500 rai

The area plan of the project is shown below

Securities and Shareholder Information

1. Registered Capital and Paid up Capital

As of 31 December 2020, the paid-up capital of the company was Baht 8,400 million, consisting of 8,400,000,000 ordinary shares, at the par value of Baht 1 each.

2. Restriction of transfer of shares

The shares of the Company can be transferred without limitation provided that ownership of the shares by non-Thai persons does not exceed 49% of the Company's registered and paid-up capital.

3. Shareholding Structure

Major Shareholders as at 30 December 2020 (at the last closing date):

Shareholders	Number of Shares	Shareholding (%)
1. TPI Polene Public Company Limited	5,899,999,300	70.24
2. Thai NVDR Company Limited	165,730,429	1.97
3. The Bank of New York Mellon	109,758,287	1.31
4. Mr. Paiwan Chartpitak	102,800,000	1.22
5. Leophairatana Enterprise Company Limited	78,060,394	0.93
6. South East Asia UK (Type C) Nominees Limited	68,079,964	0.81
7. Bangkok Life Assurance Public Company Limited	67,826,500	0.81
8. NORTRUST NOMINEES LIMITED-THE NORTHERN TRUST COMPANY RE IEDU UCITS CLIENTS	65,000,000	0.77
9. Mr. Prateep Tangmatitham	61,289,400	0.73
10. Mr. Yuk Lung Lee	50,000,000	0.60

4. Dividend Payment Policy

The Company's dividend payment policy is to distribute annual dividends to its shareholders at a rate of not less than 50.0% of the net profit as recorded in the Company's separate financial statements after deductions for income tax and legal reserves as required by law and its article of association. Notwithstanding the above, dividend payments are subject to the discretion of the Company's Board of Directors based on the Company's results of operations, cash flow, investment plans, future needs, and other factors as the Company's Board of Directors deems appropriate, and the dividend payment must be approved by the annual general meeting of shareholders.

In addition, the Board of Directors may, from time to time, pay the shareholders the interim dividends, provided that it is of the view that the Company has adequate profits to make such payment. After the interim dividends have been paid, such dividend payments shall be reported to the shareholders at the next shareholders' meeting.

Separate Financial Statement	2018	2019	2020
Net Profit per share (Baht)	0.440	0.548	0.536
Dividend per share (Baht)	0.40	0.40	0.27*
Par Value per Share (Baht)	1.00	1.00	1.00
Dividend Payout Ratio (%)	90.91	72.99	50.37

Note: * The dividend payment for the Company's 2020 performance was divided into an interim dividend payment for the first half of 2020 performance at the rate of Baht 0.12 per share, which was already paid to shareholders, and the payment for the performance for the second half of 2020 at Baht 0.15 per share, which was approved by the Board of Directors in the Company's Board of Directors' meeting no.2/2021 and is required to be approved in the 2021 Annual General Shareholder's Meeting.

Debentures, Debentures Registrar and Debenture Holders' Representatives

Offering for Sale of Debentures on 31 December 2020

Debenture Series	Name	Type	Amount (MB)	Interest Rate (p.a.)	Issued Date	Maturity Date	Term	Debenture Holders' Representative*	Debenture Registrar*
TPIPP21NA	Debentures of TPI Polene Power Public Company Limited No.1/2018 Series1 Due A.D.2021	Unsecured and Unsubordinated Debentures with a debenture holders' representative	4,000	3.90 %	28 Nov 2018	28 Nov 2021	3 Years	Bank of Ayudhya Public Company Limited	Bank of Ayudhya Public Company Limited
TPIPP22NA	Debentures of TPI Polene Power Public Company Limited No.1/2019 Series1 Due A.D.2022	Unsecured and Unsubordinated Debentures with a debenture holders' representative	4,000	3.50 %	9 Aug 2019	9 Nov 2022	3 Years 3 Months	Bank of Ayudhya Public Company Limited	CIMB Thai Bank Public Company Limited
TPIPP247A	Debentures of TPI Polene Power Public Company Limited No.1/2020 Series1 Due A.D.2024	Unsecured and Unsubordinated Debentures with a debenture holders' representative	4,000	3.90 %	19 Aug 2020	19 Jul 2024	3 Years 11 Months	Bank of Ayudhya Public Company Limited	CIMB Thai Bank Public Company Limited
			12,000						

*** Note:**

Name : Bank of Ayudhya Public Company Limited
Address : 1222 Rama III Road, Bang Phongphang, Yan Nawa, Bangkok 10120 Thailand
Telephone : +66(0) 2296-2000, +66(0) 2296-5696
Fax : +66(0) 2683-1302

Name : CIMB Thai Bank Public Company Limited
Address : 44 Langsuan Road, Lumpini, Pathum Wan, Bangkok 10330 Thailand
Telephone : +66 (0) 2638-8000, +66 (0) 2626-7000
Fax : +66 (0) 2657-3333

Short term loan in form of bill of exchange

As 31 December 2020, the Company's outstanding debt, in the form of bills of exchange, was Baht 240 million.

Contact financial institution : TMB Bank Public Company Limited
3000 Phahonyothin Road, Chom Phon Sub-district, Chatuchak District, Bangkok Province 10900

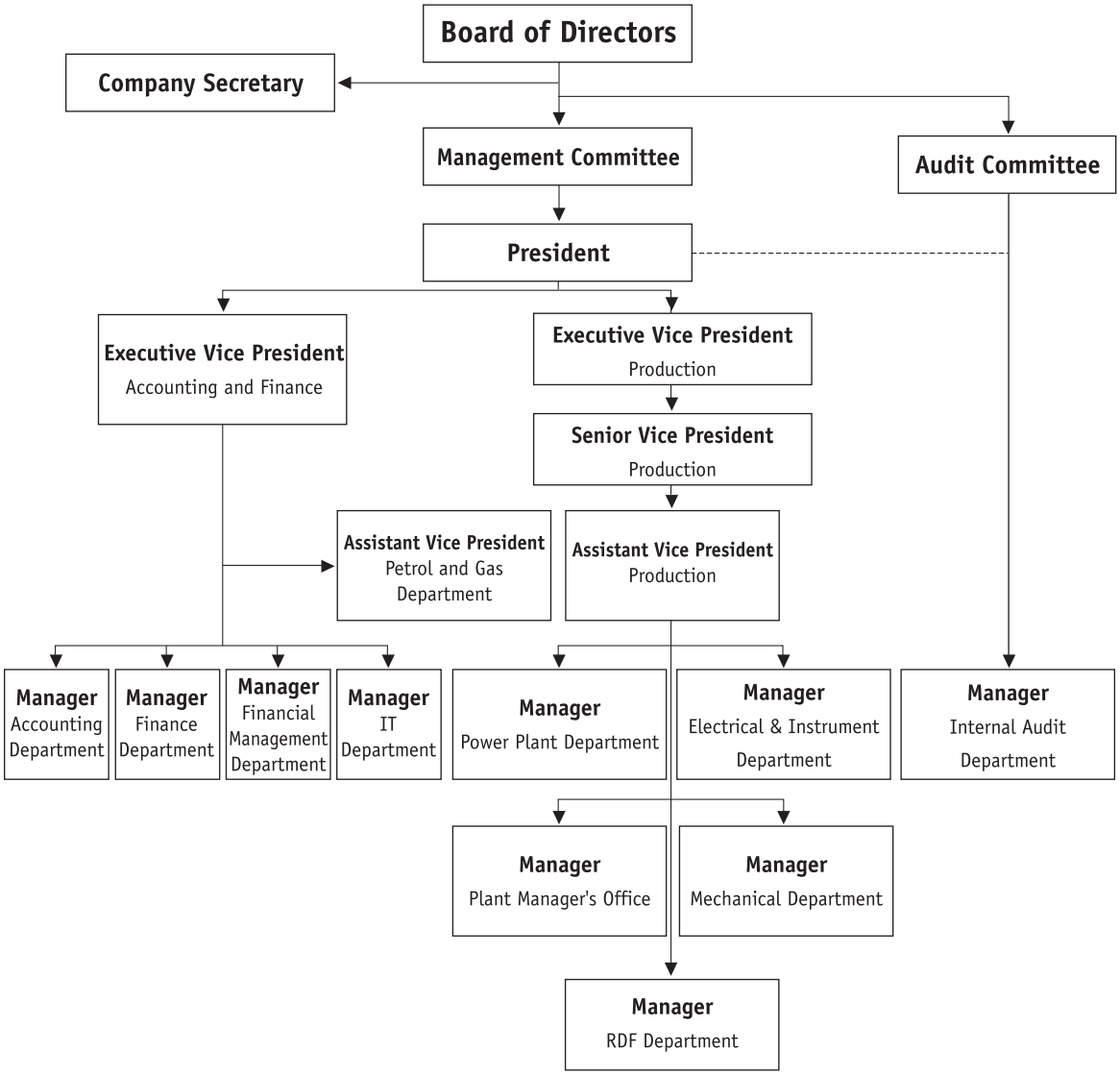
CIMB Thai Bank Public Company Limited
44 Langsuan Road, Lumpini, Pathum Wan, Bangkok 10330

TISCO Bank Public Company Limited
TISCO Tower, 48/2 North Sathorn Road, Bangrak, Bangkok, Thailand 10500

Export-Import Bank of Thailand
EXIM BUILDING, 1193 PHAHOLYOTHIN ROAD, PHAYATHAI, BANGKOK 10400

Management Structure

As of 31 December 2020, the Management structure of the Company was as follows:



1. Board of Directors

As at 31 December 2020, the management structure of the Company consists of three Executive Committees: (1) the Board of Directors (2) Sub-committees, including the Executive Management Committee and the Audit Committee, and (3) The Management.

The Company does not have a recruitment committee or a remuneration committee. Nevertheless, the Company has put in place the necessary policies and criteria for the proper appointment and remuneration of the members of the Board of Directors. These standards are consistent with those followed by other public SET-listed companies, which are in similar industries and have similar financial positions and performance as the Company. The Company believes that these policies and standards allow it to appoint suitable, qualified, knowledgeable, capable, skilled, and experienced individuals for the benefit of the Company. The Company has also put in place the necessary policies and criteria for the proper appointment and remuneration of the members of the Management.

1.1 Board of Directors

As of 31 December 2020, the Board of Directors of the Company comprised 15 directors as follows:

No	Name	Position
1	Mr. Prachai Leophairatana	Chairman
2	Dr. Pramuan Leophairatana	Vice Chairman
3	Mrs. Orapin Leophairatana	Vice Chairman
4	Mr. Prayad Liewphairatana	Director
5	Miss Pattrapan Leopairut	Director
6	Mr. Pakorn Leopairut	Director
7	Mr. Pakkapol Leopairut	Director
8	Ms. Nitawan Leophairatana	Director
9	Ms. Malinee Leopairut	Director
10	Dr. Porakrit Leophairatana	Director
11	Mr. Manu Leopairote	Independent Director ; Chairman of the Audit Committee
12	Mr. Thiraphong Vikitset	Independent Director ; Member of the Audit Committee
13	Mr. Abhijai Chandrasen	Independent Director ; Member of the Audit Committee
14	Mr. Khantachai Vichakkhana	Independent Director
15	Mr. Wanchai Manosooti	Independent Director

All Directors of the Company have participated in at least one training course organized by the Thai Institute of Director Association: the Directors Certification Program (DCP) or the Directors Accreditation Program (DAP).

Authorized Director

"Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mrs. Orapin Leophairatana, Mr. Prayad Liewphairatana, Miss Pattrapan Leopairut, Mr. Pakorn Leopairut, Mr. Pakkapol Leopairut, Mrs. Nitawan Leophairatana and Dr. Porakrit Leophairatana, two directors of which signing jointly with Company seal affixed."

Independence of the Board of Directors

At present, the Board of Directors consists of 15 directors, five of whom are independent directors and constitute one-third of the total number of directors of the Company, which is in compliance with the Notification of the Capital Market Supervisory Board No. TorChor.39/ 2559 Re: Application for and Approval of Offer for Sale of Newly-Issued Shares. The SET recommended practices and principles of good corporate governance prescribe, however, that if the Chairman of the Board of Directors is not an independent director, then the number of independent directors should be more than one-half of the total number of directors.

Although the number of independent directors of the Company is less than one half of the total number of directors, the Company is of the view that the transparency of the structure of its Board of Directors sufficiently safeguards the interests of the shareholders and the Company. This is because the Board of Directors comprises five independent directors, all of whom, including the Audit Committee members, are third parties who possess the knowledge, capability, and experience that are beneficial to the business operations of the Company, and who are impartial and have no conflicts of interest with the major shareholders of the Company.

Moreover, after becoming listed on the SET, the Company must comply with the rules and regulations prescribed by the SEC Office, the Capital Market Supervisory Board, and the SET, such as the regulations governing connected transactions and the acquisition and disposal of assets. These regulations require that matters of material importance shall be approved at a shareholders' meeting, and that

the opinion of the Audit Committee, to the extent that it differs from that of the Board of Directors, shall be reported to the shareholders. In such a case, the Audit Committee acts as the representatives of the minority shareholders of the Company. As such, as shareholders would be informed of the opinion of the Audit Committee, they would receive adequate information to enable them to make decisions on agenda items.

In addition, all of the directors have the duty to comply with all relevant laws such as the fiduciary duty under the SEC Act, the Public Limited Company Act, as well as the various policies of the Company, including the Company's Corporate Governance Policy and Code of Conduct, which prescribe that all directors and persons related to the business operations of the Company have the duty to comply with all relevant laws and policies in order to maximize the benefits for the shareholders of the Company.

The Board's meeting

In 2020, the Board of Directors convened meetings a total of 12 times, with attendance as detailed below:

No	Name	Position	Number of Meeting Attendance
1	Mr. Prachai Leophairatana	Chairman	12/12
2	Dr. Pramuan Leophairatana	Vice Chairman	12/12
3	Mrs. Orapin Leophairatana	Vice Chairman	12/12
4	Mr.Prayad Liewphairatana	Director	10/12
5	Miss Pattrapan Leopairut	Director	11/12
6	Mr. Pakor n Leopairut	Director	12/12
7	Mr. Pakkapol Leopairut	Director	12/12
8	Ms. Nitawan Leophairatana	Director	12/12
9	Ms. Malinee Leopairut	Director	12/12
10	Dr. Porakrit Leophairatana	Director	11/12
11	Mr. Manu Leopairote	Independent Director and Chairman of the Audit Committee	11/12
12	Mr. Thiraphong Vikitset	Independent Director and Audit Committee	12/12
13	Mr. Abhijai Chandrasen	Independent Director and Audit Committee	12/12
14	Mr. Khantachai Vichakkhana	Independent Director	12/12
15	Mr. Wanchai Manosooti	Independent Director	12/12

1.2 Audit Committees

As of 31 December 2020, the Audit Committee is comprised of three directors as follows:

No	Name	Position
1.	Mr. Manu Leopairote	Chairman of the Audit Committee
2.	Dr. Thiraphong Vikitset	Member of the Audit Committee
3.	Dr. Abhijai Chandrasen	Member of the Audit Committee

Ms. Weeranuch Khimkhum has been appointed as a secretary to the Audit Committee.

Dr. Thiraphong Vikitset has a background and experience in the accounting and finance field, which are adequate to be responsible for reviewing the reliability of financial statements of the Company. Dr. Thirapong Wikitsait holds a Bachelor's degree of Science in Chemical Engineering and a Ph.D in Economics from West Virginia University.

Meeting of the Audit Committee

In 2020, the Audit Committee convened meetings a total of five times, with attendance as detailed below:

No	Name	Position	Number of Meeting Attendance
1.	Mr. Manu Leopairote	Chairman of the Audit Committee	5/5
2.	Dr. Thiraphong Vikitset	Member of the Audit Committee	5/5
3.	Dr. Abhijai Chandrasen	Member of the Audit Committee	5/5

1.3 Management Committee

As of 31 December 2020, the Management Committee is comprised of nine directors as follows:

No	Name	Position
1.	Mr. Prachai Leophairatana	Chairman of the Management Committee
2.	Dr. Pramuan Leophairatana	Vice Chairman of the Management Committee
3.	Mrs. Orapin Leophairatana	Vice Chairman of the Management Committee
4.	Mr. Prayad Liewphairatana	Member of the Management Committee
5.	Miss Pattrapan Leopairut	Member of the Management Committee
6.	Mr. Pakorn Leopairut	Member of the Management Committee
7.	Mr. Pakkapol Leopairut	Member of the Management Committee
8.	Ms. Nitawan Leophairatana	Member of the Management Committee
9.	Dr. Porakrit Leophairatana	Member of the Management Committee

2. The Management

The Management, as the definition of the Management according to the announcement of S.E.C. of Kor. Jor. 17/2551 Re: the definition of the announcement of the issuing and the offering of the stock (including additional revisions).

As at 31 December 2020, the Management team is comprised of eight members as follows:

No	Name	Position
1.	Mr. Pakorn Leopairut	President
2.	Mr. Pakkapol Leopairut	Executive Vice President - Accounting and Finance
3.	Dr. Porakrit Leophairatana	Executive Vice President - Production
4.	Mr. Worawit Lerdbussarakam	Senior Vice President - Production
5.	Mrs. Sirirat Lerthirunrat	Assistant Vice President - Petrol and Gas
6.	Mr. Somkiat Teeratakulpisal	Assistant Vice President - Production
7.	Miss Karuna Permsiripan	Manager - Accounting
8.	Miss Weerawan Larpchaiwut	Manager - Finance

Remarks: The Management means the President or the first four executives, following in descending order in a hierarchical structure. All those in equal positions such as the four management executives also include executives in charge of the Accounting or Finance department, who are in the position of Department Manager or higher.

3. Corporate Secretary

Miss Weeranuch Khimkhum has been appointed at the meeting of the Board of Directors' meeting no. 6/2016 held on 22 September 2016, as a corporate secretary of the Company from 22 September 2016. The corporate secretary is deemed to be responsible for the duties as imposed by the Securities and Exchange Act.

4. Remuneration of the Directors and the Management

4.1 Remuneration of the Directors

In 2020, remuneration awarded to the Company's 15 directors in the form of meeting allowances and bonuses was Baht 21,827,600 compared to Baht 18,656,000 of 14 directors in 2019. Details of remuneration in 2020 are as follows:

Unit: Baht

No.	Name	position	Meeting allowances	Bonuses	Total
1	Mr. Prachai Leophairatana	Chairman	1,281,600	193,600	1,475,200
2	Dr. Pramuan Leophairatana	Vice Chairman	1,281,600	193,600	1,475,200
3	Mrs. Orapin Leophairatana	Vice Chairman	1,281,600	193,600	1,475,200
4	Mr. Prayad Liewphairatana	Director	1,281,600	193,600	1,475,200
5	Miss Pattrapan Leopairut	Director	1,281,600	193,600	1,475,200
6	Mr. Pakorn Leopairut	Director	1,281,600	193,600	1,475,200
7	Mr. Pakkapol Leopairut	Director	1,281,600	193,600	1,475,200
8	Ms. Nitawan Leophairatana	Director	1,281,600	193,600	1,475,200
9	Ms. Malinee Leopairut	Director	1,281,600	193,600	1,475,200
10	Dr. Porakrit Leophairatana	Director	1,174,800	-	1,174,200
11	Mr. Manu Leopairote	Independent Director and Chairman of the Audit Committee	1,281,600	193,600	1,475,200
12	Mr. Thiraphong Vikitset	Independent Director and Audit Committee	1,281,600	193,600	1,475,200
13	Mr. Abhijai Chandrasen	Independent Director and Audit Committee	1,281,600	193,600	1,475,200
14	Mr. Khantachai Vichakkhana	Independent Director	1,281,600	193,600	1,475,200
15	Mr. Wanchai Manosooti	Independent Director	1,281,600	193,600	1,475,200
	Total		**19,117,200**	**2,710,400**	**21,827,600**

4.2 Remuneration of Management

In 2020, remuneration awarded to the Company's six Executives including salaries and bonuses was Baht 23,513,830 compared to Baht 19,534,135 of five Executives in 2019. Such remuneration did not include remuneration of the accounting manager.

Company shares held by the Directors and the Management (including married couples and their offspring) as at 30 December 2020.

No	Name	Shareholding as at 30 July, 2020 (shares)	Shareholding as at 30 December, 2020 (shares)	Change (shares)
1	Mr. Prachai Leophairatana	6,019,906	6,019,906	-
2	Dr. Pramuan Leophairatana	4,993,408	4,994,025	-
3	Mrs. Orapin Leophairatana *	*	*	*
4	Mr. Prayad Liewphairatana	5,352,708	5,352,708	-
5	Miss Pattrapan Leopairut	3,853,192	3,853,192	-
6	Mr. Pakorn Leopairut	5,325,591	5,325,591	-
7	Mr. Pakkapol Leopairut	1,870,399	1,870,399	-
8	Ms. Nitawan Leophairatana	250,571	250,571	-
9	Ms. Malinee Leopairut	50,265	50,265	-
10	Mr. Manu Leopairote	-	-	-
11	Mr. Thiraphong Vikitset	179	179	-
12	Mr. Abhijai Chandrasen	-	-	-
13	Mr. Khantachai Vichakkhana	171	171	-
14	Mr. Wanchai Manosooti	1,000,000	1,000,000	-
15	Dr. Porakrit Leophairatana	537,314	537,314	-
16	Mr. Worawit Lerdbussarakam	750,000	750,000	-
17	Mrs. Sirirat Lerthirunrat	-	-	-
18	Mr. Somkiat Teeratakulpisal	-	-	-
19	Miss Karuna Permsiripan	-	-	-
20	Miss Weerawan Larpchaiwut	-	-	-

Note: * Included in shareholding of Mr. Prachai Leophairatana to comply with the provisions contained in the Securities and Exchange Act, article 258

5. Personnel

5.1 Number of employees

As of 31 December 2020, the Company and its subsidiaries had 1,173 employees.

Department	Number of employees
Head Office	103
Saraburi plant	1,070
Total	1,173

5.2 Remuneration of Employee

In 2020, the Company paid personnel expenses or salary expense to employees in the total amount of Baht 551,251,369.76, in the form of salaries, bonuses and other remuneration with details as follows:

Unit: Baht

Remuneration	2020
Salaries and Bonuses	512,715,139.23
Other remuneration [1]	38,536,230.53
Total	**551,251,369.76**

Note :1 Other remuneration included food, medical fees and a provident fund

5.3 Provident Fund

The company contributes three percent of an employee's salary to the provident fund and the employees contribute at least three percent of their own salary. The Company started putting money into the provident fund in May 2016 and the provident fund expenses amount to Baht 9,231,560 as of December 2020.

5.4 Employee Development Policy

The Company realizes the importance of its personnel, so its policy is to develop skills, knowledge and the ability to work for all employees in an appropriate and consistent manner as follows:

- Staff Training Plan and Courses: To teach both the work to be done and to provide employees with the knowledge to work properly, safely, and consistently, suitable for each and every job position. The annual training plan derived from the survey needs in training (Survey Needs) from all departments to understand the real needs for training. The training will be conducted in accordance with the rules and regulations of the Department of Skill Development, Ministry of Labor.
- External Training: To develop the capacity, knowledge, and ability based on the appropriate work by sending employees to join training or seminars with external training institutions; sending employees to broaden their horizons in both domestic and international settings, as well as sending staff to training centers for skills development to prepare them to be the lecturer and the inspector of the skill levels of the workers at the plant; To increase operational skills and efficiency through courses such as Waste-to-Energy Cooperation Course, Future Energy Asia 2020, Digital Nation on Data Governance, Gas Station Operator Course, Digital Business Solutions Summit 2020, Service Innovation Masterclass 2020, International Trade Law, Service Innovation: Strategies for digital transformation into business, a meeting to discuss educational development to support development in the project area in the Special Development Zone, Chana District, Songkhla Province, etc.
- In-house Training: To develop ideas, potential, knowledge, and ability to perform the job to meet the goals of the organization and the current competitive situation to increase the capacity and sustainability of the organization along with the training in order to keep up-to-date with current events or situations.
- On the Job Training (OJT): To develop employees to be able to work more efficiently. There is ongoing training to educate employees according to the Training Road Map (TRM) of each department: To develop oneself in the performance of work with quality and efficiency. For new employees and employees who are promoted, the Company has organized a learning course for employees to have knowledge and understanding of the work of each section as follows:
    - Mind Development and Preparation Course: To promote the morals and ethics through Dharma practice for new employees as a new employee orientation. Dharma listening and practicing, Meditation Training, and Walking Meditation were held for one day at Wat Rama IX Karnchanapisek, Bangkok, to create virtue, honesty and good attitudes to work and to colleagues. Also, a job visit at the Saraburi plant for 1 day was arranged to see the overall picture of the company and to visit various agencies at the actual location of the Saraburi factory in order for the employees to become confident and proud in the company, including creating morals and good attitudes towards work and colleagues.
    - A work ethics course for staff members is organized annually through the course, "Dharma at Work", so that all employees have morals in their mind and use Dharma as guidance to work and live daily life well.
    - Management training for employees and administrators at all levels: To develop management skills in line with the Company's business operations, such as Domestic Power Purchase Agreement (PPA) for Executives, Setting Goals and Planning for Work, Control and Follow Up, Coaching Skills for Supervisors, Personal Data Protection Act 2019 in practice, etc. in order to develop management skills in line with the company's business operations.
    - Training on emotional and social behavior (soft skills): creating and developing effective teams, communication and coordination techniques, thinking outside the box and creativity, awareness of ownership and commitment to the organization, etc.
    - Occupational health and safety programs: for safety officers at supervisor level (Safety Supervisor), and committee of safety, occupational health, and working environment.
    - Productivity and Quality Course: such as reducing costs and waste in the organization, raising awareness of operational quality, testing staff for a full liter of oil at gas stations, etc.
    - Professional courses; To be aware of up-to-date legal situations or regulations regarding the operation, such as:
    - Accounting: A Joint Cooperation between Exim Thailand and NEXI, Open Tax Law with Tax Guru, Precautions for Financial Statement Preparation, Account Closing and Presentation of Financial Statements, Keeping Up with Accounting for Bookkeepers in accordance with accounting guidelines, Rules for using the exchange rate, the whole system of value added tax, Double tax Convention with the foreign income tax burden, etc.
    - Personnel management: Personal Data Protection Law 2019 in Practice, Labor Law and Organization Management, Prevention and Prosecution of Employee's Corruption Case in Court.
    - IT: IT Compliance Course, Digital Nation on Data Governance, Digital Business Solutions Summit 2020, Personal Data Protection Act- Information technology, etc.
    - Import-Export/ Marketing: Customs Expert Certificate Renewal of 2020, Personal Data Protection Act for marketing strategies' planning, etc.

- Executive course: To enhance knowledge and ability for job development to be effective including knowledge and modern evolution, up-to-date with current events in various important and useful courses such as Development Executive in the Digital Era (Class 4), Strategic Executive Program (Class 3), Promoting Peaceful Society (Class 11) by King Prajadhipok's Institute, International Trade Law (Class 9), Service Innovation Masterclass 2020: "Service Innovation, Strategies for Digital Transformation", Smart Cities and Data Centers: Concept, Design, Management and Case Studies, Handling & Transporting Chemicals & Dangerous Goods Summit. 2020 etc.

5.5 Labor disputes

From the year 2014 to the year 2020, the Company Group had no labor disputes in which it was a litigant that may have had a significant impact on the Company's or the Group's business.

Corporate Governance

1. Policy

The Company values ethical business conduct by putting corporate social responsibility into clear practice. The Company issued a Code of Business Conduct, which is disclosed on the Company's website, and is constantly reviewed to make the Code of Business Conduct more suitable for changed circumstances. The Company's Directors acknowledge best practices for directors of a listed company as their principle guideline. The Directors, the management and all levels of staff carry out their duties with honesty, integrity, and good ethics. All realize that the Company is a long-established, leading, reputable company with a track record of over 20 years. Corporate governance practices of the Company can be divided into five sections as follows:

1.1 Section 1. Stakeholder Rights

The Company realizes and respects the importance of the rights of all shareholders. The Company has policies to protect shareholders' fundamental rights and ensure equitable treatment under the law as follows:

1. Shareholders' Meeting

   The Company schedules an annual general meeting of the shareholders ("AGM") within four months of the annual closing date of its accounting books. In case there are emergency issues that might affect the interest of the shareholders and/or are related to the terms and regulations or any legal issues, to be proposed for approval in the meeting. The extraordinary shareholders' meeting will be held as the case may be. Due to the COVID situation, the company has postponed the annual general meeting of the shareholders within the period specified by the law. Later the Company scheduled the general meeting of shareholders after the situation was resolved in 2020, so the Company held a shareholders' meeting as follows:

   1.1 The Annual General Meeting of Shareholders was held on 30 July 2020 at the Conference Room on the 9th floor of TPI Tower, 26/56, Chan Tat Mai Road Thung Maha Mek Subdistrict, Sathon District, Bangkok. A total of 15 directors attended the AGM.

   The auditor of the Company and legal counselor acted as a mediator in checking ballots throughout the meeting in which the Chairman of the Board of Directors conducted the meeting completely as required by law and the results of the meeting have approved all agenda items.

2. Delivering Meeting Notices

   After the Company's Board of Directors approved and resolved the Annual General Shareholders Meeting, the Company discloses the Invitation to the Annual General Shareholders Meeting with all relevant documents on the Company's website for shareholders' consideration in advance of the meeting.

   The meeting notices contained details of the agenda and accompanying documents (both supplementary and supporting) for the decisions of the Board of Directors. Then the Securities Registrar mails the opinion of the Board, minutes of the previous meeting, the annual report, all meeting documents, and proxy forms designed by the Ministry of Commerce, to shareholders at least seven days or fourteen days (as the case may be) ahead of the meeting date. An invitation to the AGM is also announced in newspapers for three consecutive days in advance of the meeting.

3. Facilitating Shareholders

   The Company treats all shareholders in a fair manner. The Company always allows registration of shareholders for at least one hour before each meeting. A barcode system summarizing details of each shareholder is printed on the registration form, or the proxy form, to facilitate registration and save time. A suitable reception is also extended to all shareholders.

4. Conduct of Shareholders' Meetings

   Before the meeting, the Chairman explains clearly the rules on voting and vote counting for individual agenda items. Once information has been disclosed for each item, the chairman allocates sufficient time for each item and facilitates the meeting appropriately. During the meeting, the chairman allows the thorough expression of views and queries by shareholders before voting and summarizes the meeting's resolution on each agenda item. Minutes of the meeting must be completely and accurately recorded, with a summary of voting results on each item.

5. After the Shareholders' Meetings

   The Company duly submits the resolution of the Shareholders' meeting to the SET one day after the meeting ends. The Company duly submits the minutes of the Shareholders' meeting to the SET, the Securities Registrar of Public Company, Department of Business Development, the Ministry of Commerce, within 14 days and also discloses the minutes of the Shareholders' meeting on the Company's website.

1.2 Section 2. Equitable Treatment of Shareholders

The Company values and treats all shareholders equally and fairly through the following actions:

1. Conducting the meeting in sequence of agenda items as specified in the invitation and not adding agenda items without notifying shareholders in advance, to ensure they have enough time to investigate before making their decisions.
2. Appointing proxies to maintain the rights of those shareholders who cannot attend in person: they are able to appoint proxies, or to delegate their votes to any independent director in attendance.

   In addition, the Company also discloses the format of the proxies (as per the format set by the Ministry of Commerce) together with all details and procedures on the Company's website in advance of the meeting.
3. In order to encourage shareholders to use ballots for every agenda item, voting tickets are provided for each agenda item separately.
4. All groups of shareholders can access the Company information completely, accurately, transparently, and in a timely manner. The Company has established an Investor Relations Office to take responsibility for providing information in both Thai and English to all shareholders, equally and completely, to ensure that shareholders can make appropriate investment decisions. Corporate information is disclosed on the Company's website, as well as on the websites of the SET, to facilitate access by shareholders and other interested investors.
5. Ensuring strict supervision of the use of inside information by explicitly defining in writing the misuse of inside information as part of the Code of Conduct. In addition, in order to prevent any conflicts of interest, or misuse of inside information by the Board and Management, the Company has put in place internal information controls to supervise the use of inside information as follows:
   1. Directors and Management will be regularly informed of related laws and regulations pertaining to misuse of inside information, through various communication channels.
   2. The Company discloses in the TPIPL annual report the shareholdings of Directors, Management (and the holdings of management equivalents in Finance and Accounting Division) in compliance with the regulations of the Office of Securities and Exchange Commission.
   3. The Directors and Management of the Company are fully responsible for submitting a report of their shareholdings in the Company, and those of their spouses and minors, in accordance with provisions contained in the Securities and Exchange Act.
   4. Any misuse of internal information shall be subject to disciplinary action, including dismissal, as announced in the Company's rules and regulations.
   5. Devising practical guidelines for potential conflicts of interest in its Good Corporate Governance and Code of Conduct for the Directors. Management and employees must strictly comply with these guidelines.

1.3 Section 3. Stakeholder Roles

The Company is well aware of the roles of all stakeholders. The Company sets precise responsibilities to be prudent, fair, and respect the rights of all stakeholders in operating its business. Hence, the Company has established a Code of Business Conduct emphasizing the balanced consideration of all stakeholders, which has been disclosed via the Company's website.

TPI Polene has embraced the Code of Conduct as a policy for Directors, Management and all employees to put the Code into practice and to abide by strict moral guidelines.

All management levels have to strictly follow the Code of Conduct as best practice principles, and it is a strict policy to ensure that all employees under each relevant organization will acknowledge, understand, and follow the Code of Conduct.

The Company has a strict policy to treat all stakeholders fairly as follows:

1. **Shareholders:** The Company concentrates on establishing the greatest benefit to shareholders. The accounting and financial systems are in place to ensure that any mistakes and irregularities will be identified in due course and that financial reports are accurate, adequate and reliable. The Company's continuously strong financial potential is demonstrated in its ability to make appropriate dividend payments to shareholders.
2. **Customers:** The Company places a great emphasis on customer satisfaction through the quality of its products and services, provided at reasonable prices.
3. **Management and Employees:** The Company realizes the importance of human resources. Hence, the Company fosters development of all levels of management and staff with internal and external training to enhance their capabilities. The Company applies compensation systems which reward and benefit management and staff appropriately and in line with remunerations in other companies in the same industry.

   In addition, the Company also focuses on the safety of its human resources by adopting Health and Safety Management standards.
4. **Trade partners:** The Company ethically sets its business operation strategies, thus enhancing relationships with all trade partners through transparent and fair practices. The Company has a policy of benefit sharing and equitable treatment for trade partners and

strictly adheres to contractual agreements made. The Company is independent, without strong involvement with any trade partners.

5. **Community and Society:** The Company, as a Thai Company, continues to be determined to discharge its responsibilities towards the nation, society and communities. Accordingly, the Company is continuously committed to promoting and supporting beneficial activities towards society, religion, education, and youth.
6. **Environmental Responsibility:** The Company acts as a good citizen, conscious and aware of being part of this society. It continues to be determined to discharge its responsibilities towards relevant rules and regulations and support the community surrounding its facilities by eliminating problems and protecting the environment, thus providing better living standards for the communities near its plants.

The Company also has Anti-Corruption operational guidelines in its Code of Conduct and Business Ethics regarding giving and/or accepts Gifts as follows:

1. The Directors, the Management and employees may not offer or accept gifts, assets, or all kinds of benefits in any circumstances from other persons for the benefits of the business of the Company, as well as not being involved in the manner of circumstances that are involved in any corruption with other persons in business dealings with the Company or potential partners of the Company. Such offering or acceptance must proceed transparently and must be disclosed.
2. The Directors, the Management and employees must avoid accepting gifts (including both monetary and nonmonetary offerings) from suppliers or other persons in business dealings with the Company, except for special events or traditional occasions.
3. The Company does not have a policy to offer gifts, assets, or other kinds of benefits in order to acquire the business of customers, business partners or other persons covering the business except for entertaining customers for the special events or traditional occasions, or for trade discounts and sales promotion of the Company.
4. The Directors, the Management and employees have the responsibility to report the acceptance of gifts, assets, or all kind of benefits from suppliers, contractors, customers or other persons covering the business that directly affect themselves to perform their duties and/or that might have conflicts of interest.
5. The Directors, the Management and employees have a responsibility to report accepting gifts, assets, or all kind of benefits from other persons in business dealings with the Company and the Company will constantly keep the suppliers, contractors, customers or other persons in business dealings with the Company informed regarding the policy of accepting gifts or all kinds of gifts or benefits.
6. Any acceptance thereof as above from other persons must comply with and proceed transparently and in alignment with related laws and regulations.
7. The Company does not prohibit offering gifts under TPIPL logo to customers in case those gifts comply with the Anti-Corruption policies and measures and are reasonably offered to other persons in compliance with the business operations of the Company.

1.4 Section 4. Information Disclosure and Transparency

The Company is aware of its duty to conduct business in conformity with relevant rules and regulations set by the SEC and the SET as follows:

1. Disclosure of Company information including financial reports is executed accurately, completely and in a timely fashion as reflected in the Annual Report form (Form 56-1). The Company's Annual Report (Form 56-2) and other reports, are carried out in compliance with the guidelines set by the SEC and the SET.
2. A plant visit is provided for interested institutional investors, shareholders and analysts to access information and have meetings with the Management of the Company. In addition, the Investor Relations Unit has been established to be responsible for communicating information to institutional investors, shareholders, analysts, and relevant authorities in an equitably and fair manner.
3. Disclosure of Company information is made through approved communication channels via the SET and the Company's website in Thai and in English.
4. The Company pays close attention to the quality of the financial information it provides particularly in its accuracy and adequacy. In addition, all financial information conforms to generally-accepted accounting principles and is audited by independent auditors. Hence, the Company will provide a report of the Board of Director's responsibility for financial statements in Annual Report.
5. Functions and responsibilities of the Board and Sub-Committees are disclosed. In addition, the number of meetings and meeting attendance of each member are disclosed in the Annual Report and 56-1 Form.
6. Disclosure of remuneration to Directors and Management Remuneration: Remuneration levels are based on the operating results of the Company during the previous fiscal year; they reflect duties and responsibilities fairly and reasonably; and are comparable to general practices in the industry.

1.5 Section 5. Responsibility of the Board

The Board plays a key role in supervising corporate governance to create maximum benefits for the Company. Each director represents all shareholders and takes part in promoting good corporate governance within the Company, and in maintaining the rights of, and creating benefits for, all shareholders and other stakeholders. Details as follows:

1. Structure of the Board

(1) Composition

The Company's Board of Directors comprises at least five directors, of whom three were independent directors. This exceeds one-third of the Board. The Board of Directors of at least half of a total number of directors must have permanent residence in Thailand and those directors may or may not hold shares in the Company.

(2) Qualifications of the Company's Directors

The Company's Board of Directors comprises qualified members who have skills, experience, honesty, ethics, and independence. They have capabilities in diverse fields, pertinent to the Company's businesses and, accordingly, can safeguard the interests of all shareholders.

In addition, all Directors are aware of their duties, responsibilities and nature of the Company's businesses. They perform their duties with honesty and prudence, and regularly update themselves on new knowledge. Directors attend each Board meeting with full responsibilities.

(3) Definition of the Independent Director Qualification

The Board of Directors has defined the qualification of Independent Directors in line with the requirements of the Thai Capital Markets Supervisory Board and SET.

(4) Segregation of the Power of the Chairman of the Board and the President

The Company's Board is well organized to ensure there is clear distinction between supervision, policy-making, and day-to-day business administrative roles. The positions of the Chairman of the Board and the President are separated. This ensures separation between governing and managing duties.

(5) Chairman of the Board

In addition, the Chairman's leadership plays a key role in ensuring the Board's efficiency and the Shareholder's meeting promotion to be in compliance with good corporate governance as the listed Company.

(6) Corporate Secretary

A knowledgeable and experienced Corporate Secretary to the Board serves as an advisor to the Board regarding pertinent laws, relevant rules and regulations, and monitors compliance of the Board's actions on a regular basis. In addition, the Secretary is also responsible for assisting in Board activities and coordinating with other relevant functions to comply with the Board's resolutions and good corporate governance principles.

2. Sub-Committee:

The Board of Directors has appointed Directors who have knowledge and skills suitable to be members of Sub-Committee to assist in important matters. The Sub-Committee consists of the Management Committee and the Audit Committee.

The Management Committee is composed of members who are knowledgeable, capable, ethical and experienced in the business. They manage functions and undertake acts in relation to the day-to-day management of the Company.

The Audit Committee consists of three Independent Directors. Members' qualifications meet the requirements stipulated in the relevant Thai Capital Markets Supervisory Board and SET announcements. The Committee is assigned to perform checks on management and secure the balance of power in various business activities to ensure reliability and integrity and serving the best interests of all stakeholders at all times.

3. Roles, Duties and Responsibilities of the Board

(1) Good Corporate Governance and the Code of Business Conduct. The Board of Directors values good corporate governance and maintains high standards of integrity and ethics. All Directors have responsibilities in carrying out their duties and are held accountable to the Company and its stakeholders. They perform their duties with integrity, in compliance with the governing laws and regulations of the Company and based on professional standards. The Company conducts business in a transparent, honest and fair manner for the interests of all groups of stakeholders.

The Company also issued a Code of Business Conduct for its Board, Management, staff and all employees. These principles are strictly followed, together with the Company's rules and regulations, as detailed in Section 3: Stakeholder Roles.

(2) **Conflict of Interest:** The Board has a clear policy to execute transactions which have potential conflicts of interest in a manner that is in the best interests of the Company and its shareholders. Transactions between the Company and anyone with which a possible conflict of interest might require approval under the rules and regulations imposed by the Thai Capital Markets Supervisory Board, the SEC and the SET concerning information disclosure and undertaking of the listed Company regarding connected transactions. In addition, such transactions are subject to an approval process in which only unconnected persons may participate.

Details of connected transactions that may involve conflicts of interest (according to criteria of the Thai Capital Markets Supervisory Board, the SET and the SEC) must be disclosed in the Company's Annual Report; in the Annual Report form (Form 56-1) or declared in other reports (as the case may be). This also includes disclosure of information on connected transactions according to the general accepted accounting standard criteria. Details of connected transactions are disclosed in the section "Inter-Company Transactions".

In addition, pursuant to the Articles of Association, Directors shall notify the Company without delay of their interests in any contract executed with the Company or affiliated companies, and of their holding, and its increase or decrease, of shares or debentures of the Company.

(3) **Internal Control and Internal Audit:**

The Board employs an appropriate, and effective, internal control system to ensure Management prevents and mitigates business risks and produces accurate and reliable financial statements.

To protect the assets of the Company and shareholders' investments from potential loss, an internal audit unit has been set up as a separate division, responsible for auditing and monitoring the Company's operations for efficiency and effectiveness under a sufficient and appropriate internal audit system. The internal audit unit is independent and able to report its resultant audit openly. This allows management to be notified of problems and irregularities in a timely manner and to be able to establish measures to safeguard the Company's assets and shareholders' investments against fraud in the Company or its subsidiaries. This can also be applied to improve and develop the efficiency and effectiveness of the Company's operations.

In addition, an Audit Committee has been appointed to review and evaluate internal control systems, to examine disclosure and assessment of all relevant information for investors, and to ensure that the Company performs in compliance with regulations and governing laws.

Five aspects of the sufficiency of the internal control systems of the Company and its subsidiaries were evaluated. These were: the organization and environmental control system; the risk management system; Management control system; the information and communication system; and the monitoring system.

In addition, the Company and its subsidiaries have policies and measures in place to regulate business transactions with major shareholders, Directors, and Management or connected persons so as to avoid conflicts of interest, in order to pursue the best interests of all parties concerned.

4. Meetings of the Board:

The Company arranges regular meetings of the Board at least once a month, and may hold special meetings as deemed appropriate, to continuously supervise management operations. The time allowed for each meeting is sufficient for the Board to consider all related matters. The Chairman and the President jointly establish and approve meeting agendas to ensure that all material issues are fully considered by the Board. Each Director may independently propose agenda items and freely expresses opinions. At meetings, Directors are encouraged to use discretion to consider all raised issues.

The Company convenes each meeting in compliance with the provisions of the Public Company Act. The minutes of each meeting are properly documented, are certified by the Board, and are systematically filed under tight security.

5. Remuneration of Directors and Management

The Company rewards its Directors fairly and reasonably, taking into account directors' responsibilities and the Company's operating results. Directors' remuneration has been approved at the shareholders meeting.

The Company fairly remunerates its Management, taking into account their responsibilities, performance, the operating results of the Company, and comparability within the same field of business.

6. Training of Directors and the Executive

The Company continuously builds the corporate governance knowledge of its Directors and Management so they may carry out their business operations in compliance with good corporate governance principles. The Company supports all Directors to participate in training courses organized by the Thai Institute of Directors Association ("IOD"), so as to add to their knowledge concerning their roles in the Company and apply such learning to their job performance.

2. Structure of the Board of Directors of the Company

The management structure of the Company consists of three Executive Committees: (1) the Board of Directors (2) Sub-Committee including the Executive Management Committee and the Audit Committee and (3) The Management.

2.1 Functions and Responsibilities

2.1.1 Functions and Responsibilities of the Board of Directors

The Company has to manage the business operations of the Company to be in compliance with governing laws, objectives, and resolutions of the shareholders' meeting. In addition, the Board of Directors of the Company is committed to conduct its business operations in compliance with corporate governance rules and regulations. It has functions and responsibilities to approve the following:

1. To carry out activities prudently and in compliance with related governing laws, the objectives of the Company, and the Articles of Association, in order to protect the Company's interests and for the benefit of shareholders;
2. To consider policy, vision, work plans and key strategies, as well as ethical standards for business operations, and to supervise and monitor the Management, to ensure that they perform their duties efficiently and are in compliance with the Company's policies;
3. To monitor the operational results of the Company and any other key progress Criteria;
4. To determine interim dividends to shareholders;
5. To ensure that financial reports are complete, accurate, reliable and timely, and are prepared in compliance with generally accepted accounting principles;
6. To monitor the implementation of internal control and audit systems; to comply with all regulations and related governing laws; and to ensure appropriate risk management;
7. To ensure that the Company performs in compliance with good corporate governance policies, and focuses on fair treatment for all related parties, and discloses all relevant information that might affect the interests of related parties and the public;
8. To monitor and to prevent conflicts of interest and ensure that connected transactions and any other transactions that might affect the interests of related parties are in compliance with related rules and regulations.

2.1.2 Functions and Responsibilities of the Audit Committee

The Audit Committee is responsible for reviewing the Company's financial report, the adequacy of internal control systems, the risk management system, and compliance with relevant laws, rules, and regulations. In addition, the Audit Committee has to prepare a report or provide its opinion to the Board of Directors or the Company's shareholders (as the case may be) as the following:

1. To review the financial reporting process to ensure that the Company's financing reporting is accurate and adequate;
2. To review the internal audit systems and ensure that the Company has adequate internal controls;
3. To ensure that the Company has duly complied with the laws on securities and exchange, SET regulations, and laws relating to its business;
4. To consider, select, and nominate an independent auditor, to propose the independent auditor's remuneration, and to attend a non-management meeting with the independent auditor at least once a year;
5. To review connected transactions and transactions that may lead to conflicts of interests to ensure that they are in compliance with laws and SET regulations, and that they are reasonable and for the Company's highest benefit;
6. To prepare, and to disclose the Company's annual report, an audit committee's report which must be signed by the chairman of the audit committee and consist of at least the following information:
   - an opinion on the accuracy, completeness and creditability of the financial report;
   - an opinion on the adequacy of the internal control systems;
   - an opinion on the compliance with the law on securities and exchange, SET regulations, or the laws relating to the business;
   - an opinion on the suitability of an auditor;
   - an opinion on transactions that may lead to conflicts of interest;
   - the number of the audit committee meetings, and the attendance of such meetings by each committee member;
   - an opinion or overview comment received by the audit committee from its performance of duties in accordance with the charter; and
   - other transactions which, according to the audit committee's opinion, should be known to the Company's shareholders and general investors, subject to the scope of duties and responsibilities assigned by the Board of Directors;
7. In performing its duties as the Audit Committee, if suspicious cases such as the following are found, which might have significant effects on the financial status and performance of the Company, the Audit Committee has to report such cases to the Board of Directors of the Company in order to improve and solve the problem within the time frame approved by the Audit Committee:

1. Conflict of interest transactions;
2. Fraud or defect in the internal control systems;
3. Non-compliance with rules and regulations of the Securities and Exchange Act and rules and regulations of the SET and related governing laws.

In case the Board of Directors of the Company or the Management do not take any actions in order to improve and solve problems within the time frame as specified, the Audit Committee is deemed appropriate to report such transactions or such actions to the SEC or the SET.

8. To perform any other tasks as assigned by the Board of Directors upon the Audit Committee's consent;
9. To submit an operational report to the Board of Directors at least once a year.

Dr. Thiraphong Vikitset has a background and experience in the accounting and finance field, which is adequate to be responsible for reviewing the reliability of financial statements of the Company. Dr. Thirapong Wikitsait holds a Bachelor of Science in Chemical Engineering and a Ph.D. in Economics from West Virginia University.

2.1.3 Functions and Responsibilities of the Management Committee

The Management Committee was appointed by the Company's Board of Directors at the Shareholders' Meeting, to perform the following functions:

1. To manage and determine the business strategies, targets and operational plans, financial objectives, and the budget of the Company by appropriately taking business factors into consideration and approval by the Board of Directors; in case circumstances change, the Management Committee shall review the use of the allocated budget to ensure that it is appropriate considering the circumstances. The Management Committee shall also undertake acts in line with the Company's business strategies in compliance with the policies determined by the Company's Board of Directors;
2. To monitor the work performance of each department to ensure the efficient and effective compliance with the Company's policies, business strategies, targets and operational plans, financial objectives, and budget of the Company as approved by the Board of Directors considering the business environment, and to provide advice and suggestions on management to the high level management;
3. To select and nominate the high level management of the Company. In the initial stage, the Management Committee members shall consider persons who are fully-qualified, and who possess the knowledge, skills and experience that are beneficial to the Company's business operations. The names of these persons shall then be nominated for approval by the Company's Board of Directors'; to specify the organizational structure and the management policy; to consider and monitor the succession plan for the Management, and the workforce plans, as well as the rules for remuneration and evaluation criteria for work performance by the Management;
4. To appoint and remove employees of the Company from office, and to determine their rewards;
5. To consider and provide suggestions or comments to the Board of Directors on proposed projects or the entering into of any transactions relating to the Company's business, and to consider fund-raising options where necessary and greater than the allocated budget and/or the amount provided by the relevant laws, rules, and regulations, or the amount that the Articles of Association of the Company require that the Shareholders' Meeting and/or are approved by the Board of Directors, as provided in the Articles of Association of the Company;
6. To perform any acts relating to the general management of the Company. The Committee shall also have the authority and responsibilities as assigned by or as provided in the policy of the Board of Directors;
7. To appoint and/or assign the member of Management Committee or any person(s) to act within the scope of the Management Committee as it deems appropriate, and within the scope provided in the Table of Authority as defined by the Board of Directors. The Management Committee has the right to revoke or amend such authority within its scope of authority.

2.1.4 Functions and Responsibilities of the President

The President is responsible for duties as assigned by the Board of Directors of the Company as follows:

1. To carry out activities prudently; to be in compliance with the objectives of the Articles of Association; and to be in line with establishing policy as approved by the Board of Directors of the Company, in order to protect the Company's interests and for the benefit of shareholders;
2. To monitor and manage daily operational results of each department to ensure these are carried out effectively and efficiently;
3. To assign, nominate, remove, and punish employees and staff of the Company to comply with Company discipline;
4. To report work progress to be in line with work plans and budgets as approved by the Board of Directors;
5. To have the authority to issue orders, rules and regulations, notifications to manage business operations to be in compliance with the Company's policy and for the best interest of the Company and to keep discipline within the organization;

6. To have the authority to appoint a sub-attorney or other person to be a representative to perform special duties under the scope of power of attorney and/or to be in compliance with rules and regulations, including Table of Authorities, as approved by the Company's Board of Directors and/or guidelines of the Company's Board of Directors and/or the Company.

3. Recruitment and Appointment of the Director, Sub-Committee and President

3.1 Recruitment of the Directors of the Company

The Company is responsible for the selection of Directors. The selection of Directors takes into consideration their background, knowledge, experience in related fields of business or consider representatives from the major shareholders of the Company who have appropriate qualifications deemed beneficial to the Company. The appointment of new Directors must be resolved and approved at the meeting of the Board of Directors and/or the Shareholders' meeting (as the case may be). Below are procedures and criteria for the selection of the Directors.

(1) Each shareholder shall have one vote for each share held;

(2) At any shareholders' meeting to elect directors, each shareholder may exercise his voting right by electing candidates one by one or by electing a whole group comprising a number of candidates which is equal to the number of directors to be elected at the meeting at one time, or as the meeting of shareholders may deem appropriate. In exercising the right to vote in either of the two options as mentioned , each shareholder shall give all the votes that he is entitled to exercise as specified in (1) above to each candidate, and each shareholder may not divide his votes into portions to various candidate;

(3) The candidates who receive the highest votes in their respective order of the votes shall be elected as directors in the number equal to the number of the directors of the Company or the number of the directors to be elected at such meeting. In the event of a tie of votes which causes the number of candidates to be elected to exceed the number of the directors of the Company or of the number of the directors to be elected at such meeting, the Chairman shall have a casting vote.

At every annual ordinary meeting of shareholders, one-third of the total number of directors of the Company shall retire. If the number of directors cannot be divided into three parts, the number of directors nearest to one-third shall retire. The directors to retire from office in the first and second years following the registration of the Company shall be determined by drawing lots. In the subsequent years, the directors who have been longest in office shall retire. Retired directors may be re-elected.

In the case of a vacancy of directorship for reason other than expiration of term of office, the Board of Directors shall elect a person possessed of qualifications and not possessed of disqualifications under the rules and regulations of the Public Company Act and the Securities and Exchange Act as the replacement director in the next meeting of board of directors, unless the remaining term of office of the director is less than two months.

The resolution of the Board of Directors under paragraph one (above) must be supported by votes not less than three-fourths of the number of the remaining directors.

The replacement director pursuant to paragraph one (above) may hold the position only for the remainder of the term of office of the director who is replaced.

3.2 Recruitment of Independent Directors

The Company has a policy to recruit independent directors to be in compliance with notification of the Capital Market Supervisory Board No. 39/2559, Application for and Approval of Offer for Sale of Newly Issued Shares, dated 30 September 2016, (including the amendment), with details as follows:

1. Holding shares not exceeding 1% of voting shares in the Company, parent company, subsidiary companies, associated company or controlling persons of the Company, including shares held by related persons of such independent director.
2. Neither being nor previously being an executive director, employee, staff, or advisor who receives salary, or a controlling person of the Company, a parent company, subsidiary companies, associated companies, same-level subsidiary companies, major shareholders, or controlling person, unless the foregoing status has ended for not less than two years prior to his or her appointment as the Company's independent director. Such prohibited characteristics shall not include the case where the independent director used to be a government official or advisor of a government unit, which is a major shareholder, or a controlling person of the Company.
3. Not being a person related by blood or legal registration as a father, mother, spouse, sibling, and child, including spouse of a child of the Company's directors, executives, major shareholders, controlling persons, or persons to be nominated as a director, executive, or controlling persons of the Company or subsidiary company.
4. Neither having nor previously having a business relationship with the Company, a parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, in the manner which may interfere with his or her independent judgment, and neither being nor used to be a significant shareholder, or controlling person of anyone having a business relationship with the Company, a parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, unless the foregoing relationship has ended for not less than two years.

The term business relationship under the first paragraph shall include normal business transactions, rental or lease immovable property, and transactions relating to assets or services or granting or receiving of financial assistance. For example, these include receiving or extending of loans, guarantees, providing assets as collateral, and other similar actions which can potentially result in the Company or its counterparty being subject to indebtedness payable to the other party in the amount of three percent or more of net tangible assets of the Company or twenty million baht or more, whichever is lower. The amount of such indebtedness shall be calculated according to the method for calculation of the value of connected transactions under the notification of the Capital Market Supervisory Board's governing rules on connected transactions mutatis mutandis. The consideration of such indebtedness shall include indebtedness occurred during the period of one year prior to the date on which the business relationship with person commences.

5. Neither being nor previously being an auditor of the Company, a parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, and not being a significant shareholder, controlling person, or partner of an audit firm which employs auditors of the Company, a parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, unless the foregoing relationship has ended for not less than two years.
6. Neither being nor previously being a provider of any professional services, including those as a legal advisor or financial advisor who receives service fees exceeding two million baht per year from the Company, a parent company, subsidiary companies, associated companies, major shareholders, or controlling person, and not being a significant shareholder, controlling person, or partner of the provider of the professional services, unless the foregoing relationship has ended for not less than two years.
7. Not being a director appointed as representative of director of the Company, a major shareholder or any shareholders who are related to the major shareholder
8. Not undertaking any business in the same nature and in competition to the business of the Company or subsidiary companies, or nor being a significant partner in a partnership of an executive director, employee, staff, advisor who receives salary or hold shares exceeding one percent of a total number of shares with voting rights of a company which undertakes its business in the same manner and in competition to that of the Company or subsidiary companies.
9. Not having any other characteristics which cause an inability to express independent opinions regarding the Company's business operation.

3.3 General Criteria for appointment of Directors in various sub-committees of the Company

The Board of Directors may appoint a sub-committee or many sub-committees to support the implementation of the Board of Directors. The sub-committee will be responsible to consider reviewing special important issues. The Board of Directors is responsible for appointing members of sub-committees, including issuing charters, functions, and responsibilities and relevant others, in relation to such sub-committee. Each year, the Board of Directors will consider reviewing the charter of each sub-committee.

3.4 General criteria for appointing the President and remuneration

The Management Committee is responsible for the selection and appointment of top management. Members of the Management Committee will first consider recruiting qualified persons who have the knowledge, as well as the appropriate qualifications, skills, and experience which are deemed beneficial to the Company's operations prior to submission of the name of the qualified persons to the Company's Board of Directors for approval. In addition, the Board of Directors is responsible to determine the organization structure, a management plan, a succession plan, manpower, and criteria for remuneration, as well as assessment of the Management's performance.

4. Supervision of operation in a subsidiary and associated company

The Company has a policy to supervise operations of a subsidiary or associated companies as follows:

1. The Company will appoint a representative to be in a position of Director in each subsidiary company and/or associated company according to the Company's shareholding percentage in the respective company. However, the Company's representative shall be considered and approved by the Company's Board of Directors.
2. The Board of Directors and the Management of each subsidiary company and/or associated company shall have functions and responsibilities to be in accordance with related governing laws. For example, the Board and the Management of each subsidiary company and/or associated company will report to the Company its financial status and performance, connected transactions, and acquisition or disposition of assets. In addition, they must report to the Company the transactions which have potential conflicts of interest, including their related persons, to avoid conflicts of interest. This is to comply with rules and regulations imposed by the Capital Market Supervisory Board and the SET.
3. The Company will set up a necessary work plan and action to ensure that a subsidiary company and/or associated company reports reliable financial status and performance. The Company will ensure an appropriation and sufficiency of disclosure system and internal control of a subsidiary company and/or associated company for business operations.

In addition, the Company will closely follow up the performance and operations of a subsidiary company and/or associated company and submit analysis reports as well as its opinion or recommendation to the Company's Board of Directors and to the Board of Directors of the subsidiary company and/or associated company to consider setting up a policy or to improve a business operation to promote business development and continued growth in the subsidiary company and/or associated company.

5. Supervision of the use of inside information

The Company values supervision to ensure all groups of shareholders can access the Company's information equitably and fairly. Inside information or undisclosed information which might have a direct impact on the share price of the Company is considered confidential information only for internal use to operate the Company's business. The Directors and the Management and all levels of employees have to keep internal information confidential. The Company has put in place the use of inside information as follows:

1. Employees shall keep information of the Company's clients confidential and shall not trade information and not disclose such information, except to the extent required to be disclosed by applicable law or approved by the Board of Directors of the Company.
2. Any disclosure of information which might have any effect on the Company must be carried out by authorized persons except for obtaining authorization from the authorized person.
3. The inside information involving business operations and administration is considered confidential. Disclosure of such inside information to the public might have an effect on the Company.
4. All employees and related persons shall not disclose non-public information to the public and shall not sell or purchase securities of the Company or of any Companies in which such persons have gotten involved by using non-public information.
5. Important documents and confidential information must be carefully stored, taken care of, and made easily accessible under special methods at each level or for each type of information (document or electronic). After the expiry period of the data retention, the responsible employee has to destroy information properly and correctly as some documents are to be kept to comply with governing laws. (as the case may be).

The Company has a policy to regulate the Directors and the Management's use of inside information that is not disclosed to the public, for their benefit including purchasing and selling securities as follows:

1. The Company will advise the Directors, the Management and the person who is in charge of the Accounting & Finance department to understand their duties to submit a report of ownership in the Company, including their spouses and children not yet of legal age, to the SEC to be in accordance with provision contained in section 59 and section 257 of the Securities and Exchange Act B.E. 2535. This includes a report of their acquisition and sales of securities in the Company, including their spouses and children not yet of legal age, to the SEC to be in accordance with the section 246 and section 298 of the Securities and Exchange Act B.E. 2535.
2. The Company requires the Board, the Management and executive persons in charge of the Accounting or Finance department, including their spouses and children not yet of legal age, to prepare and submit reports of their ownership in the Company to the corporate secretary prior to filing such report to the SEC. Such a report shall be prepared and submitted to the corporate secretary within 30 days from the date when they first hold the position. After that, they shall report every transaction within three business working days from the purchasing or selling date.
3. Prohibition of the Board of Directors and employees in related departments, including their spouse and children not yet of legal age, of purchasing or selling the Company's securities within one month before quarterly and yearly financial report are due to be released publicly and within 24 hours from the disclosure date of such financial statements to the public.

   In addition, the Board of Directors and employees in related departments, including their spouse and children not yet of legal age, are prohibited from purchasing or selling the Company's security by using undisclosed information, which might affect the price of the Company's security, up until the expiration of the 24-hour period after such information has been disclosed to the public.
4. The Company has set up criteria and guidelines for penalties for offenders for use of inside information for personal advantage. The penalties include a letter of employee reminder, waiver of wage payment, temporary work suspension without payment, and layoffs. The penalties will be considered subject to the intent of the action and the seriousness of the offense.

6. Audit Fees

1. The Company and its subsidiaries paid audit fee for 2020 to:

1.1 The statutory auditor of the Company for the financial year ended 2020 in the amount of baht -0-

1.2 The office of the statutory auditor of the Company, or other persons or related enterprises paid other audit fees related to the statutory auditors of the Company for year 2020 in the amount of BHT 2,400,000.

2. Non-Audit Fees

The Company paid a fee to KPMG Phoomchai Audit Company Limited to review the report of promotional privileges and benefits of exemption from payment of corporate income tax by virtue of the promotional certificates of the Board of Investment in 2020 for a total of Baht 180,000.

7. Adoption of Corporate Governance Code (CG Code) for listed companies

The Company has reviewed the corporate governance policy by referring to the Corporate Governance Code for listed companies in 2012 of the Stock Exchange of Thailand and good Corporate Governance Code for listed companies 2017 (CG Code) of the Securities and Exchange Commission. The company had adopted most practices by adding practices that are suitable for the business and can do without any other effects on the corporate governance policy of the Company. At present, the Board of Directors as the Governing Board has considered implementing the Corporate Governance Code (CG Code) issued by the SEC. The Governing Board takes into account the above principles and understands the benefits and importance of implementing the CG Code, which emphasizes the integration of social, environmental and social issues, and corporate governance to create value for business for sustainable development, consisting of 8 main categories as follows:

Principle 1: Establish clear roles and responsibilities of the Board as the leader of the organization that creates value for sustainable businesses

Principle 2: Define objectives and central ideas for sustainability

Principle 3: Strengthen effective committees

Principle 4: Recruiting and developing a CEO and people management

Principle 5: Nurture innovation and responsible operations

Principle 6: Strengthen effective risk management and internal controls

Principle 7: Ensure disclosure and financial integrity

Principle 8: Ensure engagement and communication with shareholders

In 2020, there were issues that the Company had not yet implemented. The Company is in the process of considering the appropriate replacement measures as follows:

1. The Company has not established a remuneration committee and a nomination committee because the company already requires the entire Board of Directors, excluding stakeholder directors, to serve as the Remuneration Committee and the Nominating Committee.

2. The Board of Directors does not set a policy to limit the number of service years for the independent director's position because the Company has considered the knowledge, ability, and experience of each independent director beneficial to all stakeholders and to the business operation of the company As a result of their performance throughout the term of office, each independent director is able to express opinions independently and without any conflict of interest. With the current business structure of the company, continuing to maintain the position is beneficial to the Company's business operations.

However, the Company has complied with a guideline that is not contrary to the law and in accordance with the corporate culture. The company has considered that such practice does not affect the qualifications of such director's independence.

Social Responsibility

1. Overview of Policy

The Company Group has a policy to pursue its business operations under well-managed administration practices with an adherence to creating a corporate culture with good corporate governance in parallel with social conservation and environmental preservation. The Company also realizes the importance of educational support, public well-being and safety, art, cultural preservation, and social development with an aim to respond to the needs of the people in the local community to further enhance the sustainable growth in all respects, which can be partly reported below.

1.1 Business Operations with Fairness

The Company aims to conduct business according to the Corporate Governance Policy and Code of Conduct of the Company (Please see details under Section 2.11 Corporate Governance -11.1 Corporate Governance Policy) and is determined to promote the firm to be an organization that does business with transparency, ethics, and responsibility for shareholders and stakeholders.

The Board of Directors is determined to conduct business according to good corporate governance practices, focusing on justice, transparency, fairness, responsibility for society, culture and the environment, together with building sustainable development for all staff, customers, the community, and all stakeholders.

"Transparent Thailand where all citizens live happily"

The Company's Board of Directors specifies principles of good corporate governance for the Board, management, and all employees of the company as follows:

(1) Directors hold on to the principles of universal corporate governance and are determined to continuously improve good corporate governance i.e. shareholders rights, equitable treatment of shareholders, shareholder roles, information disclosure and transparency, and responsibilities of the Board.

(2) Directors, management, and staff concentrate to apply the Principles of Corporate Governance i.e. creation of shared value, responsibility, equitable treatment, accountability, transparency, and ethics (C.R.E.A.T.E.) to use as a guideline to conduct business and to strictly abide by laws and related regulations of invested countries.

(3) Directors establish the management structure to treat directors, management and shareholders with fairness, and consider policy, vision, work plans and key strategies, and supervise and monitor business operations, and ensure appropriate risk management. They are independent and responsible for business operations to conform to good corporate governance by being an ethical leader and a good example to follow the Corporate Governance and Code of Conduct as well as promote the culture of corporate governance. They are responsible for all related stakeholders and to promote human rights, consumer rights, and fair labor as well as to establish a system to follow up, evaluate, and review for all employees to practice corporate governance in a complete and sustainable manner.

In addition, the Company makes a written announcement of a Code of Conduct for all stakeholders with shared values principles between the Company and stakeholders. Top management is responsible for the participation of all stakeholders and improves communication channels to continuously allow for the expression of opinions to the responsible business units. The Company has a strict policy to treat all stakeholders fairly including shareholders, customers, employees, trade partners, competitors, communities, and society. The management and employees put the Code of Conduct into practice so they clearly understand how to fairly treat shareholders, trade partners, and customers, etc.

1.2 Anti-Corruption Policy

The Company is committed to pursuing its business operations with an emphasis on transparency with ethics and responsibility to shareholders, customers, employees, society and other stakeholders. The Directors, the management, and all levels of employees are prohibited from operating or accepting, soliciting, demanding, or accepting assets or other benefits to other persons in business dealing with the Company, whether directly or indirectly, as a motive for them to do or refrain from doing any act to acquire or keep benefits that are unsuitable to the business, except as allowed by the laws, rules, regulations, local customs or tradition, or business customs, in order to create the balanced consideration of all related parties and fair treatment to all parties concerned. The Company has conducted Anti-Corruption awareness as guideline policies for the management and employees of the Group to perform in compliance with the principles of good corporate governance, Code of Conduct and/or related to the terms and regulations or any legal issues to create sustainable value and long-term growth of the business.

Objective

1. All levels of employees must not induce to act or refrain from actions that may lead to malfeasance and corruption, by not being involved in corruption, whether directly or indirectly.
2. To support all levels of employees' roles and responsibilities to take part in the activities of an Anti-Corruption Policy Corruption, not to solicit, demand, or accept assets or other benefits from other persons in business dealings with the Company,
3. To conduct its business with fairness and enhance the confidence to its stakeholders.

Scope of Anti-Corruption Policy

Stakeholders of the Company who are involved in Anti-Corruption Policy corruption are classified into two major groups as follows:

1. **Internal :** Director, Management Team, and all level of staffs/employees
2. **External:** Customer or suppliers, contractor's sub-contractors, business partners, creditors, governmental authorities and private officers.

Anti-Corruption Definition

Corruption means any types of bribery: an offering, agreement to give, giving, promising to give, soliciting, or receiving of money, assets, or other inappropriate benefits from government officers, government sectors, the private sector, or responsible person either in direct or indirect action so that such person could proceed or disregard his/her function in order to acquire, retain the business, recommend a specific company to the entity, or achieve any improper benefits in the business transaction. Exceptions shall be applied in case of laws, regulations, statements, standards, customs, or business traditions.

Roles and Responsibilities

1. The Board of Directors is responsible for determining the policy, and monitoring, and forming an effective system supporting anti-corruption acts in order to affirm that the management team intensively is concerned with, emphasizes, and cultivates an anti-corruption mindset as part of the Company's culture.
2. The President and the management are responsible for determining an anti-corruption system, and for promoting, and encouraging anti-corruption manners conveyed to all staff and related parties. This also includes reconsideration of systems or regulations in order to best adjust with business changes, regulations, standards, and laws.
3. The Audit Committee is responsible for the revision of financial and accounting reports, internal controls, internal audit functions, and risk management so that such operations are concise, appropriate, effective, and conform to global standards.
4. The Internal Audit Director is responsible for auditing, assessment, and evaluations in business transactions, whether they are accurate and comply with guidelines, approval authority, standards, laws, and policies in such monitored departments in order to ensure that the internal controls are sufficient and suitable for probable risk in corruption. This shall be directly reported to the Audit Committee.

Anti-Corruption Guidelines

1. Staff shall not be negligent in any corruption conditions involved directly with the Company. All staff must notify such acts to supervisors or responsible persons provided in particular channels, including collaborate with the fact-finding investigations.
2. A person who is involved in corruption is considered to have committed a disciplinary offense. This means such person needs to be considered for disciplinary action according to the Company's standards. Legal conviction may be applied in case such acts violate the laws.
3. The Company shall provide fairness and safeguard staff who inform management of corruption cases relating to anti-corruption information.
4. The Company is concerned about the importance of dissemination, knowledge sharing, and constant communication with employees.
5. The Internal Audit Department of the Company will be responsible for reviewing and evaluating internal control systems, disclosure of Company information, and to review implementation of the provisions and risk management systems that can mitigate risks against corruption and report directly to the Audit Committee.

Provision in Implementation

Implementation of Anti-Corruption Policy (to interact properly with business partners and the related parties who have conflicts of interest)

All levels of employees will be responsible for the anti-corruption policy in connection with customers, suppliers and all parties concerned. (Hereafter called "related parties who have conflicts of interest" who have a direct impact on business operations)

1. The employees must comply with the anti-corruption policy and measures, the Company's corporate governance principles, and the code of business conduct and hospitality activities from other persons in business dealings with the Company.
2. The employees must not accept gifts, entertainment and hospitality offerings, gifts or entertainment and hospitality activities from other persons in business dealings with the Company, whether directly or indirectly.
3. Employees must not be corrupt or accept corruption in any form in any circumstance, covering the business without otherwise getting prior approval from their direct supervisors. Any acceptance thereof as above from other persons must comply with the Anti-Corruption policy and measures, the Company's corporate governance principles, and code of business conduct and must not have any impact in the business decisions of said employee.
4. Employees must not perform any act to acquire or keep benefits from their positions in the Company or to accept gifts, entertainment and hospitality offerings, gifts or entertainment and hospitality activities from other persons in business dealings with the Company.
5. Whenever the employees advise the personnel of the Company, those actions must not go against the benefits and/or recruitment of the Company or refrain from doing any act to acquire or keep benefits that are against related laws and regulations.
6. There are to be no close relationships between supervisors and those under their supervision within the same departments such as: married couples, parents or offspring that may impose conflicts of interest.
7. Business relations and procurement processes with the public sector or all types of bribery or illegal payments are prohibited in all business transactions, operations, and connections to the government.
8. Corrupt persons who violate or fail to comply with the anti-corruption measures must face punishment under the Company's rules and may also face prosecution if the action violates the law.
9. Employees must be granted approval from their supervisors before offering all types of gifts (such as the Company's products) or entertainment and hospitality activities to other persons or to a business and need to be in compliance with the anti-corruption policy and measures, the Company's corporate governance principles, and code of business conduct. In case of emergency that in any circumstances, employees have not been granted approval from their supervisors in advance, such employees are deemed to get an approval from their supervisors whatsoever after offering all types of gifts (such as the Company's products) or all forms in any circumstances, to other persons covering the business.
10. The employees must not acquire or take benefits from their positions in the Company to engage in inappropriate relationships, sexual harassment, and other verbal or physical harassment of a sexual nature, any kinds of treatment or consideration of, or making a distinction in favor of or against (such discrimination based on race, sex, disabilities or religious). This also includes burglary, threats, force or any other kind of the action that violates the law.
11. Employees should ask or use request forms to get opinions from their supervisors or responsible persons when the employees face or doubt any act that is considered corruption in order to avoid any argument.

File complaints or reports of fraud

1. Complaints or recommendations

1.1 A complaint if encountering any acts that are considered corruption, direct or indirect;

1.2 Any act that is considered corruption and/or have a direct effect on the internal control of the Company cooperate in the fact-finding investigation stipulated by the Company's regulations;

1.3 Any act that has a direct impact on the Company's reputation and benefits;

1.4 Any misconduct that is against the law, morals and/or business ethics.

2. Suitable report channel to file a complaint

When they face or have doubts about any act that might be considered corruption, employees have a responsibility to notify supervisors or responsible persons through suitable reporting channels.

3. Channels of Communication between the Company and its Employees (Internal complaint)

1. Head of the Internal Control Department/ Head of the Human Resources Department or Head of Legal Department.
2. Mail Box
3. E-Mail : Orapin@tpipolenepower.co.th

4. Channels of Communication between the Company and outsiders (External complaints)

1. Letters : Mrs. Orapin Leophairatana
   Vice Chairman
   TPI Polene Power Public Company Limited
   26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120
2. E-Mail : orapin@tpipolenepower.co.th
3. Letters : The Audit Committee
   TPI Polene Power Public Company Limited
   26/56 Chan Tat Mai Road, Thungmahamek,
   Sathorn, Bangkok 10120
4. Tel. no. 02-285-5090 or 02-212-1039 Internal Audit Department

Identities and confidentiality protected

1. Identities protected

As the whistleblower or the person filing the grievance in good faith is greatly beneficial to the Company and all employees, therefore, the whistleblower or the person subject to such grievance and parties involving in the fact-finding and reporting process, no matter what difficulties they might have, the Company will ensure that no employees shall be demoted, penalized or be otherwise affected because they honestly decline to participate in corruption.

The Company has the policy to investigate such reports with equal transparency, care and fairness and subject them to a proper investigation. Information will be kept confidential and only be revealed when necessary while we will take into consideration the safety and damage to the whistleblower or the person filing the grievance, which will be carried out in a confidential manner to ensure staff who make the reports will have their identities protected.

2. Names and Confidentiality Protected

The whistleblower or the person filing the grievance (various groups of stakeholders or employee) may choose not to reveal his/her name, address or contact number unless he/she feels that such a disclosure will enable the Company to inform him/her of progress. Information will be kept confidential and only be revealed when necessary while we will take into consideration the safety of the whistleblower or the person filing the grievance. The Company will hear all such reports with equity, transparency, care, and fairness and subject them to a proper investigation, which will be carried out in a confidential manner to ensure the staff who makes the reports will have their identities protected with fair treatment.

Fact-finding process and Penalties

1. Having received the grievance, the management representatives, whose members consist of the Compliance Unit and the Audit Committee, will be responsible to conduct an investigation.
2. Under the fact-finding process, the management representatives and the Audit Committee might assign management representatives to keep them informed of the progress of further investigation.
3. In case the tip or the grievance is found to contain materiality, the person committing corruption or violating or failing to comply with the anti-corruption measures will be notified. The Company will grant opportunities for the person committing corruption or proved to be guilty to acknowledge the reasons and reserve the right for them to defend themselves by providing additional information or evidence that they aren't involved in any corruption or are guilty of violating or failing to comply with the anti-corruption measures as accused.
4. In case the person who committed corruption or violated or failed to comply with the anti-corruption measures, is proven to be guilty, the Company will take actions in accordance with the established procedures to investigate and levy disciplinary punishment on employees at fault, relating to corruption matters. Such a person will be considered for discipline according to the Company's standards. Legal conviction may be applied in case such an act violates the law. The management's decision is considered the final judgment for punishment on employees at fault, relating to corruption matters.

Disclosure of the Anti-Corruption Policy

1. The Company announces the written publication of the anti-corruption policy and measurements as a principal guideline for employees to follow.
2. The Company discloses the written publication of the anti-corruption policy and measures through the Company's channels, such as letters, the Company's website and annual report., etc.

3. The anti-corruption policy needs to be reviewed regularly, including with a possible revision of such policy and implementation provision in order to accord with business changes, regulations, standards, and laws.

1.3 Respecting Human Rights

The company realizes that the community and the environment are affected by its activities and business conduct; hence, the Board, the management, and all employees must respect the law, customs, traditions, and local cultures where the company is conducting business. The Company has consequently set the following guidelines:

(1) Employees must treat any person in the areas of the establishment with respect, on the basis of human dignity, justice and respect for each other. They must also comply with all applicable laws in the country.

(2) The Company promotes diversity in employment and provides opportunities to grow and advance on a career path without discrimination in favor or against any person, race, nationality, religion, country, education, age, sex, status, disability, and so on.

(3) Employees must carefully handle stakeholder information.

(4) Employees will not disclose confidential information of stakeholders to unauthorized persons, except with the written consent of the stakeholder or the authorized person of the company.

(5) Employees must limit disclosure, use and access to stakeholder information as necessary.

(6) Prohibiting employees from harassing or causing sexual nuisances in the workplace.

In addition, the operation and management of the security of the Company's area must comply with voluntary compliance with security and human rights principles.

1.4 Fair Labor Practices

The Company values its employees, focusing on helping all employees to progress, to have welfare and security, to develop their potential, and to be safe to work. To treat employees fairly, the guidelines are as follows:

(1) The company has plans and training courses to teach the job to be done or relevant issues for employees to understand and how to work properly, safely and suitably with the employees in each job position.

(2) The Company organizes training for knowledge development, competitive advantage of its employees to support its growth and the progress of the employees.

(3) The company encourages the transfer of knowledge, teaching, and work learning among employees.

(4) The Company provides opportunities and support for employee education, and training to increase knowledge both inside and outside the organization following proper job descriptions.

(5) The Company has clear and strict employment regulations, including progress in the job with no restriction on gender, age, social status, race, ethnic, religious, educational institutions. The employment policies and working conditions are based on the needs of the job.

(6) The company will not employ migrant workers including contractors and subcontractors.

(7) The Company provides a channel for listening to employees' feedback and suggestions.

(8) The Company provides benefits and welfare, equivalent to other companies in the same industry.

(9) The Company creates a good working environment and a safe place to work.

1.5 Consumer Responsibility

The Company is committed to providing customers or consumers who buy products and services from the Company appropriate benefits and satisfaction with the product by producing fair-priced, good quality products which show responsibility to customers and consumers. It needs to serve customers and consumers quickly and without discrimination. The Company also maintains sustainable relationships with customers and consumers. The guidelines are as follows:

(1) To develop quality products and give full service by continuously delivering goods and services quickly to meet the needs of customers and consumers. Employees must also be fully dedicated to meeting customer needs with reasonable prices and without restrictions on consumer rights.

(2) Not to commit any fraud or deception in the quality of the Company's product and services by producing products and services that are safe, reliable and non-hazardous to the health of consumers. The warning signs and documentation must be specified in accordance with international quality management standard systems.

(3) To store customer data in a secure system and not to disclose customers' data illegally. The Company must specify the fair price of its products and services.

(4) To provide an agency responsible for providing adequate recommendations and knowledge of products and services including counseling and offering solutions. We also receive complaints in order to maximize customer satisfaction in products and services.

1.6 Environmental protection

The main business of the Company is the production and distribution of electricity, and service stations for fuel and natural gas (NGV). It focuses on power plants that use waste heat and RDF fuels. Most of its businesses are eco-friendly.

The Company provides a health insurance fund in the event that people in the community radius of 5 kilometers around a project become sick due to the operations of the factory. In the first year, 1 million baht was put into the fund and 500,000 baht per year was put into the fund the following years.

In addition, the Company has provided funds to promote public health in communities. This includes training for health workers and providing medical tools to the community health center by funding approximately 300,000 baht per year in a radius of 5 kilometers around the power plant project. Areas that are covered by these funds include Mittraphap Sub-district, Thap Kwang Sub-district, Muak Lek District and Tha Khlo Sub-district, etc.

The Company launched a project to study air quality in the area of ‹‹5 kilometers radius around the power plant projects of TPI Polene Power Public Company Limited during 2018-2020. The period of the study time was three years and was conducted by Thammasat University Research and Consultancy Institute (TU-RAC).

The Company created a project to study the effects of heavy metals on dairy farming areas and aquatic animals in a radius of 20 kilometers around the project area by hiring higher education institutions to establish ongoing three year studies. The project began in mid-2019.

The Company has hired an environmental consulting company to inspect dust in the atmosphere that are not more than 2.5 microns, with eight stations around the project areas which will be measured for a period of five years continuously between the years 2019-2023.

The Company provides a map of health risks to monitor the health status of at-risk people in the community within a 5 kilometers radius around a power plant project by hiring Suan Sunandha Rajabhat University as a researcher. The project started in September 2019 and was completed in March 2020.

The Company has conducted research to study the health and environmental impact of health risk areas in people with health risks and on vegetables and fruit, fish and shellfish as well as soil and water by hiring Suan Sunandha Rajabhat University as a researcher. The project started in September 2019 and was completed in March 2020 but we will continue to conduct research studies every year.

In addition, the Company has taken additional environmental actions as follows:

1. The Company has installed five fixed air quality monitoring stations to measure and monitor the air quality in the surrounding communities: namely the Subbon Temple Station, Ban Subbon School Station, Wat Hin Lub Station, Ban Ang Hin Station, and Ban Sai Ngam Station. Therefore, the Company will know the results of the air quality measurement 24 hours a day every day of the week.

2. The Company has created a project to study the air quality in a radius of five kilometers around the power plant project of TPI Polene Power Public Company Limited, operated by the Office of Research and Consulting Center of Thammasat University. The study was conducted in 2018-2020 for a period of three years.

3. The Company hired an environmental consultant to measure up to 2.5 microns in size dust particles in the atmosphere, at eight stations in the community area surrounding the project area, for a period of five consecutive years between 2019 and 2023.

4. The Company conducts research to study the health and environmental impact on people at risk of health issues in health risk areas: these include vegetables, fruit, fish, shellfish, soil, water and cow's milk in areas at risk of regular contact with people. Suan Sunandha Rajabhat University conducted the study and completed the project in 2019 and has continued another project in 2020 and will continue to conduct research studies every year.

5. The Company has provided a project fund for research, occupational development, and environmental conservation. In the first year of the project, Baht 1,000,000 was provided for the fund and at least Baht 200,000 has been provided annually to support at least two projects per year. In 2020, the Company sponsored a project in the amount of Baht 200,000 to increase the reproductive performance of beef cattle after giving birth in hot and humid weather at Thap Kwang Research Station of Kasetsart University. And the company supported a project, in the amount of Baht 76,800, to study water quality for sustainable consumption at Nong Khae Kindergarten.

6. The Company provides a health insurance fund to take care of people in the event that people in the community within a radius of five kilometers around the project are affected by illness due to the operation of the factory. The Company funded Baht 1,000,000 baht in the first year and Baht 500,000 baht per year in the following years.

7. The Company provides a supporting budget to promote public health in the community, such as training of public health workers, providing medical equipment to the community health center by supporting approximately Baht 300,000 per year in the community area within a radius of five kilometers around the power plant project, namely at Mittraphap Subdistrict, Thap Kwang Subdistrict, Muak

Lek Subdistrict, and Tha Khlo Subdistrict. In 2020, the Company sponsored: four blood pressure monitors and 7 knowledge roll-up media signs for the Muak Lek Sub-District Public Health Volunteers; four blood pressure monitors and 32 bags of medical devices to the village health volunteers of Mueang Thap Kwang Municipality; 10 blood pressure monitors, 10 blood glucose monitors, 10 digital fever monitors, 10 medical equipment bags and 10 foot-pedal gel presses for the village health volunteers of Mittraphap Subdistrict; and 11 blood pressure monitors for village health volunteers of Tha Khlo Subdistrict.

8. The Company provided a health risk mapping project to monitor the health conditions of vulnerable people in the community within a five kilometer radius around the power plant project. Suan Sunandha Rajabhat University completed the educational project in 2019 and undertook another continuing education program in 2020.

9. The Company provides a budget to support the development of occupational health and safety for Health Promoting Hospitals in subdistricts and public health personnel nearby with a budget of Baht 300,000 per year.

10. The Company provides a budget to support biological resources, cooperates with government agencies or the private sector to restore forests near project areas and other areas with afforestation activities, with a budget of Baht 3,000 per rai, not less than 100 rai per year. In 2020, the Company supported for afforestation of 162 rai for the amount of Baht 486,000.

1.7 Community or social development

A commitment to social and community development, promoting quality of life, and maintaining the environment so that industry can live in harmony with society and the community, are what the Company, as a company of Thai people, values along with its business operations. The Company has focused on developing sustainable practices in various areas.

The Company launched a project to install 14 drinking water machines within a radius of five kilometers around power plant projects to allow the community to have clean and safe drinking water. This project was completed in 2019.

In 2020, the Company supported a public health budget of Baht 13,031,638.07 to hospitals, foundations, and other organizations to promote and develop a good quality of life for Thai people including support for ambulances and medical equipment to Saraburi Hospital worth more than three million baht. This money also helped with patient care and helped promote the quality of life in the field of medical treatment for people in Saraburi.

1.8 Innovative use and dissemination of innovations that are socially and environmentally responsible.

The Company is focused on innovation through the maximization of resources. The Company is focused on generating electricity from waste heat and RDF which uses waste as raw material for production. The use of alternative energy reduces carbon dioxide (CO_2) emissions into the atmosphere; thus, it is deemed an environmental-friendly innovation. At various times, the Company has publicized this principle to the community so people can learn and understand the Company's operations.

In addition, RDF is produced from waste which is derived from local communities and factories. The Company's business is an innovative business to recycle waste and it also helps the community reduce waste, which is a national problem. Additionally, it helps reduce the waste disposal processes of other public and private sector organizations, which saves energy indirectly, in accordance with the company's philosophy to create balance between business growth and environmental protection. These initiatives also help create a strong Thai society and are a driving force for the Thai economy and Thai society.

2. Implementation and Reporting (CSR in Process)

The Company Group has a clear policy on CSR and is committed to working on such a policy to ensure that it helps create a quality society and environment. The company policy has been implemented for the benefit of the community and society as follows:

(1) The Company is committed to implementing the guidelines of "Zero Waste" and has consistently followed this policy by regulating, supervising, and developing processes to ensure that the rate of waste emissions from operations is below the highest level allowed by law. Also, the Company reuses the waste heat from the cement production process to produce electricity power.

(2) The Company is focusing on ways to reduce carbon dioxide (CO_2) emissions into the atmosphere, which cause greenhouse effects for the community. As a result, the Company has focused on operating the RDF power plant.

(3) The Company is committed to reducing community waste by utilizing community waste for alternative RDF projects. The use of such alternative fuels to generate electricity helps community waste management and reduces the quantity of the waste and the space for garbage collection.

(4) The Company continues to use the waste monitoring system to monitor the emission of waste from the combustion process of the power plant and keeps track of and controls the oxides of nitrogen (NOx) and sulfur dioxide (SO_2) in each combustion process. And it controls the temperature and fuel-to-air ratio during the combustion process to maintain the level of waste discharge to the level required by law.

(5) The Company shall cooperate and comply with the regulations, laws and other requirements related to the environment.

(6) The company has established a health surveillance fund comprising of:

1. A health insurance fund to be a guarantee for the medical expenses of anyone who becomes ill because of the project. In the first year, 1 million baht was put into the fund and 500,000 baht per year was put into the fund in the following years.
2. Funds to support personnel, medical equipment, and research on public health in the amount of 300,000 baht per year.
3. Funds for public health checks in the area to be monitored and observed for communities around the power plant.
4. Provide a project to check the health of people in the area in order to monitor the health of the communities surrounding the power plant within the radius of five kilometers around the project.

(7) Spatial air quality study project - The company hired the Thammasat University Research and Consultancy Institute (TU-RAC) to study the impact of air quality protection guidelines by studying the accumulation of heavy metals in the air, potential support capacity for SO2, NO2, TSP, PM10 and heavy metals, potential support capacity for TSP and PM10 in limestone quarries, accumulation of heavy metals in the soil and guidelines for air quality management in the area around the power plant. The study area was within a radius of five kilometers around the project with the study lasting three years (2018-2020).

(8) Funds for the conservation and restoration of natural resources and the environment: To promote career development in the community, to support research institutes, educational institutions, academics, and the community to use in projects related to the conservation and restoration of natural resources and the environment, to promote career development and professional development in nearby communities, totaling 2 projects per annum with a budget of 400,000 baht per annum.

(9) Public health support budgets to support public health activities in the areas of health promotion and surveillance at the sub-district, district and provincial levels; To support the training of volunteers in neighboring communities, support research budgets or monitor health impacts on people in the area, purchase medical equipment and support personnel in public health to increase knowledge about chemistry, pollution and occupational health and safety in the amount of 300,000 baht per annum.

(10) Budget for occupational health and safety: To support the potential enhancement of the Tambon Health Promotion Hospital and health personnel to take care of the health of people in areas at risk from exposure to pollutants and carcinogens due to the Company's projects; This includes sponsoring the purchase of medical supplies, tools, and medical equipment, training and practice from occupational health personnel or hygiene or occupational medical doctors annually in an amount of 300,000 baht per annum.

(11) Supporting biological resource projects: In cooperation with government agencies or the private sector in the restoration of forest areas in the nearby limestone mountains, project areas or other areas with forestry activities by supporting a budget of Baht 3,000 baht per rai for at least more than 100 rai per annum.

(12) The Company sent the money to the community development fund in the area around the power plant in the amount of 33,484,876.61 baht to allocate to communities around the power plants of the company in various areas. This fund supported community development, career promotion, educational development, overseeing the development of public utilities in the community, including participation in communities in various proposed projects for community development. The budget allocated from this fund helped support sustainable coexistence between the community and the power plants of TPI Polene Power Public Company Limited.

3. Businesses that affect social responsibility

- None -

4. Additional Guidelines on Prevention of Corruption Involvement

The Company Group has a policy against corruption. The Company focuses on promoting morality, ethics, transparency in business operations according to the business ethics of the Company. It also operates its business using a management system that is efficient, transparent, and auditable. In addition, the Company encourages its personnel at all levels not to deal with corruption directly or indirectly, and to participate in preventing and combating corrupt practices related to the Company's business.

The Company Group has a policy regarding gifts and other benefits from/to the person or company that conducts business with the Company. To avoid any conflict of interest, the employees of the company must not accept or claim, directly or indirectly, any gifts or bribes, special remuneration or incentives that are valued by outsiders who are involved in business. And if any employees need to do that, he/she must receive approval by the direct supervisor before taking any action. The receipt of such gifts must comply with the rules, business practices, or business etiquette and it must have no influence on the business decisions of employees.

In addition, the Company Group has a policy that does not allow or encourage unlawful payments or bribing a government agency. It also provides a way to clearly report clues or complaints when people see the wrong action. The investigation and penalties are set out in the Company's Anti-Corruption Policy.

Internal Controls and Risk Management

At the Board of Directors' meeting no. 1/2564, held on 28 January 2021, attended by the three members of the Audit Committee, the Board considered and evaluated the sufficiency of the internal control systems of the Company by investigating the management and other relevant departments, and considering assessment report, which was prepared by the management and reviewed by the Audit Committee. These were five aspects of internal control systems as follows:

1. The organization and environmental control system
2. The risk management system
3. Management control system
4. Information and communication system
5. The monitoring system

The resultant assessment showed that the internal control systems of the Company operated appropriately and sufficiently. The Company provided sufficient employees to efficiently follow-up the internal control systems, and to sufficiently monitor the operations of the Company to safeguard the Company's assets including transactions in which a possible conflict of interest might occur. The Board also considered that other aspects of the internal control systems are sufficient.

Inter-Company Transactions

Disclosure of information about inter-company transactions, and other transactions that might have the potential to involve conflicts of interest, is in compliance with the rules and regulations imposed by the SET and the SEC.

The Audit Committee has performed its duties and responsibilities to review inter-company transactions. The procedures used in inter-company transactions have always been subject to the normal terms and conditions of business and reflect applicable market prices. The Company established procedures for the above transactions in the same manner as for transactions with general customers and all inter-company transactions reflect applicable market prices to ensure that there are no conflicts of interest.

As of 31 December 2020, the Company had inter-company transactions with related persons, which might have the potential to involve conflicts of interest. The Directors and/or Management have considered the reasonableness of the above inter-company transactions, and all were undertaken for the maximum benefit of the Company and were subject to the normal terms and conditions of business to reflect applicable market prices and in compliance with the rules and regulations imposed by the SET and the SEC. Details of the inter-company transactions are contained in Note 5 of the consolidated financial statements as at 31 December 2019, and 31 December 2020 which can be summarized as follows:

1 Inter-Company Transaction between the Company and related persons that might have the potential to involve conflicts of interest

(1) TPI Polene Public Company Limited ("TPIPL")

TPIPL is a major shareholder of the Company. TPIPL holds 70.24% of paid up capital in the Company. In addition, TPIPL and the Company have seven common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana, Miss Malinee Leophairut, Mr. Khantachai Vichakkhana and Mr. Pakorn Leopairut as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from power sales	2,131.3	1,982.7	The Company sold power generated from its power plant to TPIPL. The Company received a monthly electricity tariff from TPIPL at the same rate as the average tariff rate at which TPIPL purchased power from the PEA. (the price does not include VAT). Since April 1, 2018, the Company has used tariff rate type 4 for large business, specific rates according to the time of use, according to the announcement of PEA plus Ft charge.	Classified as ordinary course of business of the Company at reasonable price and beneficial to the Company.
Revenue from petrol and gas (NGV) station	30.2	23.9	The Company sold petrol and gas at its service stations at retail market price to TPIPL for use in TPIPL's vehicles. Such retail price was applied to other customers both related and unrelated to the Company.	Classified as ordinary course of business of the Company at retail market price which is the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the company.
Revenue from sales of steam	33.8	35.4	The Company sold steam to TPIPL at BHT650 per ton which was derived from production cost plus 10% margin. The sale of steam to TPIPL occurs because the company has the steam generated from the electricity production process of the company, Therefore, the company sells steam generated from the electricity generation process to TPIPL to be used in the light weighted concrete production plant of TPI Polene at the price of 525 baht per ton, which is calculated from the estimated steam cost incurred. Still, in 2016, the company entered into an agreement with TPI Polene Plc. to sell steam at 650 baht per ton, which is considered the estimated cost of staem incurred plus 10 percent of the said cost.	Classified as ordinary course of business of the Company which is the utilization of the machines that the company already has to be most effective. However, the price of steam based on the estimated cost of steam generated in 2015 might not cause the company to lose benefits. But it deemed appropriate to improve the price of steam, where the company will charge steam at actual cost plus 10% margin to better reflects the opportunity cost of the Company.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from provision of labor	35.7	36.6	Labor cost to TPIPL occurred because TPI Polene has a power generation unit in the tile production plant of TPIPL but there are not enough qualified workers to operate the power plants. In 2015, the company charged workers according to the cost of salaries, welfare and related expenses of workers sent to work in the power plants. However, in 2016, the company entered into an agreement with TPIPL which stipulates that the labor cost is calculated based on the cost of salary, welfare and expenses related to workers sent to work in the power plants plus 10% margin.	Charging the labor cost in 2015 at costs might not make the company lose benefits; however, it does not allow the company to benefit from such transactions. Still, when there is an adjustment of the said labor cost, the labor cost is calculated according to the cost of salary, welfare and related expenses of workers sent to operate in the power plant plus a 10 % margin to make the company more profit and also to create more operational experience for workers. Hence the transaction is reasonable and beneficial to the company.
Expenses to purchase waste heat	28.1	31.5	In the cement production process of TPIPL, there will be a lot of waste heat left from the cement production process and the company can use such waste heat as a fuel to produce electricity efficiently. The Company entered into an agreement with TPIPL to purchase waste heat emitted from cement plant of TPIPL at BHT0.06/Kwh, which was derived from additional cost of TPIPL to deliver waste heat to power plant of the Company. Since January 1, 2018, the price is set at BHT0.12/Kwh.	The transaction is classified as an ordinary course of business of the Company because the Company must use waste heat as one of the main fuels for power plant, which results in a lower production cost of power of the Company as compared with other fuel. Therefore, this transaction is reasonable and beneficial to the Company.
Expenses to purchase coal	2,221.6	1,998.0	The Company purchased coal from TPIPL according to the contract agreement of sale and service to use coal as a fuel for boiler testing at TPIPL' cost plus 2% margin. The price was adjustable subject to heat content of coal.	The transaction is classified as an ordinary course of business of the Company and necessary for the business of the company. The said price is the price that TPIPL buys from coal traders including shipping costs plus 2% margin and adjustable subject to the actual heat value of the coal received. This transaction is reasonable and beneficial to the Company
Expenses to purchase untreated water	128.0	285.6	The Company purchased untreated water from TPIPL for use in its power generation process according to the contract agreement of sale and service with TPIPL in 2016 at an actual cost plus 10% margin. On October 1, 2017, the water price of the Provincial Waterworks Authority (PWA) is reference price and trade discounts vary according to the production cost of water of TPIPL.	The transaction is classified as an ordinary course of business of the Company and is necessary to the Company. In case the Company makes its own investment in water facilities, the project investment cost is too high and it is not feasible to invest. This transaction at the rate charged is reasonable and beneficial to the Company.
Expenses to purchase shredded tire	2.2	1.6	The Company purchased shredded tires from TPIPL for use in the power generation process in power plants according to the contract agreement of sale and service that the company made with TPIPL in 2016 at production cost plus 10% margin of TPIPL.	The transaction is classified as ordinary course of business of the Company and is necessary to the Company. The price is reasonable and beneficial to the Company.
Expenses for rental of land	16.7	0.0	The Company leased a number of premises from TPIPL, including land for power plant, RDF plant and petrol and gas service stations. The land lease agreement is classified by business type as follows: • Waste heat power plant of the company is located in the same area as the cement plant of TPIPL for the convenience of receiving waste heat as fuel. In addition, RDF-fired power plants and coal-fired power plants are located nearby for the convenience of fuel transportation; hence, the company has a land lease agreement for the said power plants, a total area of 47-0-52.5 rai, totaling 3 contracts. The contract period is between 30-50 years (ending between 2042-2062). The total land rental rate is Baht 5.6 million per year which is comparable or less than the rate as offered by TPIPL to outsider related or unrelated.	The transaction is assets-related or services-related and is to support normal business of the company. It is neccesay for the business of the company with the rental price set at the comparable rate as that of TPIPL offered to others. Therefore, the transaction is considered reasonable. and beneficial to the company
Advance payment	10.8	0.0		
Depreciation and interest expense	0.0	36.7		
Deferred interest	0.0	309.6		
Finance lease liabilities	0.0	777.5		

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
			• RDF plants are located in the same area as the power plant for the convenience of fuel transportation. The Company has a land lease agreement for RDF plant with a total area of 1-1-11.51 rai, with a term of 30 years (ended in year 2046), and a total rental rate of Baht 0.2 million per year which is comparable or less than the rental rate as offered by TPIPL to related and unrelated tenants. • Four petrol and gas stations (NGVs) are located in Saraburi Province to provide services to general customers and the four areas are located along Mittraphap Road, which is the main road of the country attracting a lot of traffic of various vehicles, which is the target customer of the service station. The Company has a land lease agreement for four petrol and gas (NGV) stations, with a total area of 32-3-1 rai, with a term of three years ending in June 2022. Total land rental is Baht 0.8 million per year, which is comparable or less than the rental rate that TPIPL offered to others, both related and unrelated.	
Expenses for service fee under Framework Agreement	132.0	132.0	The Company entered into a Framework Agreement with TPIPL whereby TPIPL was engaged to perform certain tasks and responsibilities for the Company both at the factory and head office, primarily relating to, among others, purchasing, administration, accounting, finance, security service, public relations, legal, engineering, information technology, HR and other services. The service fee was at Baht 10,000,000 per month, which was derived from service cost plus 10% margin. In 2018, the service fee was at Baht 11,000,000 per month.	The transaction is classified as an ordinary course of business of the Company with the service fee calculated from the cost of services plus 10% margin. If the company does not accept such services from TPIPL and needs to hire more staff and invest more in information technology systems, it is not worth the investment. Hence the transaction is reasonable and beneficial to the company.
Expenses for material samples analysis and industrial waste disposal service fees	230.8	193.9	The Company entered into a contract with TPIPL whereby TPIPL was engaged to perform material sample analysis and industrial waste disposal services. The material sample analysis fee consists of (1) material collection fees of Bath 100 per sample (2) materials preparation fees of Bath 300 per sample (3) analysis fees based on the material types from Bath 300-10,400 per sample; and an industrial waste disposal services fees, based on the waste type and chloride rate, is about Bath 1,000 - 5,000 per ton with a special discount of 10% of for this fee.	The transaction is classified as an ordinary course of business of the Company with the service fee referenced from Thailand Institute of Scientific and Technological Research, Institute for Scientific and Technological Research and Services (ISTRS) and Environmental Research Institute Chulalongkorn University. Hence the transaction is reasonable and beneficial to the company.

(2) TPI Polene Bio Organics Company Limited

TPI Polene Bio Organics Company Limited is a 99.99%-owned subsidiary company of TPIPL. TPIPL holds 99.99% of paid up capital in TPI Polene Bio Organics Co., Ltd. In addition, the Company and TPI Polene Bio Organics Co., Ltd. have eight common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana, Miss Pattrapan Leopairut, Mr. Pakorn Leopairut, Mr. Pakkapol Leopairut and Mrs. Nitawan Leophairatana as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from petrol and gas (NGV) station	0.1	0.0	The Company sold petrol and gas at its service stations at a retail market price to TPIPL for use in TPIPL's vehicles. Such a retail price was applied to other customers both related and unrelated to the Company.	Classified as an ordinary course of business of the Company at retail market price which is the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the Company.
Expenses for purchasing products and other services	4.3	2.7	The Company purchased products and services from TPI Polene Bio Organics Company Limited to use in the general operations of the Company. The transactions can be divided into the following main items: 1) The Company purchased products for trading in its convenience stores at its petrol and gas stations. These included wood vinegar, organice fertilizer, dish washing liquid, etc. The purchase price of such products is set at the same price as that of TPI Polene Bio Organic, and which is sold to other customers, both related and unrelated. 2) The Company purchases spare parts, supplies and other raw materials that TPI Polene Bio Oraganics Company Limited has to use in the business of the company. The purchase price of such products is determined according to the cost of TPI Polene Bio Organics Company Limited.	The transaction is classified as an ordinary course of business that supports the Company's operations. The purchase price is the same price that TPI Polene Bio Organics sells to other customers, both related and unrelated to the company and/or determine the purchase price and service according to the costs incurred by TPI Polene Bio Organics, as the case may be. This transaction is therefore reasonable and beneficial to the Company.

(3) TPI Concrete Company Limited

TPI Concrete Company Limited is a 99.99%-owned subsidiary company of TPIPL. TPIPL holds 99.99% of paid up capital in TPI Concrete Company Limited. In addition, the Company and TPI Concrete Company Limited have four common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana and Mrs. Orapin Leophairatana as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from petrol and gas (NGV) station	0.8	0.5	The Company sold petrol and gas at its service stations at retail market price to TPIPL for use in TPIPL's vehicles. Such retail price was applied to other customers both related and unrelated to the Company.	Classified as an ordinary course of business of the Company at retail market prices which is the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the Company.

(4) TPI All Seasons Company Limited

TPI All Seasons Company Limited is a 99.99%-owned subsidiary company of TPIPL. TPIPL holds 99.99% of paid up capital in TPI All Seasons Company Limited. In addition, the Company and TPI All Seasons Company Limited have six common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana, Mr. Pakorn Leopairut and Ms. Nitawan Leophairatana as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from petrol and gas (NGV) station	0.3	0.2	The Company sold petrol and gas at its service stations at retail market price to TPIPL for use in TPIPL's vehicles. Such retail price were applied to other customers, both related and unrelated to the Company.	Classified as an ordinary course of business of the Company at retail market prices which is the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the Company.

(5) Thai Nitrate Company Limited

Thai Nitrate Company Limited is a 99.99%-owned subsidiary company of TPIPL. TPIPL holds 99.99% of paid up capital in Thai Nitrate Company Limited. In addition, the Company and Thai Nitrate Company Limited have six common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana, Mr. Pakorn Leopairut and Mr. Pakkapol Leopairut as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from petrol and gas (NGV) station	0.0	0.0	The Company sold petrol and gas at its service stations at retail market price to TPIPL for use in TPIPL's vehicles. Such retail price were applied to other customers both related and unrelated to the Company.	Classified as an ordinary course of business of the Company at retail market prices which are the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the Company.

(6) Bangkok Union Life Insurance Public Company Limited

Bangkok Union Life Insurance Public Company Limited is 25.00% held by TPI Polene Public Company Limited, 9.60% held by Bangkok Union Insurance Public Company Limited and 15.18% by Leophairatana group. In addition, the Company and Bangkok Union Life Insurance Public Company Limited have three common directors including: Mr. Pramuan Leophairatana, Mr. Prayad Liewphairatana and Miss Malinee Leophairut as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from petrol and gas (NGV) station	0.1	0.0	The Company sold petrol and gas at its service stations at retail market prices to TPIPL for use in TPIPL's vehicles. Such retail price were applied to other customers both related and unrelated to the Company.	Classified as an ordinary course of business of the Company at retail market price which are the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the company.
Expenses for insurance premium	2.8	3.4	The company purchased a life insurance policy as welfare for the employees of the company, Bangkok Union Life Insurance's premium rate is the best rate and is the same rate that Bangkok Union Life Insurance Plc. collected from other related and non-related customers.	Classified as an ordinary course of business of the Company. This transaction was made on bidding basis at market price. Bangkok United Life Insurance's premium rate is comparable to the rate that Bangkok Union Life Insurance Plc. collected from other related and non-related customers. This transaction is therefore reasonable and beneficial to the Company.
Advance for insurance premium	0.9	0.7		

(7) Bangkok Union Insurance Public Company Limited

Bangkok Union Insurance Public Company Limited is 12.87% held by Leophairatana Enterprises Co. Ltd., 12.74% held by Bangkok Union Life Insurance Public Company Limited, 9.19% by Thanapornchai Enterprises Co. Ltd. and 14.57% by Leophairatana group. In addition, the Company and Bangkok Union Insurance Public Company Limited have three common directors including: Mr. Prachai Leophairatana, Miss Malinee Leophairut and Mr. Manu Leopairot as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Revenue from petrol and gas (NGV) station	0.1	0.1	The Company sold petrol and gas at its service stations at retail market price to TPIPL for use in TPIPL's vehicles. Such retail price was applied to other customers both related and unrelated to the Company.	Classified as ordinary course of business of the Company at retail market price which is the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the company.
Expenses for insurance premium	68.0	79.6	The Company purchased property risk insurance, construction insurance, third party liability insurance, money insurance and legal liability insurance arising from the type 3 controlled business under the law on fuel control, which relates to the operation of natural gas control (NGV). The company has negotiated insurance rates before purchasing the policy and renews insurance and the insurance premium rate is the same rate that Bangkok Union Insurance collected from both related and non-related customers.	Classified as ordinary course of business of the Company. This transaction was made on bidding basis at market price. Bangkok United Insurance's premium rate is comparable to the rate that Bangkok Union Insurance Plc. collected from other related and non-related customers. This transaction is therefore reasonable and beneficial to the Company.
Advance for insurance premium	41.6	35.6		

(8) United Grain Industry Company Limited

United Grain Industry Company Limited is 52.63% held by Leophairatana Enterprises Co. Ltd., 19.00% held by TPI Polene Plc. and 15.71% by Leophairatana group. In addition, the Company and United Grain Industry Company Limited have 9 common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana, Miss Malinee Leophairut, Miss Pattrapan Leophairut, Mr. Pakorn Leopairut, Mr. Pakkapol Leopairut and Ms. Nitawan Leophairatana as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Expenses for land rental	7.2	0.0	Land rental is a normal business support transaction of the company. The Company have RDF plant and oil and gas (NGV) service stations located on the land of United Grain Industry Company, therefore, entered into a land lease agreement for business use of RDF plant and oil and gas (NGV) service stations, which are classified by business type as follows: • RDF plants are located in the same area as the power plant for the convenience of fuel transportation. The Company has a land lease agreement for RDF plants with a total area of 46-1-67.18 rai, with a term of 30 years (contract ended 2046) with a total rental rate of Baht 5.6 million per year, which is at the same level or not higher than the rental price that the United Grain Industry provides to others, both related and non-related. • Petrol and gas service stations (NGV) Changsanit branch, was located in Jaeramae District, Ubon Ratchathani providing services to general customers in such areas. The Company has entered into the land lease agreements for oil and gas service stations. (NGV) for a total area of 2-3-44.5 rai, the contract period is 3 years, ending the contract in June 2022, with the total land rental rate of Baht 1.0 million per year which is at the same rate that United Grain Industry offered to others, both related and non-related.	Classified as ordinary course of business at market rate as offered by United Grain Industry Co., Ltd. to both related parties and non-related parties. This transaction is therefore reasonable and beneficial to the Company.
Payable advance for land rental	2.1	0.0		
Depreciation and interest expense	0.0	12.6		
Deferred interest	0.0	97.6		
Finance lease liabilities	0.0	252.7		

(9) Pornchai Enterprises Company Limited

Pornchai Enterprises Company Limited is 75.12% held by Leophairatana Enterprises Co. Ltd., 0.65% held by TPI Polene Plc. and 0.33% by Leophairatana group. In addition, the Company and Pornchai Enterprises Company Limited have five common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana and Miss Malinee Leophairut as of 31 December 2019.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Expenses for office rental	0.9	0.6	The company rented the 8th floor of the TPI Tower building for use as a 186-square-meter office space. The lease term is three years. The contract expires in May 2022 with the rental rate of Baht 160.0 per square meter per month and the service fee is baht 240.0 per square meter per month which is at the same level or not higher than the rental rate Pornchai Enterprises offered to others, both related and non-related.	Classified as an ordinary course of business and is necessary for business operations of the Company. The rental price is set at a rate that is not higher than the general market price compared to similar properties and is in the vicinity and at the same rate Pornchai Enterprises offered to others. This transaction is therefore reasonable and beneficial to the Company.
Deposit	0.2	0.2		
Depreciation and interest expense	0.0	12.6		
Deferred interest	0.0	97.6		
Finance lease liabilities	0.0	252.7		

(10) Thanapornchai Enterprises Company Limited

Pornchai Enterprises Company Limited is 25.13% held by Leophairatana Enterprises Co. Ltd., 9.81% held by Thanapornchai Enterprises Company Limited and 21.49% by Leophairatana group. In addition, the Company and Thanapornchai Enterprises Company Limited have nine common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana, Miss Malinee Leophairut, Miss Pattrapan Leophairut, Mr. Pakorn Leopairut, Mr. Pakkapol Leopairut and Ms. Nitawan Leophairatana as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Expenses for Land rental	1.3	0.0	The Company rents the land for use in the business of two oil stations and gas (NGV) locations, namely Puchao Samingphrai Branch in Samutprakan province and Phayuha Khiri Branch in Nakhonsawan province to provide services to general customers. The two areas are located along the road that attracts traffic of various vehicles which is the target customer of the service station. The company has a land lease agreement for two oil and gas (NGV) stations, with a total area of 4-2-11 rai. The contract period is three years, ending in June 2022 with rental rate of Baht 1.3 million per year which is in the same rate Thanapornchai Enterprise offered to others, both related and non-related.	Classified as an ordinary course of business and is necessary for business operations of the Company. The rental price is set at a rate that is not higher than the general market price compared to similar properties and is in the vicinity and at the same rate Thanapornchai Enterprises offered to others. This transaction is therefore reasonable and beneficial to the Company.
Depreciation and interest expense	0.0	1.4		
Deferred interest	0.0	0.5		
Finance lease liabilities	0.0	5.9		

(11) Saraburi Cotton Factory Company Limited

Saraburi Cotton Factory Company Limited is 23.12% held by Leophairatana group, 5.75% held by Leophairatana Enterprises Co. Ltd. In addition, the Company and Saraburi Cotton Factory Company Limited have six common directors including: Mr. Prachai Leophairatana, Mrs. Orapin Leophairatana, Miss Pattrapan Leophairut, Mr. Pakorn Leopairut, Mr. Pakkapol Leopairut and Ms. Nitawan Leophairatana as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Expenses for Land rental	1.3	0.0	The Company rents the land for use in the business of oil stations and gas (NGV) locations, Pakkaosan Branch in Saraburi province to provide services to general customers. The area is located along the road that attracts traffic of various vehicles which is the target customer of the service station. The company has a land lease agreement for the oil and gas (NGV) stations, with a total area of 2-2-11.75 rai. The contract period is three years, ending in June 2022 with rental rate of Baht 1.3 million per year which is in the same rate Saraburi Cotton Factory Company Limited offered to others, both related and non-related.	Classified as an ordinary course of business and is necessary for the business operations of the Company. The rental price is set at a rate that is not higher than the general market price compared to similar properties and is in the vicinity and at the same rate Saraburi Cotton Factory Company Limited offered to others. This transaction is therefore reasonable and beneficial to the Company.
Depreciation and interest expense	0.0	1.4		
Deferred interest	0.0	0.5		
Finance lease liabilities	0.0	5.9		

(12) Leophairatana Enterprises Company Limited

Leophairatana Enterprises Company Limited is 88.40% held by Leophairatana group, 6.25% by Pornchai Enterprises Co. Ltd., 2.19 % held by TPI Holdings Company Limited and 0.94 % by TPI EOEG Co. Ltd. In addition, the Company and Thanapornchai Enterprises Company Limited have five common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana and Miss Malinee Leophairut as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Expenses for Land rental	4.0	0.0	The Company rents the land for use in the business of three oil stations and gas (NGV) locations, namely Onnut branch, Sudbantat branch, and Soi Klang branch in Bangkok to provide services to general customers. The three areas are located along the road that attracts traffic of various vehicles which is the target customer of the service station. The company has a land lease agreement for three oil and gas (NGV) stations, with a total area of 7-0-42 rai. The contract period is three years, ending in June 2022 with rental rate of Baht 4.0 million per year which is in the same rate Leophairatana Enterprises Company Limited offered to others, both related and non-related.	Classified as an ordinary course of business and is necessary for business operations of the Company. The rental price is set at a rate that is not higher than the general market price compared to similar properties and is in the vicinity and at the same rate Leophairatana Enterprises Company Limited offered to others. This transaction is therefore reasonable and beneficial to the Company
Depreciation and interest expense	0.0	4.2		
Deferred interest	0.0	1.5		
Finance lease liabilities	0.0	17.8		

(13) TPI Healthcare Company Limited

TPI Healthcare Company Limited is 99.99% held by Leophairatana group, 6.25% by Pornchai Enterprises Co. Ltd., 2.19 % held by TPI Holdings Company Limited and 0.94 % by TPI EOEG Co. Ltd. In addition, the Company and Thanapornchai Enterprises Company Limited have five common directors including: Mr. Prachai Leophairatana, Dr. Pramuan Leophairatana, Mr. Prayad Liewphairatana, Mrs. Orapin Leophairatana and Miss Malinee Leophairut as of 31 December 2020.

Transaction	Transaction Size (Million BHT)		Necessity and Reasonableness	Opinion of the Audit Committee
	Fiscal year ended 31 December, 2019	Fiscal year ended 31 December, 2020		
Expenses for Product purchases	8.7	7.9	The Company purchases products from TPI Healthcare Company Limited for sales promotion at the Company's petrol stations such as drinks. The purchase price of the product is the same rate that TPI Healthcare Company Limited offered to others, both related and non-related	Classified as an ordinary course of business of the Company at retail market price which is the same level that the company sold to other customers, both related and not related to the company; hence, the transaction is reasonable and beneficial to the company.

The details of the connected transactions for 2018[DO16] can be found in the annual report of the company through the company's website (www.tpipolenepower.co.th).

2. Procedures to approve Related Transactions

The Company's Board of Directors' meeting no.2/2563, held on 28 February 2020, passed a resolution to establish and approve policies governing related party transactions as follows:

1. The Company is required to comply with measures and approval procedures set forth in the relevant rules and regulations of the SEC and the SET, concerning related party transactions and relevant disclosure requirements. The procedures used in related party transactions have always been subject to the normal terms and conditions of business and reflect applicable market prices. The Directors and people who have potential conflicts of interest will not attend the Board of Directors' meeting with an agenda item to consider and approve the related party transactions.
2. The Board of Directors will provide procedures to approve the related party transactions to be carried out under the standards of integrity and reviewed by the Audit Committee to be in the best interest of the Company and its shareholders. This complies with the SEC and the SET regulations. The Company will disclose the related party transactions to the public accurately and completely. The related party transactions are subject to reflect applicable market prices.

3. Policy for the Related Party Transactions

To have the related party transactions carried out on transparent basis, the Company has a policy for the related party transactions as follows:

1. The Company expects to continue its business transactions with major shareholder and related parties in the normal course of its business without conflict of interest. The Company is committed to comply with regulations of the SET and related authorities based on reasonable criteria and applicable market prices.
2. In case there will be any related party transactions occurring in the future, the Company will carry out the related party transaction to be in compliance with regulations of the Securities and Exchange Act B.E 2535. Disclosure of related party transactions shall be in accordance with the relevant rules and regulations of the SET as well as prevailing accounting policy.
3. In case the related party transactions continuously occur as a normal course of business, the Company has policies and measures in place to regulate such related party transactions to be carried out under normal commercial terms and conditions with fair and reasonable prices. Such transactions can be audited and are in compliance with the normal terms and conditions of general trading, which will be approved by the Board of Directors.
4. In case there are related party transactions or any amendments of the agreement and terms in relation to any transaction with major shareholders, directors or management or any person, in which conflict of interests might occur, such transactions are subject to an approval process in which only unconnected persons may participate.

4. Potential Future Related Transactions

The Company expects to continue its business transactions with major shareholders and/or related parties in the normal course of its business. Such transactions are necessary to the business operation of the Company. The transactions are as follows:

1. To sell power to TPIPL;
2. To sell petrol and gas at petrol and gas stations to TPIPL group and persons that might have the potential to involve conflicts of interest;
3. To lease a number of premises, including land and office space, from TPIPL group and persons that might have the potential to involve conflicts of interest;
4. To purchase / to sell products and services with TPIPL group as follows:
   - To purchase products and services i.e., waste heat, untreated water, coal, spare parts and services provided by TPIPL at both factory and head office to support the Company's operation under the Frame Work Agreement;
   - To sell products and services to TPIPL i.e. steam, provision of labor for repair and maintenance of power plants;
5. To purchase/sell various products and services within TPIPL group such as RDF, organic material, spares parts and other raw materials;
6. To purchase all risk insurance cover and life insurance cover from related parties that might have the potential to involve conflicts of interest.

The Company adheres to practices for the connected transactions to comply with measures and approval procedures set forth in the relevant rules and regulations of the Securities and Exchange Act B.E 2535, the Capital Market Supervisory Board, the SEC, and the SET including the policy and related notifications of the Company such as Code of Practice, policies governing related party transactions.

Management Discussion and Analysis

1. Operating Results and Financial Status for 2020

Revenues

Total revenue from sales (comprising revenue from sale of power and goods and revenue from adders) in 2020 was Baht 11,119.4 million compared with Baht 10,571.2 million in 2019, an increase of Baht 548.1 million or 5.2%. The increase in sales revenues was primarily attributed to an increase in sales revenues in the energy and utilities business, which was Baht 10,586.8 million in 2020 compared with Baht 9,851.5 million in 2019.

In 2020, sales of power were Baht 10,547.2 million, comprising sales to EGAT of Baht 8,564.4 million and sales to TPIPL of Baht 1,982.8 million, whereas in 2019 sales of power was Baht 9,807.3 million, comprising sales to EGAT of Baht 7,676.0 million and sales to TPIPL of Baht 2,131.3 million. The increase in revenue from power sales was mainly due to installations of boilers (B13, B14) to expand power capacity resulting in an increase in sales to the Electricity Generating Authority of Thailand.

Sales from petrol and gas stations decreased from Baht 719.7 million in 2019 to Baht 532.6 million in 2020, which was mainly due to a decrease in sales volume of petrol and gas.

Other Income

Other income increased from Baht 164.3 million in 2019 to Baht 281.8 million in 2020, an increase of Baht 117.5 million due to an increase of revenue from insurance compensation of Baht 56.5 million, from Baht 43.0 million in 2019 to Baht 99.6 million in 2020. Meanwhile, the company's rental income increased by Baht 47.0 million from Baht 94.3 million in 2019 to Baht 141.4 million in 2020.

Cost of Goods Sold

Cost of goods sold increased from Baht 6,027.7 million in 2019 to Baht 5,529.7 million in 2020, an increase of Baht 497.9 million or 9.0%, which was mainly due to an increase in units of electricity production in 2020.

Gross Profit

Gross profit increased from Baht 5,041.5 million in 2019 to Baht 5,091.7 million in 2020, an increase of Baht 50.2 million or 1.0 %. This was a result of higher units of power sales in 2020 compared with 2019. Gross profit margins decreased from 47.7% in 2019 to 45.8% in 2020.

Selling Expenses

Selling expenses decreased from Baht 75.7 million in 2019 to Baht 66.4 million in 2020, a decrease of Baht 9.2 million or 12.2%. Selling expenses accounted for 0.6% of sales revenue in 2020, a decrease from 0.7% in 2019, mainly due to higher sales revenue from the energy and utilities business.

Administrative Expenses

Administrative expenses increased from Baht 432.2 million in 2019 to Baht 432.7 million in 2020, an increase of Baht 0.6 million or 0.1%. Administrative expenses accounted for 4.1% and 3.9% of total sales revenue in 2019 and 2020, respectively.

Finance cost

In 2020, the Company recorded finance costs of Baht 285.2 million compared with Baht 159.5 million in 2019, an increase of Baht 125.7 million or 78.8%, as the Company issued debentures in the amount of Baht 4,000 million in August 2020 for purposes of investment in various power plant projects (such as RDF plant, RDF storage warehouse, conveyor system and other related machines), improvement of power plant efficiency, expansion RDF production capacity, working capital, and land purchases to support the Company' s future investment in power plant projects in the special economic zone in Songkhla Province.

Income Tax Expense

In 2020, the Company recorded income tax expenses of Baht 122.2 million, an increase of Baht 20.2 million or 19.8% from Baht 102.0 million in 2019.

Net Profit

In 2020, the Company and subsidiaries recorded EBITDA of Baht 5,750 million, an increase of Baht 245.0 million or 4.0% from Baht 5,505 million in 2019, due to an installation of additional boilers to expand power capacity.

In 2020, the Company and its subsidiaries registered net profits of Baht 4,506 million, a decrease of Baht 101 million or 2% compared with 2019. This was due to a net foreign exchange loss of Baht 4 million in 2020, while there was a net foreign exchange gain of Baht 92 million in 2019. There was also an increase of financial costs of Baht 126 million, from Baht 159 million in 2019 to Baht 285 million in 2020.

The Company's net profit margin decreased from 42.2% in 2019 to 39.4% in 2020, mainly due to the increase in financial costs.

2. Financial Status and Financial Ratio

Assets

At year-end 2019 and 2020, total consolidated assets were Baht 37,852.6 million and Baht 43,775.2 million respectively. The increase in total assets is mainly due to investment in property, plants, and equipment and the increase in trade receivable accounts and inventory accounts as sales increased.

At year-end 2019 and 2020, total consolidated current assets were Baht 6,667.1 million and Baht 7,158.1 million respectively. Accounts receivables represented 32.2 % and 33.9 % of total current assets, which equated to an average collection period of 63 days and 74 days respectively. Inventory accounted for 15.8 % and 17.4 % of total current assets in 2019 and 2020, equating to average inventory turnover periods of 53 days and 69 days respectively.

As of 31 December 2019 and 31 December 2020, the property, plants, and equipment of the Company were valued at Baht 30,770.4 million and Baht 35,605.6 million respectively. The increase in the property, plants and equipment value was mainly due to additional investment in property for future power plants of the Company.

Liabilities

Total consolidated liabilities were Baht 10,742.2 million and Baht 14,847.0 million at the end of 2019 and 2020 respectively. The total liabilities increased as the Company issued debentures in the amount of Baht 4,000 million for purposes of investment in various power plant projects such as improvement of power plant efficiency, expansion RDF production capacity, and working capital and land purchases to support the Company's future investment in power plant projects in the special economic zone in Songkhla Province.

Other payables accounted for 67.9% and 13.7% of total current liabilities in 2019 and 2020 respectively, as the Company paid the cost of power plants, machinery, and equipment to overseas suppliers, who completed the installation work of the power plants.

Trade receivable accounts at year-end 2019 and 2020 were Baht 439.8 million and Baht 432.5 million, representing an average payment period of 27 days and 26 days respectively. During the COVID-19 pandemic, the Company always repaid its debts on time to relieve the financial burden of the Company's business partners.

Shareholders' Equity

As of 31 December 2019 and 31 December 2020, shareholders' equity was Baht 27,110.3 million and Baht 28,928.1 million respectively. In 2020, the Company operated its business with a profit.

Capital Structure

At the end of 2019 and 2020, total debt to equity ratios were at 0.40 and 0.51 times and the financial debt to equity ratios were 0.30 and 0.45 times respectively. In 2020, the Company issued debentures in the amount of Baht 4,000 million for purposes of investment in various power plant projects such as improvement of power plant efficiency, expansion RDF production capacity, working capital and land purchases to support the Company's future investment in power plant projects in the special economic zone in Songkhla Province.

Financial Liquidity

In 2019 and 2020, the Company recorded consolidated net cash flow from operating activities of Baht 4,566.9 million and 4,820.4 million, respectively.

In 2019 and 2020, the Company registered net cash flow in investing activities of Baht (5,781.6) million and Baht (4,820.4) million respectively. In 2020, the Company had higher investments in machinery and land compared to 2019.

In 2019 and 2020, the Company recorded net cash flow from financing activities of Baht 1,348.4 million and Baht 1,166.0 million, respectively. As a result, the Company's net cash flow after financing activities in 2019 and 2020, was at Baht 133.7 million and Baht 1,100.6 million, respectively.

Source of funds

The Company and its subsidiaries have sufficient funds for investment in various projects. The source of funds comes from the net cash flow from operating activities, debenture and bill of exchange offerings, loans from domestic financial institutions, and revolving credit from financial institutions.

Financial obligations of the Company and subsidiaries as of 31 December 2020 are as follows:

1. Debentures: The debentures debt of the Company and its subsidiaries equals Baht 12,000 million under the Medium Term Note Program, in accordance with the terms and conditions of the debentures stipulated that the debt to equity ratio must be maintained (debt means interest-bearing liabilities) at the end of the quarterly accounting period or the end of the fiscal year throughout the term of the debentures and must not exceed 1.75: 1.

As of 31 December 2020, the Company and its subsidiaries have an interest-bearing debt to equity ratio of 0.45: 1, which does not exceed the required rate of 1.75: 1, in accordance with the terms and conditions of the debenture agreements of the Company. However, the Company's net interest-bearing debt ratio (net after cash and cash equivalents and current investments) to shareholders' equity equals 0.33: 1.

2. Bill of Exchange: The bill of exchange amount of the Company and subsidiaries is equal to 240 million baht, which is used as working capital in its business operations.

Use of proceeds from the offering for sale of debentures

In 2020, the Company issued and sold debentures, totaling Baht 4,000 million, which can be summarized as follows:

Proceeds Utilization	Amount (Million Baht)	Period of proceeds utilization	Progress of proceeds utilization
1. Investment in boilers, RDF plant, improvement of power plant efficiency, and expansion RDF production capacity	2,000	Within 2021	It will be fully utilized by 2021.
2. Land purchases to support the Company's future investment in power plant projects in the special economic zone in Songkhla Province	1,000	Within 2021	It will be fully utilized by 2021.
3. Working capital	1,000	Within 2020	Fully utilized
Total amount	4,000		

Commitments with non-related parties

As of 31 December 2020, the Company and its subsidiaries had commitments as follows:

1. Commitments under construction contracts for machinery and equipment in the amount of Baht 458.1 million, using sources of funds from cash flows from business operations including the issuance and offering of debentures;

2. Commitments under land lease agreements which have commitments within 1 year of Baht 0.5 million by using funding from cash flows from business operations;

3. Letter of credit obligation (for importing machinery and spare parts) in the amount of Baht 97.9 million and bank guarantees of Baht 117.1 million by using the funds from the cash flow from business operations and revolving credit facilities from financial institutions in the amount of Baht 1,600 million.

Financial information

1. Financial statements and auditor's report

1.1 Auditor

The auditors for the consolidated and separate financial statements which were audited for the year ended 31 December 2020 is Mr. Bunyarit Thanormcharoen, registration number 7900 from KPMG Phoomchai Audit Ltd.

1.2 Summary of audit reports

The auditor audited the consolidated and separate financial statements of TPI Polene Power Public Company Limited and its subsidiaries and of TPI Polene Power Public Company Limited, which consists of the consolidated and separate statements of financial position as at 31 December 2020, the consolidated and separate statements of comprehensive income, changes in equity, and cash flow for the same year ended and notes which contain a summary of significant accounting policies and other matters.

The auditor is of the opinion that the above financial statements present fairly, in all material respects, the financial position of the company as of 31 December 2020, and cash flow for the year then ended in accordance with Thai Financial Reporting Standards.

2. Summary of separate financial statements of TPI Polene Power Plc. in 2018, 2019 and 2020

2.1 Statement of financial position

(Unit : Million Baht)	As of December 31, 2020					
	2018	%	2019	%	2020	%
Current assets						
Cash and cash equivalents	450.16	1.43	689.56	1.82	1,790.58	4.09
Current investments	3,960.65	12.56	2,650.70	7.00	1,496.24	3.42
Trade accounts receivable	1,530.70	4.85	2,148.28	5.68	2,425.69	5.54
Other receivables	104.53	0.33	54.59	0.14	148.50	0.34
Receivables and advances to related parties	35.85	0.11	61.00	0.16	40.14	0.09
Inventories	587.73	1.86	1,052.51	2.78	1,248.86	2.85
Other current assets	12.20	0.04	10.47	0.03	8.06	0.02
Total current assets	**6,681.82**	**21.18**	**6,667.09**	**17.61**	**7,158.07**	**16.35**
Non-current assets						
Investments in subsidiaries	-	-	-	-	-	-
Other long-term investments	5.34	0.02	186.53	0.49	188.05	0.43
Property, plant and equipment	24,642.82	78.13	30,770.44	81.29	35,605.61	81.34
Right-of-use assets	-	-	-	-	650.62	1.49
Leasehold rights	0.11	0.00	0.00	0.00	0.00	0.00
Advances for plant and equipment	106.95	0.34	116.24	0.31	58.59	0.13
Deferred tax assets	91.70	0.29	91.01	0.24	82.26	0.19
Other non-current assets	12.48	0.04	21.26	0.06	31.95	0.07
Total non-current assets	**24,859.41**	**78.82**	**31,185.49**	**82.39**	**36,617.09**	**83.65**
Total assets	**31,541.22**	**100.00**	**37,852.57**	**100.00**	**43,775.15**	**100.00**

(Unit : Million Baht)	As of December 31, 2020					
	2018	%	2019	%	2020	%
Current liabilities						
Short-term loans from financial institutions	-	-	-	-	239.63	0.55
Trade accounts payable	377.10	1.20	439.83	1.16	432.52	0.99
Other payables	1,611.41	5.11	1,583.96	4.18	791.22	1.81
Payables and advances from related parties	79.82	0.25	93.99	0.25	66.23	0.15
Current portion of lease liability	-	-	-	-	14.85	0.03
Current portion of debentures	-	-	-	-	4,000.00	9.14
Interest payable	14.53	0.05	34.86	0.09	53.24	0.12
Short-term loans from related party	-	-	-	-	-	-
Current portion of long-term loans from financial institutions	-	-	-	-	-	-
Income tax payable	35.62	0.11	35.56	0.09	47.47	0.11
Other current liabilities	118.71	0.38	146.08	0.39	139.06	0.32
Total current liabilities	**2,237.19**	**7.09**	**2,334.27**	**6.17**	**5,784.19**	**13.21**
Non-current liabilities						
Long-term loans from financial institutions	-	-	-	-	-	-
Long-term loan from related party	-	-	-	-	645.18	1.47
Debentures	4,000.00	12.68	8,000.00	21.13	8,000.00	18.28
Non-current Provisions for employee benefits	87.70	0.28	151.12	0.40	152.71	0.35
Decommissioning costs	167.96	0.53	256.86	0.68	264.93	0.61
Total non-current liabilities	**4,255.66**	**13.49**	**8,407.97**	**22.21**	**9,062.82**	**20.70**
Total liabilities	**6,492.85**	**20.59**	**10,742.24**	**28.38**	**14,847.01**	**33.92**
Shareholders' equity						
Authorized share capital	8,400.00	26.63	8,400.00	22.19	8,400.00	19.19
Issued and paid share capital	8,400.00	26.63	8,400.00	22.19	8,400.00	19.19
Shares premium on ordinary shares	14,580.89	46.23	14,580.89	38.52	14,580.89	33.31
Retained earnings						
Appropriated-Legal reserve	533.36	1.69	763.64	2.02	840.00	1.92
Unappropriated	1,534.04	4.86	3,365.96	8.89	5,107.42	11.67
Other components of equity	0.09	0.00	(0.16)	(0.00)	(0.18)	(0.00)
Non-controling interests	-	-	0.00	0.00	0.00	0.00
Total liabilities	**25,048.38**	**79.41**	**27,110.33**	**71.62**	**28,924.14**	**66.08**
Total liabilities and shareholders' equity	**31,541.22**	**100.00**	**37,852.57**	**100.00**	**43,775.15**	**100.00**

2.2 Statement of comprehensive income

(Unit : Million Baht)	As of December 31, 2020					
	2018	%	2019	%	2020	%
Revenue						
Revenue from sale of power and goods	4,235.36	55.58	6,338.04	59.96	6,333.23	56.96
Revenue from adders	3,384.45	44.42	4,233.16	40.04	4,786.12	43.04
	7,619.81	**100.00**	**10,571.20**	**100.00**	**11,119.35**	**100.00**
Cost of sales of power and goods	(3,651.43)	(47.92)	(5,529.73)	(52.31)	(6,027.66)	(54.21)
Gross Profit	**3,968.38**	**52.08**	**5,041.47**	**47.69**	**5,091.69**	**45.79**
Net foreign exchange gain	46.62	0.61	91.64	0.87	-	-
Investment income	49.17	0.65	78.69	0.74	42.86	0.39
Other income	199.75	2.62	164.29	1.55	281.79	2.53
Total income	**4,263.92**	**55.96**	**5,376.10**	**50.86**	**5,416.35**	**48.71**
Distribution costs	(66.56)	(0.87)	(75.68)	(0.72)	(66.44)	(0.60)
Administrative expenses	(318.76)	(4.18)	(432.15)	(4.09)	(432.73)	(3.89)
Net foreign exchange loss	-	-	-	-	(3.99)	(0.04)
Total expenses	**(385.32)**	**(5.06)**	**(507.83)**	**(4.80)**	**(503.16)**	**(4.53)**
Profit from operations	**3,878.60**	**50.90**	**4,868.27**	**46.05**	**4,913.19**	**44.19**
Financial costs	(18.97)	(0.25)	(159.48)	(1.51)	(285.18)	(2.56)
Share of profit (loss) of subsidiaries	-	-	-	-	-	-
Profit before income tax expense	**3,859.63**	**50.65**	**4,708.79**	**44.54**	**4,628.01**	**41.62**
Tax expense	(160.67)	(2.11)	(101.98)	(0.96)	(122.18)	(1.10)
Profit for the year	**3,698.96**	**48.54**	**4,606.81**	**43.58**	**4,505.83**	**40.52**
Other comprehensive income (expense)						
Items that will be reclassified to profit or loss						
Exchange differences on translating foreign operations	0.09	0.00	(0.25)	(0.00)	(0.02)	(0.00)
Share of other comprehensive income (expense) of subsidiaries	-	-	-	-	-	-
Total items that will be reclassified subsequently to profit or loss	0.09	0.00	(0.25)	(0.00)	(0.02)	(0.00)
Items that will not be reclassified to profit or loss						
Gains (losses) on remeasurements of defined benefit plans	(10.89)	(0.14)	(30.76)	(0.29)	-	-
Income tax relating to items that will not be reclassified	2.18	0.03	6.15	0.06	-	-
Total items that will not be reclassified to profit or loss	(8.71)	(0.11)	(24.61)	(0.23)	-	-
Other comprehensive income (expense) for the year, net of tax	(8.62)	(0.11)	(24.86)	(0.24)	(0.02)	(0.00)
Total comprehensive income for the year	3,690.34	48.43	4,581.95	43.34	4,505.81	40.52
Profit attributable to:						
Owners of the parent	3,698.96	48.54	4,606.81	43.58	4,505.82	40.52
Non-controlling interests	-	-	-	-	-	-
Profit for the year	3,698.96	48.54	4,606.81	43.58	4,505.82	40.52
Total comprehensive income (expense) attributable to:						
Owners of the parent	3,690.34	48.43	4,581.95	43.34	4,505.81	40.52
Non-controlling interests	-	-	-	-	-	-
Total comprehensive income (expense) for the year	**3,690.34**	**48.43**	**4,581.95**	**43.34**	**4,505.81**	**40.52**
Basic earnings per share (in Baht)	**0.44**	**-**	**0.55**	**-**	**0.54**	**-**

2.3 Revenue from external customers

(Unit : Million Baht)	2018	%	2019	%	2020	%
Energy & Utilities	6,912.25	90.71	9,851.49	93.19	10,586.78	95.21
Petrol and gas stations	707.56	9.29	719.71	6.81	532.57	4.79
other	-	-	-	-	-	-
Total	7,619.81	100.00	10,571.20	100.00	11,119.35	100.00

2.4 Statement of cash flow

(Unit : Million Baht)	2018	2019	2020
Net cash from operating activities	**3,932.68**	**4,566.89**	**4,820.44**
Net cash used in investing activities	**(5,082.76)**	**(5,781.58)**	**(4,885.83)**
Net cash from financing activities	**1,144.00**	**1,348.43**	**1,165.99**
Net increase (decrease) in cash and cash equivalents before effect of exchange rates	**(6.09)**	**133.74**	**1,100.60**
Effect of exchange rate changes on balances held in foreign currencies	0.09	(0.26)	(0.05)
Cash and cash equivalents from changes in investments in subsidiaries	-	105.91	0.48
Cash and cash equivalents at 1 January	456.16	450.16	689.56
Cash and cash equivalents at 31 December	**450.16**	**689.56**	**1,790.58**

3. Key Financial Ratios

Financial Ratios	Separate financial statements As of 31 December		
	2018	2019	2020
Liquidity Ratios			
Current ratio (times)	2.99	2.86	1.24
Quick ratio (times)	2.66	2.35	0.99
Cash ratio (times)	1.46	2.00	1.19
Receivables turnover (times)	6.72	5.75	4.86
Collection period (days)	53.57	62.64	74.04
Inventory turnover (times)	7.04	6.74	5.24
Inventory turnover period (days)	51.12	53.39	68.72
Accounts payable turnover (times)	13.27	13.54	13.82
Payment Period (days)	27.13	26.59	26.05
Cash cycle (days)	77.56	89.44	116.72
Profitability Ratios			
Gross profit margin (%)	52.08	47.69	45.79
Operating profit margin (%)	49.64	44.44	43.84
Other profit margin (%)	0.97	0.10	(2.15)
Cash to net profit ratio (%)	103.96	97.21	98.89
Net profit margin (%)	46.73	42.24	39.37
Return on equity (%)	15.02	17.66	16.08
Efficiency Ratios			
Return on assets (%)	12.52	13.28	11.04
Return on fixed assets (%)	18.12	19.54	16.22
Total assets turnover (times)	0.27	0.31	0.28
Financial Policy Ratios			
Interest bearing debt to equity (times)	0.16	0.30	0.45
Net Interest bearing debt to equity according to terms and conditions(times)(7)	n.a.	0.17	0.33
Debts to equity ratio (times)	0.26	0.40	0.51
Net Interest bearing debt to EBITDA (1)	(0.10)	0.85	1.67
Interest bearing debt to EBITDA (1)	0.94	1.45	2.24
Interest coverage ratio (times) (2)	1,065,975	41.84	15.54
Debt service coverage ratio (times) (3)	1,065,975	41.84	11.79
B/E,P/N size to interest bearing debt ratio (times) (4)	0	0	0.02
Interest Bearing debt matured 1 year to total interest bearing debt (5)	0	0	0.33
Loan from Financial Institution to interest bearing debt ratio (6)	0	0	0.02
Other liabilities to interest bearing debt ratio	0	0	0.05

Notes

(1) Net interest-bearing debt to EBITDA ratio calculated from (interest bearing debt - cash and cash equivalent-current investment) / EBITDA*
* EBITDA calculated from revenue from sale of power and goods + revenue from adders + other income - cost of sales of power and goods - distribution costs - administrative expenses + depreciation

(2) Interest Coverage Ratio calculated from EBITDA / finance costs (from statement of cash flows)

(3) Debt Service Coverage Ratio calculated from EBITDA / (principal repayments and finance costs from statement of cash flows)

(4) B/E,P/N size to interest bearing debt ratio calculated from (B/E+P/N) / interest bearing debt

(5) Interest Bearing debt matured one year to total interest bearing debt calculated from (short- term interest bearing debt + current portion of long-term interest bearing debt) / interest bearing debt for the year 2018 and 2019, the value is 0 because the company does not have debt obligations from financial institutions.

(6) Loans from Financial Institution to total debt ratio calculated from loan from investment institutions / total debt for the year 2018 and 2019, the value is 0 because the company does not have debt obligations from financial institutions.

(7) Net Interest bearing debt to equity according to terms and conditions calculated from (interest bearing debt - cash and cash equivalent-other current financial assets) / total equity

Legal Disputes

The Company and its subsidiaries, as of December 31, 2020, engaged in material litigations, arbitrations or claims, as follows:

On 16 December 2019, 222 individuals sued the Energy Regulatory Commission (ERC) et al to the Central Administrative Court with the Company listed as the 5th Defendant. The Plaintiffs requested that the approval of the Environmental and Health Impact Assessment (EHIA) report for the 150 megawatts thermal power plant project, the license to operate an electricity generating business, and the construction approval of the Company be revoked. The Plaintiffs also requested that the Court take evidence out of Court and issued an interim measure ordering that the electricity generating system be temporarily stopped until the final decision is reached.

On 25 December 2019, the Court inquired of both Parties to consider the request for an interim measure and rendered its decision on 28 January 2020 denying the request for an interim measure since there is no reason to hear that the Company's power business license is illegal.

Subsequently, on 31 January 2020, the Court accepted the complaint and requested the Company to file the answers within the time limit. The lawyer submitted the answer to the court on July 1, 2020. The case is now being considered by the Court.

On 7 December 2020, the Central Administrative Court sent an objection to the 5th defendant to the company to make an additional statement to the court within the specified period, which will be due to submit an additional testimony on 20 February 2021. This is currently in the process of making additional statements.

The Company's legal consultant considered the complaint and its appendixes and hereby opines that the Company lawfully received the license to operate the electricity generating business and the construction approval from the relevant authorities. The complaint of the Plaintiffs is untrue. As the case is pending the preparation of answers, the Company has caused to relieve itself of any liability generated from the complaint depending on the Central Administrative Court Decision. Moreover, the Company has pressed charges against the 222 Plaintiffs to the Muak Lek police Station, Saraburi, for making false information to charge a person in the Court. The case is under investigation by the police.

Information of Directors, Executives and Company Secretary as at 31 December 2020

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
1.Mr. Prachai Leophairatana 77 years of age **Position**-Chairman of the Board; Chairman of the Management Committee - Miss Malinee Leophairatana (Elder sister) - Dr. Pramuan Leophairatana (Younger brother) - Mr. Prayad Liewphairatana (Younger brother)	1. Honorary Doctorate in Industrial Engineering, Rajamangala University of Technology Krugthep 2. M.S.(EE) University of California (Berkeley) U.S.A. 3. B.E.(EE) (1st Class Hons.) University of Canterbury, New Zealand 4. Directors Accreditation Program (DAP) (Class 35/2005), Thai Institute of Directors (IOD)	0.000	1991-Present	Chairman	TPI Polene Power Plc.
			Jan2016-Present	Chairman of the Management Committee	TPI Polene Power Plc.
			2001-Present	Chief Executive Officer	TPI Polene Plc.
			Apr2012-Present	Directors	Bangkok Union Insurance Plc.
			Oct2019-Present	Executive Director	TPI Deep Sea Port Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Polene Power (Songkla) Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Wind Power Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Solar Power Co.,Ltd.
			2000-2006	Board Executive Director	Bangkok Union Insurance Plc.
			1978-2006	Chief Executive Officer	Thai Petrochemical Industry Public Co., Ltd. and entities
			1992-2000	Senator	Parliamentary Commission
			1969-1997	Chairman	Cathay Finance & Securities Plc.
2.Dr. Pramuan Leophairatana 72 years of age **Position**-Vice Chairman of the Board; Vice Chairman of the Management Committee - Miss Malinee Leophairatana (Elder sister) - Mr. Prachai Leophairatana (Elder brother) - Mr. Prayad Liewphairatana (Younger brother)	1. M.S., SC.D. Massachusetts Institute of Technology at Cambridge, M.A., U.S.A. 2. B.S. (Honors) in Chemical Engineering, University of California at Berkeley, U.S.A. 3. Directors Accreditation Program (DAP) (Class39/2005), Thai Institute of Directors (IOD) 4. Diplomas, National Defense College, The National Defence Course Class 41 and The Joint State-Private Sector Course Class 11	0.059	Jan2016-Present	Vice Chairman and Vice Chairman of the Management Committee	TPI Polene Power Plc.
			1991-Jan2016	Director	TPI Polene Power Plc.
			1973-Present	Executive Director	Leophairatana Enterprises Co., Ltd.
			1988-Present	Director	Thai Plastic Product Co., Ltd.
			1989-Present	Director	Thai Plastic Film Co., Ltd.
			1989-Present	Director	United Grain Industry Co., Ltd.
			1991-Present	Executive Director	TPI Concrete Co., Ltd.
			1997-Present	Chairman	Bangkok Union Life Insurance Plc.
			2001-Present	Director/President	TPI Polene Plc.
			2002-Present	Executive Director	Polene Plastic Co., Ltd.
			2010-Present	Executive Director	TPI Polene Bio Organics Co., Ltd.
			Jul2014-Present	Executive Director	Mondo Thai Co., Ltd.
			Aug2016-Present	Executive Director	Thai Nitrate Co., Ltd.
			Aug2019-Present	Executive Director	TPI Deep Sea Port Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Polene Power (Songkla) Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Wind Power Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Solar Power Co.,Ltd.
			Oct2019-Jan2015	Executive Director	Thai Nitrate Co., Ltd.
			1996-Jul2014	Executive Director	Mondo Thai Co., Ltd.
			1990-Aug2012	Executive Director	Thai Nitrate Co., Ltd.
			1978-2006	President	Thai Petrochemical Industry Plc.
3.Mr. Prayad Liewphairatana 70 years of age **Position**-Director; Member of the Management Committee - Miss Malinee Leophairatana (Elder sister) - Mr.Prachai Leophairatana (Elder brother) - Dr.Pramuan Leophairatana (Elder brother)	1. M.S.(CE) University of Michigan (ANN ARBOR) U.S.A. 2. Directors Accreditation Program (DAP) (Class35/2005) Thai Institute of Directors (IOD)	0.064	1991-Present	Executive Director	TPI Polene Power Plc.
			Jan2016-Present	Member of the Management Committee	TPI Polene Power Plc.
			1973-Present	Executive Director	Leophairatana Enterprises Co., Ltd.
			1987-Present	Director/President	TPI Polene Plc.
			1981-2006	Director	International Plastic Trading Co., Ltd.
			1988-Present	President	Thai Plastic Product Co., Ltd.
			1988-Present	President	United Grain Industry Co., Ltd.
			1989-Present	President	Thai Plastic Film Co., Ltd.
			1991-Present	Executive Director	TPI Concrete Co., Ltd.
			1996-Present	Executive Director	Mondo Thai Co., Ltd.
			1997-Present	Executive Director	Bangkok Union Life Insurance Plc.
			2002-Present	Executive Director	Polene Plastic Co., Ltd.
			2010-Present	Executive Director	TPI Polene Bio Organics Co., Ltd.
			2Aug2016-Present	Executive Director	Thai Nitrate Co., Ltd.

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
4.Mrs. Orapin Leophairatana 74 years of age **Position**-Vice Chairman of the Board; Vice Chairman of the Management Committee - Mr.Prachai Leophairatana (Husband)	1. Political Science (2nd Class Honors) Chulalongkorn University 2. Directors Accreditation Program (DAP) (Class35/2005), Thai Institute of Directors (IOD)	0.072	Jan2016-Present	Vice Chairman and Vice Chairman of the Management Committee	TPI Polene Power Plc.
			2007-Jan2016	Director	TPI Polene Power Plc.
			1998-Present	Executive Director	TPI Concrete Co., Ltd.
			2002-Present	Executive Director	Polene Plastic Co., Ltd.
			2005-Present	Director/Senior Executive Vice President	TPI Polene Plc.
			2009-Present	Executive Director	TPI All Seasons Co., Ltd.
			2010-Present	Executive Director	United Grain Industry Co., Ltd.
			2010-Present	Executive Director	Thai Petrochemical Industry Co., Ltd.
			2010-Present	Executive Director	TPI Polene Bio Organics Co., Ltd.
			Jul 2014-Present	Executive Director	Mondo Thai Co., Ltd.
			Oct2019-Present	Executive Director	TPI Deep Sea Port Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Polene Power (Songkla) Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Wind Power Co.,Ltd.
			Oct2019-Jan2015	Executive Director	TPI Solar Power Co.,Ltd.
			Oct2013-Jan2015	Executive Director	Thai Nitrate Co., Ltd.
			2009-Aug2013	Executive Director	Thai Nitrate Co., Ltd.
			2001-2011	Director	Thai Listed Company Association
			1998-2003	Senior Executive Vice President	TPI Polene Plc.
			Apr-Dec1997	Director	Association of Finance Companies
			1995-1997	Director	Bangkok Stock Trading Center
			1995-1997	Chairman	Association of the Securities Brokerage
			1986-1997	Managing Director	Cathay Finance & Securities Plc.
			1977-1982	Third Secretary	Ministry of Foreign Affairs
5.Miss Pattrapan Leopairut 42 years of age **Position**-Director; Member of the Management Committee - Mr.Pakorn Leopairut (Younger brother) - Mr.Pakkapol Leopairut (Younger brother)	1. Assumption University (ABAC) (Master Degree) 2. Bangkok University International College (BUIC) (Bachelor Degree) 3. International School Bangkok (ISB) (High School) 4. Movement of Thai industrial investor toward India and Myanmar 5. Employee Fraud Prevention Detection 6. Excellence in Practice Quality Control 7. Investigation & Litigation, Business Process Transformation & Operation 8. Relationship Marketing & Customer 9. Relationship Management 10. Directors Accreditation Program (DAP) (Class 121/2016), Thai Institute of Directors (IOD)	0.046	2007-Present	Executive Director	TPI Polene Power Plc.
			Jan2016-Present	Member of the Management Committee	TPI Polene Power Plc.
			2009-Present	Assistant Vice President	TPI Polene Plc.
			2010-Present	Executive Director	TPI Polene Bio Organics Co., Ltd.
			2014-Present	Executive Director	Zenith International Power Co.,Ltd.
			Oct2014-Present	Executive Director	TPI Commercial Co., Ltd.
			2006-Present	Executive Director	Thai Petrochemical Industry Co., Ltd.
			Oct2019-Present	Executive Director	TPI Deep Sea Port Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Polene Power (Songkla) Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Wind Power Co.,Ltd.
			Oct2019-Present	Executive Director	TPI Solar Power Co.,Ltd.

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
6.Mr. Pakorn Leopairut 41 years of age **Position**-Director; Member of the Management Committee and President - Miss Pattrapan Leopairut (Elder sister) - Mr.Pakkapol Leopairut (Younger brother)	1. Master of Public and Private Management NIDA 2. CEDI-BABSON ENTREPRENEURIAL LEADERSHIP PROGRAM No. 1/2556 3. Young F.T.I Elite No. 1 The Federation Of Thai Industries 4. Executive Development Program No.10 Ministry of Finance FPO : Forum Economic Guru Seminar No.3 Ministry of Finance 5. Energy Executive Program No.1 The Federation of Thai Industries 6. Directors Accreditation Program (DAP) (Class 122/2016), Thai Institute of Directors (IOD)	0.063	2007-Present Jan 2016-Present Feb2016-Present May2019-Present 2008-Present 2009-Present 2010-Present 2010-Present 2010-Present 2014-Present Jul2015-Present Jul2015-Present 2011-Present 2007-Present Oct2019-Present Oct2019-Present Oct2019-Present Oct2019-Present 2007-2008 2002-2007	Executive Director Member of the Management Committee President Executive Director Assistant Vice President Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director President Executive Director Executive Director Executive Director Executive Director Investment Analyst Supervisor	TPI Polene Power Plc. TPI Polene Power Plc. TPI Polene Power Plc. TPI Polene Plc. TPI Polene Plc. TPI All Seasons Co., Ltd. TPI Polene Bio Organics Co., Ltd. TPI service Co., Ltd. Zenith International Power Co.,Ltd. TPI Commercial Co., Ltd. TPI Intertrade Co.,Ltd. TPI Refinery (1997) Co.,Ltd. Thai Petrochemical Industry Co., Ltd. Thai Nitrate Co., Ltd. TPI Deep Sea Port Co.,Ltd. TPI Polene Power (Songkla) Co.,Ltd. TPI Wind Power Co.,Ltd. TPI Solar Power Co.,Ltd. MFC Asset Management Plc. Thai Petrochemical Industry Plc.
7.Mr. Pakkapol Leopairut 38 years of age **Position**-Director ; Member of the Management Committee and Executive Vice President-Accounting and Finance - Mr.Pakorn Leopairut (Elder brother) - Miss Pattrapan Leopairut (Elder sister)	1. Economic University of Southern California (Master Degree) 2. Economic University of Kansas (Bachelor Degree) 3. CEDI-BABSON ENTREPRENEURIAL LEADERSHIP PROGRAM No. 1/2012 4. CMO by Marketing Association of Thailand No.1/2012 5. Executive Development Program No.10 (July 2014) 6. Directors Accreditation Program (DAP) (Class122/2016), Thai Institute of Directors (IOD)	0.022	Feb2016-Present Jan2016-Present Jul2015-Present 2008-Jan2016 2010-Present 2010-Present 2011-Present 2014-Present Jul2015-Present Jul2015-Present Oct2019-Present Oct2019-Present Oct2019-Present Oct2019-Present	Executive Vice President Member of the Management Committee Executive Director Assistant Vice President Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director	TPI Polene Power Plc. TPI Polene Power Plc. TPI Polene Power Plc. TPI Polene Plc. TPI service Co.,Ltd. Zenith International Power Co.,Ltd. TPI Polene Bio Organics Co., Ltd. TPI Commercial Co., Ltd. TPI Intertrade Co.,Ltd. TPI Refinery (1997) Co.,Ltd. TPI Deep Sea Port Co.,Ltd. TPI Polene Power (Songkla) Co.,Ltd. TPI Wind Power Co.,Ltd. TPI Solar Power Co.,Ltd.

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
8.Ms. Nitawan Leophairatana 41 years of age **Position**-Director; Member of the Management Committee - Dr.Pramuan Leophairatana (Father)	1. Juris Doctor Seattle University - School of Law, Graduated 2006 2. LL.M in Taxation New York University - School of Law, Graduated 2007 3. Licensed Attorney in New York State 4. M.P.A. Cornell University, Graduated 2003 5. B.A. Cornell University Major In Chemistry and Chemical Biology) Graduated 2002 6. Directors Accreditation Program (DAP) (Class 121/2016), Thai Institute of Directors (IOD)	0.003	Jan2016-Present Jul2015-Present 2013-Feb2016 Mar2016-Present 2009-Present 2010-Present 2010-Present 2010-Present 2014-Present Jul2015-Present Jul2015-Present Oct2019-Present Oct2019-Present Oct2019-Present Oct2019-Present 2008-2013 2007-2008	Member of the Management Committee Executive Director Assistant Vice President Assistant Vice President Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Executive Director Assistant Vice President Senior Associate Executive Director Executive Director Executive Director	TPI Polene Power Plc. TPI Polene Power Plc. TPI Polene Power Plc. TPI Polene Plc. TPI All Seasons Co., Ltd. TPI Polene Bio Organics Co., Ltd. TPI service Co.,Ltd. Zenith International Power Co.,Ltd. TPI Commercial Co., Ltd. TPI Intertrade Co.,Ltd. TPI Refinery (1997) Co.,Ltd. TPI Deep Sea Port Co.,Ltd. TPI Polene Power (Songkla) Co.,Ltd. TPI Wind Power Co.,Ltd. TPI Solar Power Co.,Ltd. TPI Polene Public Co.,Ltd. Earnst and Young LLP, New York City, USA. United Grain Industry Co., Ltd. Thai Plastic Product Co., Ltd. Thai Plastic film Co., Ltd.
9.Ms. Malinee Leopairut 79 years of age **Position**-Director - Mr.Prachai Leophairatana (Younger brother) - Dr.Pramuan Leophairatana (Younger brother) - Mr.Prayad Liewphairatana (Younger brother)	1. Master's Degree in Actuarial Science Georgia State University, U.S.A. 2. Bachelor of Commerce and Accounting Major in Statistics (Second Honour), Chulalongkorn University 3. Certified as Actuary under Section 78/2 of The Non-Life Insurance Act B.E.2535 as Amended by Non-Life Insurance Act (No.2), B.E.2551 4. Directors Certification Program (DCP) (Class 22/2002) Thai Institute of Directors (IOD)	0.001	Jan2016-Present 1973-Present 2015-Present 1997-Present 1997-Present 1973-2011 1987-1989	Director Director Director Director Chief Executive Officer Managing Director President	TPI Polene Power Plc. Leophairatana Enterprises Co., Ltd. Thai Special Steel Industry Plc. Bangkok life Insurance Plc. Bangkok Union Insurance Plc. Bangkok Union Insurance Plc. Thai General Insurance Association

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
10.Dr. Porakrit Leophairatana 31 years of age **Position**-Director - Dr.Pramuan Leophairatana (Father) - Ms.Nitawan Leophairatana (Elder sister)	1. Ph.D. Chemical Engineering, Columbia University, Graduated 2017 2. M.Phil. Chemical Engineering, Columbia University, Graduated 2016 3. M.S. Chemical Engineering, Columbia University, Graduated 2015 4. B.S. Chemical and Biological Engineering, Tufts University, Graduated 2012	0.006	Jan2020-Present Mar2018-Present May2018 Present Aug2019-Present Sep2019-Present Sep2019-Present Sep2019-Present Sep2019-Present Aug2019-Present May2018-Present May2018-Present May2018-Present Apr2019- resent Mar2017-May 2018 Oct2017-Mar 2019	Executive Director Assistant Vice President Director Director Executive Director Executive Director Executive Director Executive Director Director Director Director Director Director CTO Co-Funder Post-Doctoral Researcher	TPI Polene Power Plc. TPI Polene Plc. TPI Polene Power (Onnut) Co.,Ltd. Zenith International Power Co.,Ltd. TPI Polene Power (Songkla) Co.,Ltd. TPI Deep Sea Port Co.,Ltd. TPI Wind Power Co.,Ltd. TPI Solar Power Co.,Ltd. TPI Refinery (1997) Co.,Ltd. TPI All Seasons Co., Ltd. TPI Healthcare Co.,Ltd. TPI Bio Pharmaceuticals Co.,Ltd. Bangkok life Insurance Plc. TempRes Technologies LLC Columbia University, New York
11. Mr. Manu Leopairote 78 years of age **Position**-Independent Director; Chairman of the Audit Committee - None -	1. Honorary Doctorate in Business Administration, Thammasat University. 2. Master's degree of Science in Economics, University of Kentucky, U.S.A. 3. Science in Economics (Honors), Thammasat University 4. Certificate, Industrial Development, "Nagoya, Japan" 5. National Defense College class 34 6. Role of Chairman Program (RCP) No.3/2001 Thai Institute of Directors (IOD) 7. Directors Certification Program (DCP) No.30/2003 Thai Institute of Directors (IOD) 8. Directors Accreditation Program (DAP- No.2003) Thai Institute of Directors (IOD)	-	Jan2016-Present 2003-Present 2004-Present 2004-Present 2004-Present 2004-Present 2006-Present 2010-Present 2010-Present 2011-Present 2005-2010 1999-2004	Independent Director and Chairman of the Audit Committee Member of the Council of State, group 5 Chairman and Chairman of the Audit Committee Chairman Director and Independent Director Chairman Director and Member of the Audit Committee Chairman Chairman Chairman Chairman Permanent Secretary Historical - Chairman - Chairman - Chairman - Chairman	TPI Polene Power Public Co.,Ltd. The Council of State (Trade and Industrial) Polyplex (Thailand) Plc. Khon Kaen Sugar Industry Plc. Thai Beverage Plc. Singapore Stock Exchange (SGX) Bangkok Union Insurance Plc. Siam Steel International Plc. Jubilee Enterprise Plc. ARIP Plc. T.M.C Industry Plc. Neighboring Countries Economic Development Cooperation Agency (Public Organization): NEDA Ministry of Industry PTT Plc. PTT Exploration and Production Plc. PTT Chemical Plc. Thai Oil Plc.

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
12.Mr. Abhijai Chandrasen 73 years of age **Position**-Independent Director; Member of the Audit Committee - None -	1. Ph.D. in Law (Honors), Paris University (Sorbonne) France. 2. Bachelor of Law (Second Honour), Chulalongkorn University 3. Thai Barrister at Law, Institute of Legal Education of the Thai Bar 4. Thai Institute of Directors (IOD) - Audit Committee Program (ACP) No.24/2008 - Role of the Compensation Committee (RCC) No. 2/2007 - Developing Corporate Governance Policy, 2006 - Finance for Non-Finance Director (FN-No.11/2004) - Directors Accreditation Program (DAP- No.5/2003) - TFRS 9 Financial Instruments: Overview and key challenges 2017 - Enhancing Audit Committee Excellences through Internal Audit, (2017) - The Business in the abnormalities era (EY) (2017) - Cyber Resilience Leadership (2017)	-	Jan2016-Present 2000-Present 2005-Present 2011-Present 2003-2013 2000-2012 1994-2012	Independent Director and Member of the Audit Committee Director and Legal Advisor Director Member of the Human Resources and Remuneration Committee Chairman of the Nomination and Remuneration Committee Member of the Audit Committee and the Risk Management Committee Advisor Director to the Management Committee Director Chairman of Audit committee Managing Director Expert Committee Executive Director Director Director Director Legal Advisor Legal Advisor Legal Advisor Legal Advisor Legal Advisor Legal Advisor Legal Advisor	TPI Polene Power Public Co.,Ltd. Kasikornbank Public Co., Ltd. Siam Motors Co.,Ltd. Kasikornbank Public Co., Ltd. Sammakorn Public Co., Ltd. Kasikornbank Public Co., Ltd. Sammakorn Public Co., Ltd. Lawyers council of Thailand (1997-2000) Narai Phand Co., Ltd (a joint venture with the public sector by the Ministry of Industry) (Jan 1987 - Jun 2000) The Property Management Committee, Chulalongkorn University The Thai Red Cross Fund The Thai Red Cross Society The Chaipattana Foundation Suan Luang foundation Rama9 Office of the Royal Development Projects Board Aeronautical Radio of Thailand Ltd. state enterprise in Thailand under the Ministry of Transport The Bangkok Dock Company (1957) Limited) state enterprise in Thailand under the Ministry of Defense. Prince Mahidol Award Foundation The Kidney Foundation of Thailand H.R.H Princess Maha Chakri Sirindhorn Charity Fund Fund for Classical Music Promotion under the Patronage of HRH Princess Galyani Vadhana

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
13.Dr. Thiraphong Vikitset 75 years of age **Position**-Independent Director; Member of the Audit Committee - None -	1. Ph.D. (Economics) West Virginia University, U.S.A. 2. B.S. Ch.E. West Virginia University, U.S.A. Training Certificate 1. Certificate of Professional Study on "Petroleum Management Program" awarded by Arthur D. Little Management Education Institute, Inc. 1982 2. Thai Institute of Directors (IOD) - Director Accreditation Program Certificate, (DAP- 2003) - Director Certificate Program, (DCP- 2004)	0.000	Jan 2016-Present	Independent Director and Member of the Audit Committee	TPI Polene Power Public Co.,Ltd.
			Present	Professor of Economic Development	National Institute of Development Administration (NIDA)
			1997-Present	Independent Director and Chairman of the Audit committee	I.C.C. International Public Co., Ltd.
			1997-Present	Director	Better Way (Thailand) Co., Ltd.
			2004-2014	Member of the Subcommittee on Energy Conservation Assessment Subcommittee	Subcommittee on Government Policy Follow-up About using Energy Oil in the Senate Manufacturing Industry
			1995-1998	Director of Academic Council	National Institute of Development Administration (NIDA)
			1986-1991	Vice President for Academic Affairs	National Institute of Development Administration (NIDA)
			1985-1986	Dean of the Faculty of Economic Development	National Institute of Development Administration (NIDA)
			1983-1985	Deputy Dean, Faculty of Economic Development	National Institute of Development Administration (NIDA)
			1976-1980	Assistant Professor, Faculty of Economic Development	National Institute of Development Administration (NIDA)
			1974-1976	Professor of Economics	National Institute of Development Administration (NIDA)
			2008	Subcommittee for tracking oil consumption on Government Policy	
			2004	Project Evaluation Subcommittee under Energy Conservation Plan	
			2002	The committee considered the use of ethanol.	
			1989	Member of Subcommittee on Energy Planning for the 7th Economic and Social Development Plan	
			1989	Committee members in the working group tariff changes over time.	
			1989	Committee on Electricity Development Working Group	
			1989	Committee members in the working group, the purchase of electricity from small power producers.	
			1989	Committee members in the working group tariff restructuring.	
			1989	Committee members working in private sector participation in the electricity sector.	
			1989	The Committee members on the working group of Electricity in industry	
			1989	The standard committee member of university education	
			1989	Committee members working in the tariff adjustment	
			1988	Committee members working on electricity demand	
			1986	Subcommittee on Energy Policy Formulation	

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
14. Mr. Khantachai Vichakkhana 73 years of age **Position**-Independent Director - None -	1. Master's degree in Political Science (Public Administration), Thammasat University 2. Bachelor of Laws, Thammasat University. 3. Guest Speaker Training Program- Land Class 2: Department of Land (1979) 4. Division Director of Security within the Kingdom Program (Ka.Rmn): Royal Thai Army (1979) 5. Advance Land Management School Program Class 3: Department of Lands (1984) 6. Advance administration Program: Class 30, Institute of Administration Development, Department of Provincial Administration (1993) 7. High Level Information Technology Executives (CIO) Seminar (2003) 8. Political Development in Democratic Governance for Executives Program Class 8, King Prajadhipok's Institute (2004) 9. Thai Institute of Directors (IOD) Directors Accreditation Program (DAP-No.112/2014) Role of Compensation Committee (RCC-No.19/2014) Directors Certification Program (DCP-No.119/2015)	0.000	Jan2016-Present	Independent Director	TPI Polene Power Public Co.,Ltd.
			June2018-Present	Chairman and Independent Director	TPI Polene Public Co.,Ltd.
			Aug2014-Present	Independent Director and the Nomination, Remuneration and Corporate Governance Committee	L.P.N. Development Public Co., Ltd.
				Independent Director	Tong Hua Holding Plc.
			Extracurricular	Council Member	Rajamangala University of technology Bangkok
				Qualified Director	National Council Boy Scouts
				Assets Management Committee	Thai Red Cross Council
				Committee	Office of The Election Commission of Thailand
				Consultants	Islamic Bank of Thailand
				Committee	Triamudomsuksa Alumni Foundation
				Committee	Retired Government Officials' Pension Association of Interior Foundation
				Committee	Executive Public Administration Foundation (EPAF)
				Committee	Anan Anantakool Foundation
				Committee	Dr.SukPhukyaphon, Foundation
				Committee	Hospital & Phrapiya school Foundation
			1999-2000	Inspector-General	Department of Lands
			1998-1999	Director of Bureau Authority Land	Department of Lands
			1995-1998	Land Management Division	Department of Lands
			1992-1995	Department of Important book	Department of Lands
			1990-1992	Land Officer- Chonburi	Department of Lands
			1989-1990	Land Officer- Phuket	Department of Lands
			1988-1989	Land Officer-Nonthaburi and Bangyai District	Department of Lands
			1986-1988	Land Officer-Nakhornnayok	Department of Lands
			1986	Land Officer-Uttaradit	Department of Lands
			Extracurricular	Council Member	Rajamangala University of technology Bangkok
				Assets Management Committee of Inquiry	Thai Red Cross Council Office of The Election Commission of Thailand
				Consultants	Islamic Bank of Thailand
				Committee	Triamudomsuksa Alumni Foundation
				Committee	Retired Government Officials' Pension Association of Interior Foundation
				Committee	Executive Public Administration Foundation (EPAF)
				Committee	Anan Anantakool Foundation
				Committee	Dr.SukPhukyaphon Foundation
				Committee	Hospital & Phrapiya school Foundation
				Assets Management	Srisavarindhira Thai Red Cross Institute of Nursing

NAME/AGE/POSITION/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING[1]	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
15.Mr. Wanchai Manosooti 71 years of age **Position**-Independent Director - None -	1. Master's degree in Business Administration from Chulalongkorn University. 2. Bachelor's degree of Accounting, Chulalongkorn University. 3. Directors Certification Program (DCP) No.18/2002 Thai Institute of Directors (IOD)	0.012	Mar2016-Present 2019-Present 1999-2001 2002-2007	Independent Director Director EXECUTIVE V.P. Managing Director	TPI Polene Power Public Co.,Ltd. Sirindhorn National Medical Rehabilitation Institute TISCO Bank Public Co.,Ltd. TISCO Securities Co.,Ltd.
16.Mr. Worawit Lerdbussarakam 56 years of age **Position**-Senior Vice President-Production - None -	1. Business of Administration from Kasetsart University 2. Bachelor's degree in faculty of engineering (Electrical engineer), Prince of Songkla University	0.009	Apr2016-Present Feb2016-Apr2016 Jan1990-Feb2016	Senior Vice President -Production Vice President -Production Vice President -Production	TPI Polene Power Public Co.,Ltd. TPI Polene Power Public Co.,Ltd. TPI Polene Public Co.,Ltd.
17.Mrs. Sirirat Lerthirunrat 61 years of age **Position**-Assistant Vice President-Petrol and Gas - None -	Bachelor's degree in Management from Sukhothai Thammathirat University	-	Jul2012-Present	Assistant Vice President -Petrol and Gas	TPI Polene Power Public Co.,Ltd.
18.Mr. Somkiat Teeratakulpisal 54 years of age **Position**-Assistant Vice President -Production - None -	1. Master's degree of GSPA from National Institute of Development Administration (NIDA) 2. Bachelor's degree in faculty of engineering, Prince of Songkla University	-	Jun2014-Present	Assistant Vice President -Production	TPI Polene Power Public Co.,Ltd.
19.Miss Karuna Permsiripan 58 years of age **Position**-Manager-Accounting - None -	Bachelor's degree in Commerce and Accountancy - Chulalongkorn University	-	Mar2016-Present	Manager-Accounting	TPI Polene Power Public Co.,Ltd.
20.Miss Weerawan Larpchaiwut 57 years of age **Position**-Manager -Finance - None -	1. Bachelor's degree of Finance and Banking, Ramkhamhaeng University 2. Master's degree in Business Administration, Ramkhamhaeng University	-	Apr2016-Present Dec2006-Mar2016	Manager-Finance Assistant Manager-Finance	TPI Polene Power Public Co.,Ltd. TPI Polene Public Co.,Ltd.
21.Miss Weeranut KimKom 48 years of age **Position**-Secretary - None -	1. Bachelor of Law, Thammasat University 2. Lawyer License from Training Department of the Lawyer council. 3. Company Secretary Program (CSP) No.76/2017	-	Sep2016-Present Nov2012-Present	Secretary Supervisor	TPI Polene Power Public Co.,Ltd. TPI Polene Public Co.,Ltd.

Remark : (1) Percentage of shareholding date was as at 31 December, 2020.

Position of the Management and Controlling Persons over the Company and Related Companies as of 31 December 2020

	Mr. Prachai Leophairatana	Mr. Pramuan Leophairatana	Mrs. Orapin Leophairatana	Mr. Prayad Liewphairatana	Miss Pattrapan Leopairut	Mr. Pakorn Leopairut	Mr. Pakkapol Leopairut	Mrs. Nitawan Leophairatana	Miss Malinee Leophairatana	Mr.Manu Leopairote	Dr.Porakrit Leophairatana	Dr. Thiraphong Vikitset	Dr. Abhijai Chandrasen	Mr. Khantachai Vichakkhana	Mr. Vanchai Manosuthi	Mr. Worawit Lerdbussarakam	Ms. Sirirat Lerthirunrat	Mr. Somkiet Teeratrakulpisal	Miss Karuna Permsiripan	Miss Weerawan Larpchaiwut
Company																				
TPI Polene Power Public Company Limited	X,//	/,V	/,V	/,V	/,V	/,V	/,V	/,V	/	///	/,V	///	///	/	/	/V	/V	/V	/V	/V
Related Company																				
TPI Polene Power (International) Co., Ltd.	X//	//	//	//	//	//	//	//	-	-	//	-	-	-	-	-	-	-	-	-
TPI Service Co., Ltd.	X//	//	//	//	-	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Polene Plastic Co., Ltd.	X//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPI Polene Bio Organics Co., Ltd.	X//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Thai Propoxide Co., Ltd.	X//	//	-	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thai Special Steel Plc.	//	//	-	//	-	-	//	-	/	-	-	-	-	-	-	-	-	-	-	-
TPI EOEG Co., Ltd.	X//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hong Yiah Seng Co., Ltd.	X//	//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-
Hong Yiah Seng Real Estates and Investment Co., Ltd.	X//	//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-
Saraburi Ginning Mill Co., Ltd.	X//	//	-	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Pornchai Enterprises Co., Ltd.	X//	//	//	//	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
Bangkok Union Insurance Plc.	/	-	-	-	-	-	-	-	//	X	-	-	-	-	-	-	-	-	-	-
TPI Concrete Co., Ltd.	X//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPI All Seasons Co., Ltd.	X//	//	//	//	-	//	-	//	-	-	/	-	-	-	-	-	-	-	-	-
United Grain Industry Co., Ltd.	X//	//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-
Thai Petrochemical Industry Co., Ltd.	-	-	//	-	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangkok Union Life Insurance Plc.	-	X//	-	//	-	-	-	-	//	-	/	-	-	-	-	-	-	-	-	-
Leophairatana Enterprises Co., Ltd.	X//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPI Commercial Co., Ltd.	X//	-	-	-	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
TPI Healthcare Co., Ltd.	X//	//	//	//	-	//	//	//	-	-	/	-	-	-	-	-	-	-	-	-
TPI Refinery (1997) Co., Ltd.	X//	//	//	//	-	//	//	//	-	-	/	-	-	-	-	-	-	-	-	-
Thai Plastic Product Co., Ltd.	X//	//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-
Thai Plastic Film Co., Ltd.	X//	//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-
Polyplex (Thailand) Public Company Limited	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-
Khon Kaen Sugar Industry Public Company Limited	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-
Thai Beverage Public Company Limited (Singapore Exchange (SGX))	-	-	-	-	-	-	-	-	-	///	-	-	-	-	-	-	-	-	-	-
Jubilee Enterprise Public Company Limited	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
ARIP Public Company Limited	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
T.M.C. Industrial Public Company Limited	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
I.C.C. International Public Company Limited	-	-	-	-	-	-	-	-	-	-	-	///	-	-	-	-	-	-	-	-
Better Way (Thailand) Co.,Ltd.	-	-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-

	Mr. Prachai Leophairatana	Mr. Pramuan Leophairatana	Mrs. Orapin Leophairatana	Mr. Prayad Liewphairatana	Miss Pattrapan Leopairut	Mr. Pakorn Leopairut	Mr. Pakkapol Leopairut	Mrs. Nitawan Leophairatana	Miss Malinee Leophairatana	Mr.Manu Leopairote	Dr.Porakrit Leophairatana	Dr. Thiraphong Vikitset	Dr. Abhijai Chandrasen	Mr. Khantachai Vichakkhana	Mr. Vanchai Manosuthi	Mr. Worawit Lerdbussarakam	Ms. Sirirat Lerthirunrat	Mr. Somkiet Teeratrakulpisal	Miss Karuna Permsiripan	Miss Weerawan Larpchaiwut
Kasikornbank Public Company Limited	-	-	-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-
Siam Motors Co., Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-
L.P.N. Development Public Company Limited	-	-	-	-	-	-	-	-	-	-	-	-	-	///	-	-	-	-	-	-
International Trading Development Co., Ltd.	X//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Phornphan Phanich Co., Ltd.	X//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Thai Agrico Co., Ltd.	X//	//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Hong Yiah Seng Warehouse Co., Ltd.	X//	//	-	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
TPI All Seasons Co., Ltd.	X//	//	//	//	-	//	-	//	-	-	/	-	-	-	-	-	-	-	-	-
TPI Polene Public Company Limited	//	//	//	//	-	-	-	-	/	-	-	-	-	-	/	-	-	-	-	-
Jaturat Co., Ltd.	//	//	-	//	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
TPI Holdings Co., Ltd.	X//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mondo Thai Co., Ltd.	X//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rayong Forest Co., Ltd.	X//	//	-	//	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
TPI Bio Pharmaceuticals Co., Ltd.	X//	//	-	//	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-
TPI Olefins Co., Ltd.	X//	//	//	//	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Archieve (Thailand) Co., Ltd.	X//	-	-	-	-	//	//	//	-	-	-	-	-	-	-	-	-	-	-	-
Rangsit Patumporn Co., ltd.	-	//	-	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K. Cotton & Gloss Co., Ltd.	//	-	-	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lian Thai Apparel Co., Ltd.	-	-	-	/	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
Kang Yong Electric Public Company Limited	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
Sukhumvit62 medical Co., Ltd.	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
GML Exhibition (Thailand) Co., Ltd.	-	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-
GML Enterprise (Thailand) Co., Ltd.	-	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-
DR Development Co., Ltd.	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
THAI DNT PAINT MFG Co., Ltd.	-	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-
Tamaka Sugar Industry Co., Ltd.	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
New Kwang Soon Lee Sugar Factory Co., Ltd.	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
Blue Ocean Spa Co., Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	//	-	-	-	-	-
Beer Thip Brewery (1991) Co., Ltd.	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
Beer Thai (1991) Public Company Limited	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
UBM Asia (Thailand) Co., Ltd.	-	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-
Rangsit Phatumporn Housing Project Co., Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Krung Thai Sugar Factory Co.,Ltd.	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
Siam Steel International Public Company Limited	-	-	-	-	-	-	-	-	-	///	-	-	-	-	-	-	-	-	-	-

	Mr. Prachai Leophairatana	Mr. Pramuan Leophairatana	Mrs. Orapin Leophairatana	Mr. Prayad Liewphairatana	Miss Pattrapan Leopairut	Mr. Pakorn Leopairut	Mr. Pakkapol Leopairut	Mrs. Nitawan Leophairatana	Miss Malinee Leophairatana	Mr.Manu Leopairote	Dr.Porakrit Leophairatana	Dr.Thiraphong Vikitset	Dr.Abhijai Chandrasen	Mr.Khantachai Vichakkhana	Mr. Vanchai Manosuthi	Mr. Worawit Lerdbussarakam	Ms. Sirirat Lerthirunrat	Mr. Somkiet Teeratrakulpisal	Miss Karuna Permsiripan	Miss Weerawan Larpchaiwut
Saha Rattananakorn Co., Ltd. (absolute receivership)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASIA Wealth Securities Company Limited	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
Anuman Spare Parts Co., Ltd.	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific Potash Corporation Limited	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-	-	-	-
Asia Precision Public Company Limited	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
SVOA Public Company Limited	-	-	-	-	-	-	-	-	-	///	-	-	-	-	-	-	-	-	-	-
Hi-Tech Nittsu (Thailand) Co., Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United Grain Marketing Co., Ltd.	X //	//	-	//	-	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-
TPI Polene Power Onnut Co.,Ltd.	/	/	/	-	-	/	/	-	-	-	/	-	-	-	-	-	-	-	-	-
TPI Deep Sea Port Co., Ltd.	/	/	/	-	/	/	/	/	-	-	/	-	-	-	-	-	-	-	-	-
TPI Polene Power (Songkhla) Co., Ltd.	/	/	/	-	/	/	/	/	-	-	/	-	-	-	-	-	-	-	-	-
TPI Wind Power Co., Ltd.	/	/	/	-	/	/	/	/	-	-	/	-	-	-	-	-	-	-	-	-
TPI Solar Power Co., Ltd.	/	/	/	-	/	/	/	/	-	-	/	-	-	-	-	-	-	-	-	-

remarks: X = Chairman / = Director // = Executive Director /// = Audit Committee /V = management

Directors of Subsidiaries.

Board of Directors of TPI Polene Power Investment Company Limited as at 31 December 2020 (Being in the liquidation process)

	Name	Position
1.	Mr. Prachai Leophairatana	Chairman
2.	Mr. Prateep Leopairut	Director
3.	Mr. Pakorn Leopairut	Director
4.	Mr. Pakkapol Leopairut	Director

Board of Directors of TPI Polene Power (On Nut) Company Limited as at 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Dr. Pramuan Leophairatana	Director
3.	Mrs. Orapin Leophairatana	Director
4.	Mr. Pakorn Leopairut	Director
5.	Mr. Pakkapol Leopairut	Director
6.	Dr. Porakit Leophairatana	Director

TPI Polene Power (International) Company Limited as at 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Mr. Prateep Leopairut	Director
3.	Dr. Pramuan Leophairatana	Director
4.	Mr. Prayad Liewphairatana	Director
5.	Mrs. Orapin Leophairatana	Director
6.	Miss Pattrapan Leopairut	Director
7.	Mr. Pakorn Leopairut	Director
8.	Mr. Pakkapol Leopairut	Director
9.	Mrs. Achira Chatdarong	Director
10.	Mrs. Nitawan Leophairatana	Director

TPI Deep Sea Port Company Limited as at 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Dr. Pramuan Leophairatana	Director
3.	Mrs. Orapin Leophairatana	Director
4.	Mr. Pakorn Leopairut	Director
5.	Mr. Pakkapol Leopairut	Director
6.	Miss Pattrapan Leopairut	Director
7.	Mrs. Achira Chatdarong	Director
8.	Mrs. Nitawan Leophairatana	Director
9.	Mrs. Pannee Liewphairatana	Director
10.	Mr. Thanakorn Liewphiratana	Director
11.	Dr. Porakrit Leophairatana	Director

TPI Olefins Company Limited as at 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Mr. Prateep Leopairut	Director
3.	Dr. Pramuan Leophairatana	Director
4.	Mr. Prayad Liewphairatana	Director
5.	Mrs. Orapin Leophairatana	Director
6.	Miss Pattrapan Leopairut	Director
7.	Mr. Pakorn Leopairut	Director
8.	Mr. Pakkapol Leopairut	Director
9.	Mr. Thanakorn Liewphiratana	Director
10.	Mrs. Chutinan Liewphiratana	Director

TPI Polene Power (Songkhla) Company Limited as of 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Dr. Pramuan Leophairatana	Director
3.	Mrs. Orapin Leophairatana	Director
4.	Mr. Pakorn Leopairut	Director
5.	Mr. Pakkapol Leopairut	Director
6.	Miss Pattrapan Leopairut	Director
7.	Mrs. Achira Chatdarong	Director
8.	Mrs. Nitawan Leophairatana	Director
9.	Mrs. Pannee Liewphairatana	Director
10.	Mr. Thanakorn Liewphiratana	Director
11.	Dr. Porakrit Leophairatana	Director

TPI Wind Power Company Limited as of 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Dr. Pramuan Leophairatana	Director
3.	Mrs. Orapin Leophairatana	Director
4.	Mr. Pakorn Leopairut	Director
5.	Mr. Pakkapol Leopairut	Director
6.	Miss Pattrapan Leopairut	Director
7.	Mrs. Achira Chatdarong	Director
8.	Mrs. Nitawan Leophairatana	Director
9.	Mrs. Pannee Liewphairatana	Director
10.	Mr. Thanakorn Liewphiratana	Director
11.	Dr. Porakrit Leophairatana	Director

TPI Solar Power Company Limited as at 31 December 2020

	Name	Position
1.	Mr. Prachai Leophairatana	Director
2.	Dr. Pramuan Leophairatana	Director
3.	Mrs. Orapin Leophairatana	Director
4.	Mr. Pakorn Leopairut	Director
5.	Mr. Pakkapol Leopairut	Director
6.	Miss Pattrapan Leopairut	Director
7.	Mrs. Achira Chatdarong	Director
8.	Mrs. Nitawan Leophairatana	Director
9.	Mrs. Pannee Liewphairatana	Director
10.	Mr. Thanakorn Liewphiratana	Director
11.	Dr. Porakrit Leophairatana	Director

Report of the Board of Directors' Responsibilities for Financial Statements

The Board of Directors of the Company are aware of their duties and responsibilities to ensure that the financial reports of the Company are accurate, complete, and transparent, and are prepared in compliance with generally accepted accounting principles and reflect the application of an appropriate and consistent accounting policy. Such reports must be prepared prudently and on a reasonable basis, and must reflect the Company's financial position and operational performance fairly and precisely for the benefit of shareholders and general investors.

In this regard, the Board of Directors has entrusted an Independent Audit Committee to be responsible for the review of accounting policy and financial reports, internal controls, internal audit and risk management systems. Comments on these issues have been included in the Audit Committee Report, which forms a part of this Annual Report.

The Board of Directors are of the opinion that the overall internal control systems of the Company and its subsidiaries have functioned satisfactorily and creditability to ensure that the financial statements of the Company and its subsidiaries present the financial position, operational results, and financial cash flow of the Company and its subsidiaries, which are accurate and reliable in all material aspects.

Sincerely Yours,

Mr. Prachai Leopairatana

Chairman of the Board

Independent Auditor's Report

To the Shareholders of TPI Polene Power Public Company Limited

Opinion

I have audited the consolidated and separate financial statements of TPI Polene Power Public Company Limited and its subsidiaries (the "Group") and of TPI Polene Power Public Company Limited (the "Company"), respectively, which comprise the consolidated and separate statements of financial position as at 31 December 2020, the consolidated and separate statements of comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of the Group and the Company, respectively, as at 31 December 2020 and their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of my report. I am independent of the Group and the Company in accordance with the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Based on my consideration and professional judgement, I have determined that there are no key audit matters to communicate in my report.

Emphasis of Matter

Without modifying my opinion, I draw attention to note 3(b) to the financial statements describing the effect of the change in the Company's accounting policy adoption from 1 January 2020. The corresponding figures presented are based on the audited financial statements as at and for the year ended 31 December 2019 after making the adjustments described in note 3(b).

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and request that the correction be made.

Responsibilities of Management and Those Charged with Governance for the Consolidated and Separate Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's and the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

(Bunyarit Thanormcharoen)
Certified Public Accountant
Registration No. 7900

KPMG Phoomchai Audit Ltd.
Bangkok
10 February 2021

Statement of financial position

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

Assets	Note	Consolidated financial statements		Separate financial statements		
		31 December 2020	31 December 2019	31 December 2020	31 December 2019 (Restated)	1 January 2019 (Restated)
Current assets						
Cash and cash equivalents	*6*	1,790,584	689,556	1,649,322	551,434	259,124
Trade accounts receivable	*5, 31*	2,425,686	2,148,276	2,425,686	2,148,276	1,530,704
Other receivables		148,498	54,585	146,931	53,027	104,526
Short-term loan to related party	*5*	-	-	-	801	-
Receivables and advances to related parties	*5*	40,139	61,001	40,139	61,027	35,857
Inventories	*7*	1,248,860	1,052,505	1,248,860	1,052,505	587,732
Other current financial assets	*31*	1,496,238	2,650,696	1,496,238	2,650,696	3,960,652
Other current assets		8,062	10,467	7,807	10,446	12,196
Total current assets		**7,158,067**	**6,667,086**	**7,014,983**	**6,528,212**	**6,490,791**
Non-current assets						
Other non-current financial assets	*31*	188,049	186,532	5,183	5,261	5,337
Investment in subsidiaries	*8*	-	-	329,933	319,986	190,911
Property, plant and equipment	*9*	35,605,612	30,770,444	35,601,238	30,770,444	24,642,820
Right-of-use assets	*3, 10*	650,619	-	650,619	-	-
Leasehold rights		-	-	-	-	113
Advances for plant and equipment		58,590	116,238	58,590	116,238	106,953
Deferred tax assets	*27*	82,262	91,011	82,262	91,011	91,699
Other non-current assets		31,953	21,263	31,953	21,263	12,483
Total non-current assets		**36,617,085**	**31,185,488**	**36,759,778**	**31,324,203**	**25,050,316**
Total assets		**43,775,152**	**37,852,574**	**43,774,761**	**37,852,415**	**31,541,107**

The accompanying notes are an integral part of these financial statements.

Statement of financial position

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

Liabilities and equity	Note	Consolidated financial statements		Separate financial statements		
		31 December 2020	31 December 2019	31 December 2020	31 December 2019 (Restated)	1 January 2019 (Restated)
Current liabilities						
Short-term loans from financial institutions	*11, 31*	239,625	-	239,625	-	-
Trade accounts payable	*5, 12*	432,516	439,833	432,516	439,833	377,095
Other payables	*13*	791,216	1,583,960	791,009	1,583,898	1,611,326
Payables and advances from related parties	*5*	66,227	93,985	66,197	93,891	79,792
Current portion of lease liabilities	*3, 10, 11*	14,849	-	14,849	-	-
Current portion of debentures	*11, 31*	4,000,000	-	4,000,000	-	-
Interest payable		53,238	34,860	53,238	34,860	14,531
Income tax payable		47,466	35,555	47,316	35,555	35,622
Other current liabilities	*14*	139,057	146,076	139,057	146,076	118,708
Total current liabilities		**5,784,194**	**2,334,269**	**5,783,807**	**2,334,113**	**2,237,074**
Non-current liabilities						
Lease liabilities	*3, 10, 11*	645,181	-	645,181	-	-
Debentures	*11, 31*	8,000,000	8,000,000	8,000,000	8,000,000	4,000,000
Non-current provisions for employee benefits	*15*	152,705	151,119	152,705	151,119	87,698
Decommissioning costs	*5, 16*	264,934	256,855	264,934	256,855	167,958
Total non-current liabilities		**9,062,820**	**8,407,974**	**9,062,820**	**8,407,974**	**4,255,656**
Total liabilities		**14,847,014**	**10,742,243**	**14,846,627**	**10,742,087**	**6,492,730**

The accompanying notes are an integral part of these financial statements.

Statement of financial position

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

Liabilities and equity	Note	Consolidated financial statements 31 December 2020	Consolidated financial statements 31 December 2019	Separate financial statements 31 December 2020	Separate financial statements 31 December 2019 (Restated)	Separate financial statements 1 January 2019 (Restated)
Equity						
Share capital:	*17*					
Authorised share capital						
(8,400 million ordinary shares, par value at Baht 1 per share)		8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
Issued and paid share capital						
(8,400 million ordinary shares, par value at Baht 1 per share)		8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
Shares premium:						
Shares premium on ordinary shares		14,580,886	14,580,886	14,580,886	14,580,886	14,580,886
Retained earnings						
Appropriated						
Legal reserve	*18*	840,000	763,640	840,000	763,640	533,356
Unappropriated		5,107,424	3,365,960	5,107,424	3,365,960	1,534,043
Other component of equity		(176)	(158)	(176)	(158)	92
Equity attribute to owners of the Company		**28,928,134**	**27,110,328**	**28,928,134**	**27,110,328**	**25,048,377**
Non-controlling interests		4	3	-	-	-
Total equity		**28,928,138**	**27,110,331**	**28,928,134**	**27,110,328**	**25,048,377**
Total liabilities and equity		**43,775,152**	**37,852,574**	**43,774,761**	**37,852,415**	**31,541,107**

The accompanying notes are an integral part of these financial statements.

Statement of comprehensive income

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

	Note	Consolidated financial statements Year ended 31 December 2020	Consolidated financial statements Year ended 31 December 2019	Separate financial statements Year ended 31 December 2020	Separate financial statements Year ended 31 December 2019 (Restated)
Revenue					
Revenue from sale of power and goods	*19, 28*	6,333,227	6,338,038	6,333,227	6,338,038
Revenue from adders	*19, 28*	4,786,123	4,233,163	4,786,123	4,233,163
		11,119,350	**10,571,201**	**11,119,350**	**10,571,201**
Cost of sales of power and goods		(6,027,657)	(5,529,730)	(6,027,657)	(5,529,730)
Gross profit		**5,091,693**	**5,041,471**	**5,091,693**	**5,041,471**
Net foreign exchange gain		-	91,637	-	91,637
Investment income	*20*	42,860	78,694	35,427	75,671
Other income	*21*	281,792	164,293	281,765	164,270
Total income		**5,416,345**	**5,376,095**	**5,408,885**	**5,373,049**
Distribution costs	*22*	(66,437)	(75,679)	(66,437)	(75,679)
Administrative expenses	*23*	(432,729)	(432,150)	(432,477)	(424,442)
Net foreign exchange loss		(3,991)	-	(3,991)	-
Total expenses		**(503,157)**	**(507,829)**	**(502,905)**	**(500,121)**
Profit from operations		**4,913,188**	**4,868,266**	**4,905,980**	**4,872,928**
Finance costs	*26*	(285,182)	(159,476)	(285,350)	(159,476)
Share of profit (loss) of subsidiaries		-	-	7,006	(4,662)
Profit before income tax expense		**4,628,006**	**4,708,790**	**4,627,636**	**4,708,790**
Tax expense	*27*	(122,181)	(101,982)	(121,812)	(101,982)
Profit for the year		**4,505,825**	**4,606,808**	**4,505,824**	**4,606,808**

The accompanying notes are an integral part of these financial statements.

Statement of comprehensive income

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

	Note	Consolidated financial statements Year ended 31 December 2020	2019	Separate financial statements Year ended 31 December 2020	2019 (Restated)
Other comprehensive income (expense)					
Items that will be reclassified subsequently to profit or loss					
Exchange differences on translating foreign operations		(18)	(250)	-	-
Share of other comprehensive income (expense) of subsidiaries		-	-	(18)	(250)
Total items that will be reclassified subsequently to profit or loss		**(18)**	**(250)**	**(18)**	**(250)**
Items that will not be reclassified to profit or loss					
Losses on remeasurements of defined benefit plans	*15*	-	(30,759)	-	(30,759)
Income tax relating to items that will not be reclassified	*27*	-	6,152	-	6,152
Total items that will not be reclassified to profit or loss		**-**	**(24,607)**	**-**	**(24,607)**
Other comprehensive income (expense) for the year, net of tax		**(18)**	**(24,857)**	**(18)**	**(24,857)**
Total comprehensive income for the year		**4,505,807**	**4,581,951**	**4,505,806**	**4,581,951**
Profit attributable to:					
Owners of the parent		4,505,824	4,606,808	4,505,824	4,606,808
Non-controlling interests		1	-	-	-
Profit for the year		**4,505,825**	**4,606,808**	**4,505,824**	**4,606,808**
Total comprehensive income (expense) attributable to:					
Owners of the parent		4,505,806	4,581,951	4,505,806	4,581,951
Non-controlling interests		1	-	-	-
Total comprehensive income (expense) for the year		**4,505,807**	**4,581,951**	**4,505,806**	**4,581,951**
Basic earnings per share (in Baht)	*29*	**0.536**	**0.548**	**0.536**	**0.548**

The accompanying notes are an integral part of these financial statements.

Statement of changes in equity

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

		Consolidated financial statements							
				Retained earnings		Other compoments of equity			
	Note	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Translation reserve	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Year ended 31 December 2019									
Balance at 1 January 2019		**8,400,000**	**14,580,886**	**533,356**	**1,534,043**	**92**	**25,048,377**	**-**	**25,048,377**
Transaction with owners, recorded directly in equity									
Contributions by and distributions to owners of the parent									
Dividends	*30*	-	-	-	(2,520,000)	-	(2,520,000)	-	(2,520,000)
Total contributions by and distributions to owners of the parent		**-**	**-**	**-**	**(2,520,000)**	**-**	**(2,520,000)**	**-**	**(2,520,000)**
Changes in ownership interests in subsidiaries									
Acquisition of non-controlling interests without a change in control		-	-	-	-	-	-	3	3
Total changes in ownership interests in subsidiaries		**-**	**-**	**-**	**-**	**-**	**-**	**3**	**3**
Total transactions with owners, recorded directly in equity		**-**	**-**	**-**	**(2,520,000)**	**-**	**(2,520,000)**	**3**	**(2,519,997)**
Comprehensive income (expense) for the year									
Profit		-	-	-	4,606,808	-	4,606,808	-	4,606,808
Other comprehensive income (expense)		-	-	-	(24,607)	(250)	(24,857)	-	(24,857)
Total comprehensive income (expense) for the year		**-**	**-**	**-**	**4,582,201**	**(250)**	**4,581,951**	**-**	**4,581,951**
Transfer to legal reserve	*18*	-	-	230,284	(230,284)	-	-	-	-
Balance at 31 December 2019		**8,400,000**	**14,580,886**	**763,640**	**3,365,960**	**(158)**	**27,110,328**	**3**	**27,110,331**

The accompanying notes are an integral part of these financial statements.

Statement of changes in equity

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

		Consolidated financial statements							
				Retained earnings		Other compoments of equity			
	Note	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Translation reserve	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Year ended 31 December 2020									
Balance at 1 January 2020		8,400,000	14,580,886	763,640	3,365,960	(158)	27,110,328	3	27,110,331
Transaction with owners, recorded directly in equity									
Contributions by and distributions to owners of the parent									
Dividends	*30*	-	-	-	(2,688,000)	-	(2,688,000)	-	(2,688,000)
Total contributions by and distributions to owners of the parent		-	-	-	(2,688,000)	-	(2,688,000)	-	(2,688,000)
Total transactions with owners, recorded directly in equity		-	-	-	(2,688,000)	-	(2,688,000)	-	(2,688,000)
Comprehensive income (expense) for the year									
Profit		-	-	-	4,505,824	-	4,505,824	1	4,505,825
Other comprehensive income (expense)		-	-	-	-	(18)	(18)	-	(18)
Total comprehensive income (expense) for the year		-	-	-	4,505,824	(18)	4,505,806	1	4,505,807
Transfer to legal reserve	*18*	-	-	76,360	(76,360)	-	-	-	-
Balance at 31 December 2020		8,400,000	14,580,886	840,000	5,107,424	(176)	28,928,134	4	28,928,138

The accompanying notes are an integral part of these financial statements.

Statement of changes in equity

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

		Separate financial statements					
				Retained earnings		Other compoments of equity	
	Note	Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Share of other comprehensive income of subsidiaries using equity method	Total equity
Year ended 31 December 2020							
Balance at 1 January 2019-as reported		8,400,000	14,580,886	533,356	1,534,681	-	25,048,923
Impact of change in accounting polecies	*3*	-	-	-	(638)	92	(546)
Balance at 1 January 2019 reported		**8,400,000**	**14,580,886**	**533,356**	**1,534,043**	**92**	**25,048,377**
Transaction with owners, recorded directly in equity							
Contributions by and distributions to owners							
Dividends	*30*	-	-	-	(2,520,000)	-	(2,520,000)
Total contributions by and distributions to owners		-	-	-	(2,520,000)	-	(2,520,000)
Comprehensive income (expense) for the year							
Profit		-	-	-	4,606,808	-	4,606,808
Other comprehensive income (expense)		-	-	-	(24,607)	(250)	(24,857)
Total comprehensive income (expense) for the year		**-**	**-**	**-**	**4,582,201**	**(250)**	**4,581,951**
Transfer to legal reserve	*18*	-	-	230,284	(230,284)	-	-
Balance at 31 December 2019		**8,400,000**	**14,580,886**	**763,640**	**3,365,960**	**(158)**	**27,110,328**
Year ended 31 December 2020							
Balance at 1 January 2020-as reported		**8,400,000**	**14,580,886**	**763,640**	**3,371,260**	**-**	**27,115,786**
Impact of change in accounting polecies	*3*	-	-	-	(5,300)	(158)	(5,458)
Balance at 1 January 2020 reported		**8,400,000**	**14,580,886**	**763,640**	**3,365,960**	**(158)**	**27,110,328**
Transaction with owners, recorded directly in equity							
Contributions by and distributions to owners							
Dividends	*30*	-	-	-	(2,688,000)	-	(2,688,000)
Total contributions by and distributions to owners		-	-	-	(2,688,000)	-	(2,688,000)
Comprehensive income (expense) for the year							
Profit		-	-	-	4,505,824	-	4,505,824
Other comprehensive income (expense)		-	-	-	-	(18)	(18)
Comprehensive income (expense) for the year		**-**	**-**	**-**	**4,505,824**	**(18)**	**4,505,806**
Transfer to legal reserve	*18*	-	-	76,360	(76,360)	-	-
Balance at 31 December 2020		**8,400,000**	**14,580,886**	**840,000**	**5,107,424**	**(176)**	**28,928,134**

The accompanying notes are an integral part of these financial statements.

Statement of cash flows

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December	
	2020	2019	2020	2019 (Restated)
Cash flows from operating activities				
Profit for the year	4,505,825	4,606,808	4,505,824	4,606,808
Adjustments to reconcile profit to cash receipts (payments)				
Depreciation	875,925	806,873	875,925	806,873
Interest income	(28,819)	(63,570)	(21,386)	(60,523)
Finance costs	285,182	159,476	285,350	159,476
Unrealised gain on foreign exchange	(5,659)	(55,368)	(5,632)	(55,368)
Reversal of loss on inventories devaluation	(3,985)	-	(3,985)	-
Gain on disposal equipment	-	(14)	-	(14)
(Gain) loss on fair value adjustment	3,980	(7,979)	3,980	(7,979)
Share of (profit) loss of subsidiaries accounted for using equity method	-	-	(7,006)	4,662
Provision for employee benefits	2,978	37,408	2,978	37,408
Tax expense	122,181	101,982	121,812	101,982
	5,757,608	5,585,616	5,757,860	5,593,325
Changes in operating assets and liabilities				
Trade accounts receivable	(277,410)	(617,572)	(277,410)	(617,572)
Other receivables	(99,232)	48,994	(99,063)	48,835
Receivables and advances to related parties	7,898	(25,156)	7,924	(25,170)
Inventories	(192,370)	(464,773)	(192,370)	(464,773)
Other current assets	(3,185)	1,729	(2,951)	1,750
Other non-current assets	(10,690)	(8,780)	(10,690)	(8,780)
Trade accounts payable	(7,317)	62,738	(7,317)	62,738
Other payables	(222,759)	42,515	(222,904)	42,538
Payables and advances from related parties	(27,758)	14,161	(27,694)	14,099
Other current liabilities	(7,019)	27,368	(7,019)	27,368
Provisions for employee benefits	(1,392)	(4,746)	(1,392)	(4,746)
Net cash generated from operating	4,916,374	4,662,094	4,916,974	4,669,612
Taxes paid	(101,521)	(95,209)	(101,302)	(95,209)
Corporate income tax refund received	5,590	-	5,590	-
Net cash from operating activities	**4,820,443**	**4,566,885**	**4,821,262**	**4,574,403**

The accompanying notes are an integral part of these financial statements.

Statement of cash flows

TPI Polene Power Public Company Limited and its subsidiaries

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December	
	2020	2019	2020	2019 (Restated)
Cash flows from investing activities				
Interest received	34,632	64,730	26,624	63,262
Acquisition of property, plant and equipment	(5,930,795)	(6,380,163)	(5,926,421)	(6,380,163)
Proceeds from sale of equipment	-	30	-	30
Advances payment for machine	(137,688)	(496,795)	(137,688)	(496,795)
Decrease in equity and debt instruments	1,150,978	1,317,935	1,150,478	1,317,935
Increase in other long-term investments	-	(181,331)	-	-
Cash outflow on loan to related party	(695,000)	-	(695,000)	(800)
Proceeds from repayment of loans to related party	695,000	-	695,800	-
Net cash outflow on acquisition of subsidiary	(2,959)	(105,988)	(2,959)	(105,988)
Cash outflow on addition investment in subsidiaries	-	-	-	(27,999)
Net cash used in investing activities	**(4,885,832)**	**(5,781,582)**	**(4,889,166)**	**(5,630,518)**
Cash flows from financing activities				
Proceeds from short-term loans from financial institutions	341,529	-	341,529	-
Repayment of short-term loans from financial institutions	(105,000)	-	(105,000)	-
Proceeds from short-term loan from related party	-	-	105,000	-
Repayment of short-term loan from related party	-	-	(105,000)	-
Payment of lease liabilities *(2019: Payment by a lessee for reduction of the outstanding liability relating to a finance lease)*	(12,625)	-	(12,625)	-
Finance costs paid	(369,912)	(131,568)	(370,080)	(131,568)
Dividends paid to owners of the Company	(2,688,000)	(2,520,000)	(2,688,000)	(2,520,000)
Proceeds from issue of debentures	4,000,000	4,000,000	4,000,000	4,000,000
Net cash from financing activities	**1,165,992**	**1,348,432**	**1,165,824**	**1,348,432**
Net increase in cash and cash equivalents, before effect of exchange rates	1,100,603	133,735	1,097,920	292,317
Effect of exchange rate changes	(50)	(257)	(32)	(7)
Cash and cash equivalents from changes in holding of investments in subsidiary	475	105,914	-	-
Net increase in cash and cash equivalents	**1,101,028**	**239,392**	**1,097,888**	**292,310**
Cash and cash equivalents at 1 January	**689,556**	**450,164**	**551,434**	**259,124**
Cash and cash equivalents at 31 December	**1,790,584**	**689,556**	**1,649,322**	**551,434**
Non-cash transactions				
Other payables - plant and equipment	791,009	1,360,994	791,009	1,360,994
Advances for plant and equipment	58,590	116,238	58,590	116,238

The accompanying notes are an integral part of these financial statements.

Notes to the financial statements

TPI Polene Power Public Company Limited and its subsidiaries
For the year ended 31 December 2020

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These notes form an integral part of the financial statements.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from the Thai language statutory financial statements, and were approved and authorised for issue by the audit committee, as appointed by the Board of Directors of the Company on 10 February 2021.

1 General information

TPI Polene Power Public Company Limited, the "Company", is incorporated in Thailand and has its registered office at 26/56, TPI Tower, Chan Tat Mai Road, Tungmahamek, Sathorn, Bangkok.

The Company was listed on the Stock Exchange of Thailand ("SET") on 5 April 2017.

The ultimate parent company during the financial year was TPI Polene Public Company Limited, "parent company", which is incorporated in Thailand and is the major shareholder and the parent of the Company and owned 70.24% of the Company's issued and paid-up share capital.

The principal business of the Company are manufacturing and distributing electricity and refuse derived fuel (RDF), organics waste and distributing diesel and natural gas 12 stations. Details of the Company's subsidiaries as at 31 December 2020 and 2019 are given in note 9.

2 Basis of preparation of the financial statements

(a) Statement of compliance

The financial statements are prepared in accordance with Thai Financial Reporting Standards ("TFRS") and guidelines promulgated by the Federation of Accounting Professions and applicable rules and regulations of the Thai Securities and Exchange Commission.

New and revised TFRS are effective for annual accounting periods beginning on or after 1 January 2020. The initial application of these new and revised TFRS has resulted in changes in certain of the Group's accounting policies.

The Group has initially applied TFRS - Financial instruments standards which comprise TFRS 9 Financial Instruments and relevant standards and interpretations which have no material impact on the financial statements and TFRS 16 Leases disclosed impact from changes to significant accounting policies in note 3(a).

In addition, the Group has not early adopted a number of new and revised TFRS, which are not yet effective for the current period in preparing these financial statements. The Group has assessed the potential initial impact on the financial statements of these new and revised TFRS and expects that there will be no material impact on the financial statements in the period of initial application.

(b) Functional and presentation currency

The financial statements are prepared and presented in Thai Baht, which is the Company's functional currency. All financial information has been rounded in the notes to the financial statements to the nearest thousand unless otherwise stated.

(c) Use of judgements and estimates

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of the Group's accounting policies. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

(i) Judgements

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements is included in the following notes:

Note 4(i) and 10 Leases:
- whether an arrangement contains a lease;
- whether the Group is reasonably certain to exercise extension options;
- whether the Group exercise termination options;
- whether the Group has transferred substantially all the risks and rewards incidental to the ownership of the assets to lessees.

(ii) Assumptions and estimation uncertainties

Information about assumption and estimation uncertainties at 31 December 2020 that have a significant risk of resulting in a material adjustments to the carrying amounts of assets and liabilities in the next financial year is included in the following notes:

Note 4(i) Determining the incremental borrowing rate to measure lease liabilities;
Note 15 Measurement of defined benefit obligations: key actuarial assumptions;

Note 16	Recognition and measurement of provisions and contingencies: key assumptions about the likelihood and magnitude of an outflow of resources;
Note 27	Recognition of deferred tax assets: availability of future taxable profit against which deductible temporary differences and tax losses carried forward can be utilised; and
Note 31	Determining the fair value of financial instruments on the basis of significant unobservable inputs.

3 Change in accounting policies

(a) TFRS 16 Leases

From 1 January 2020, the Group has initially adopted TFRS 16 on contracts previously identified as leases according to TAS 17 Leases and TFRIC 4 Determining whether an arrangement contains a lease using the modified retrospective approach.

Previously, the Group, as a lessee, recognised payments made under operating leases and relevant lease incentives in profit or loss on a straight-line basis over the term of the lease. Under TFRS 16, the Group assesses whether a contract is, or contains, a lease. If a contract contains lease and non-lease components, the Group allocates the consideration in the contract based on stand-alone selling price (transaction price). As at 1 January 2020, the Group and the Company recognised right-of-use assets and lease liabilities, as a result, the nature of expenses related to those leases was changed because the Group recognised depreciation of right-of-use assets and interest expense on lease liabilities.

On transition, the Group also elected to use the following practical expedients:
- do not recognise right-of-use assets and lease liabilities for leases with less than 12 months of lease term;
- use hindsight when determining the lease term;
- apply a single discount rate to a portfolio of leases with similar characteristics; and
- exclude initial direct costs from measuring the right-of-use asset.

(in thousand Baht)

Impact from the adoption of TFRS 16	**Consolidated financial statements**	**Separate financial statements**
At 1 January 2020		
Increase in right-of-use assets	642,426	642,426
Decrease in advances to related parties	(12,964)	(12,964)
Increase in lease liabilities	(629,462)	(629,462)

(in thousand Baht)

Measurement of lease liability	**Consolidated financial statements**	**Separate financial statements**
Operating lease commitment as disclosed at 31 December 2019	866,397	866,397
Service agreement that does not qualify	(1,276)	(1,276)
Extension option of the lease term	136,780	136,780
	1,001,901	1,001,901
Present value of remaining lease payments, discounted using the incremental borrowing rate at 1 January 2020	629,462	629,462
Finance lease liabilities recognised as at 31 December 2019	-	-
Lease liabilities recognised at 1 January 2020	629,462	629,462
Weighted-average incremental borrowing rate (% per annum)	3.9	3.9

Right-of-use assets and lease liabilities shown above were presented as part of Energy & Utilities and Petrol & gas stations segments, respectively.

(b) Changes in accounting policy for investments in subsidiaries in separate financial statements

The Company changed the accounting policy for recognition and subsequent measurement of investments in the separate financial statements from the cost method to the equity method. Under the cost method the investments are carried at cost and only dividends received by the Company from the subsidiaries are recognised in profit. Under the equity method investments in subsidiaries are initially recognised at cost. Subsequently the carrying value of the investments are adjusted for the Company's share in profit or loss, other comprehensive income and dividends received. As the Company has significantly expanded its business through investment in subsidiaries, the Company believes that the equity method better reflects the rights of its shareholders to profit and loss, other

comprehensive income and accumulated equity from subsidiaries than the cost method. The change in this accounting policy is carried out in accordance with Thai Accounting Standard No. 27, Separate Financial Statements. The Company has applied this policy since 1 January 2020 and retrospectively adjusted the previous periods' separate financial statements for comparison purpose as follows;

(in thousand Baht)

	Separate financial statements					
	At 1 January 2019			At 31 December 2019		
	As reported	Impact of changes in accounting policies	Restated	As reported	Impact of changes in accounting policies	Restated
Statement of financial position						
Non-current assets						
Investments in subsidiaries	191,457	(546)	190,911	325,444	(5,458)	319,986
	191,457	**(546)**	**190,911**	**325,444**	**(5,458)**	**319,986**
Equity						
Retained earnings - unappropriated	1,534,681	(638)	1,534,043	3,371,260	(5,300)	3,365,960
Other components of equity	-	92	92	-	(158)	(158)
	1,534,681	**(546)**	**1,534,135**	**3,371,260**	**(5,458)**	**3,365,802**
Statement of comprehensive income						
Share of profit (loss) of subsidiaries	-	(638)	(638)	-	(4,662)	(4,662)
Profit for the year	**3,699,597**	**(638)**	**3,698,959**	**4,611,470**	**(4,662)**	**4,606,808**
Share of other comprehensive income (loss) of subsidiaries using equity method	-	92	92	-	(250)	(250)
Other comprehensive income (expense) for the year, net of tax	**(8,708)**	**92**	**(8,616)**	**(24,607)**	**(250)**	**(24,857)**
Total comprehensive income (loss) for the year	**3,690,889**	**(546)**	**3,690,343**	**4,586,863**	**(4,912)**	**4,581,951**
Earnings per share (basic) *(in Baht)*	**0.440**	**-**	**0.440**	**0.549**	**(0.001)**	**0.548**

4 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

(a) Basis of consolidation

The consolidated financial statements relate to the Company and its subsidiaries (together referred to as the "Group")

Business combinations

The Group applies the acquisition method for all business combinations when control is transferred to the Group, as describe in subsidiaries section, other than those with entities under common control.

The acquisition date is the date on which control is transferred to the acquirer.

Goodwill is measured as the fair value of the consideration transferred including the recognised amount of any non-controlling interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. Any gain on bargain purchase is recognised in profit or loss immediately.

Consideration transferred includes the fair values of the assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, and equity interests issued by the Group. Consideration transferred also includes the fair value of any contingent consideration and share-based payment awards of the acquiree that are replaced mandatorily in the business combination. If a business combination results in the termination of pre-existing relationships between the Group and the acquiree, then the lower of the termination amount, as contained in the agreement, and the value of the off-market element is deducted from the consideration transferred and recognised in other expenses.

Any contingent consideration is measured at fair value at the date of acquisition, and remeasured at fair value at each reporting date. Subsequent changes in the fair value are recognised in profit or loss.

A contingent liability of the acquiree is assumed in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

Transaction costs that the Group incurs in connection with a business combination, such as legal fees, and other professional and consulting fees are expensed as incurred.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

Non-controlling interests

At the acquisition date, the Group measures any non-controlling interest at its proportionate interest in the identifiable net assets of the acquiree.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

Loss of control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income or expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

(b) Investments in subsidiaries

Investments in subsidiaries in the separate financial statements of the Company are accounted for using the equity method.

Interest in subsidiaries is accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the separate financial statements include the Company's share of the profit or loss and other comprehensive income of equity- accounted investees, until the date on which significant influence, control or joint control ceases.

Disposal of investments in the separate financial statements

On disposal of an investment, the difference between net disposal proceeds and the carrying amount is recognised in profit or loss.

If the Company disposes of part of its holding of a particular investment, the deemed cost of the part sold is determined using the weighted average method applied to the carrying value of the total holding of the investment.

(c) Foreign currencies

Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate at the reporting date.

Non-monetary assets and liabilities measured at cost in foreign currencies are translated to the functional currency at the exchange rates at the dates of the transactions.

Foreign currency differences are generally recognised in profit or loss.

Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to Thai Baht at the exchange rates at the reporting date.

The revenues and expenses of foreign operations are translated to Thai Baht at rates approximating the exchange rates at the dates of the transactions.

Foreign exchange differences are recognised in other comprehensive income and accumulated in the translation reserve, except to extent that the translation difference is allocated to non-controlling interest.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Group disposes of part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount is reattributed to non-controlling interests. When the Group disposes of only part of an associate or joint venture while retaining significant influence or joint control, the relevant proportion of the cumulative amount is reclassified to profit or loss.

(d) Financial instruments

Accounting policies applicable from 1 January 2020

(d.1) Recognition and initial measurement

Trade receivables, debt securities issued and trade payables are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Group becomes a party to the contractual provisions of the instrument.

A financial asset and financial liability (unless it is a trade receivable without a significant financing component or measured at FVTPL) is initially measured at fair value plus transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price. A financial asset and a financial liability measured at FVTPL are initially recognised at fair value.

(d.2) Classification and subsequent measurement

Financial assets - classification

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value to other comprehensive income (FVOCI); or fair value to profit or loss (FVTPL).

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified prospectively from the reclassification date.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:
- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:
- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets - business model assessment

The Group makes an assessment of the objective of a business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realising cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Group's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;

- how managers of the business are compensated - e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

Financial assets - assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal" is defined as the fair value of the financial asset on initial recognition. 'Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:
- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable-rate features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

Financial assets - subsequent measurement and gains and losses

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.
Financial assets at amortised cost	These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income, calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

Financial liabilities - classification, subsequent measurement and gains and losses

Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. Any gain or loss on derecognition is also recognised in profit or loss.

(d.3) Derecognition

Financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognised.

Financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

(d.4) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

Accounting policies applicable before 1 January 2020

Investments in other debt and equity securities

Debt securities and marketable equity securities held for trading are classified as current assets and are stated at fair value, with any resultant gain or loss recognised in profit or loss.

Debt securities that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are stated at amortised cost, less any impairment losses. The difference between the acquisition cost and redemption value of such debt securities is amortised using the effective interest rate method over the period to maturity.

Debt securities and marketable equity securities, other than those securities held for trading or intended to be held to maturity, are classified as available-for-sale investments. Available-for-sale investments are, subsequent to initial recognition, stated at fair value, and changes therein, other than impairment losses and foreign currency differences on available-for-sale monetary items, are recognised directly in equity. Impairment losses and foreign exchange differences are recognised in profit or loss. When these investments are derecognised, the cumulative gain or loss previously recognised directly in equity is recognised in profit or loss. Where these investments are interest-bearing, interest calculated using the effective interest method is recognised in profit or loss.

Equity securities which are not marketable are stated at cost less any impairment losses.

The fair value of financial instruments classified as held-for-trading and available-for-sale is determined as the quoted bid price at the reporting date.

Disposal of investments

On disposal of an investment, the difference between net disposal proceeds and the carrying amount together with the associated cumulative gain or loss that was reported in equity is recognised in profit or loss.

If the Group disposes of part of its holding of a particular investment, the deemed cost of the part sold is determined using the weighted average method applied to the carrying value of the total holding of the investment.

(e) Cash and cash equivalents

Cash and cash equivalents in the statements of cash flows comprise cash balances, call deposits and highly liquid short-term investments. Bank overdrafts that are repayable on demand are a component of financing activities for the purpose of the statement of cash flows.

(f) Trade and other accounts receivable

A receivable is recognised when the Group has an unconditional right to receive consideration.

A receivable is measured at transaction price less allowance for expected credit loss (2019: allowance for doubtful accounts) which is determined based on an analysis of payment histories and future expectations of customer payments. Bad debts are written off when incurred.

(g) Inventories

Inventories are measured at the lower of cost and net realisable value.

Cost is calculated as follows:

1) Finished goods: Diesel and natural gas are calculated using the first in first out principle.

2) Inventories other than those mentioned in 1) are calculated using the weighted average cost principle.

Cost comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. In the case of manufactured inventories and work-in-progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

(h) Property, plant and equipment

Recognition and measurement

Owned assets

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gains and losses on disposal of item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised in profit or loss.

Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is calculated based on the depreciable amount, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment. The estimated useful lives are as follows:

Buildings and other constructions	20 and 30 years
Machinery	5 - 30 years
Tools and factory equipment	3 - 20 years
Furniture, fixtures and office equipment	3 - 10 years
Vehicles	10 years

No depreciation is provided on land, assets under construction and installation and major spare parts have not been issued.

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

(i) Leases

Accounting policies applicable from 1 January 2020

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in TFRS 16.

As a lessee

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices. However, for the leases of property the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date except for leases of low-value assets and short-term leases which is recognised as an expense on a straight-line basis over the lease term.

Right-of-use asset is measured at cost, less any accumulated depreciation and impairment loss, and adjusted for any remeasurements of lease liability. The cost of right-of-use asset includes the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of restoration costs, less any lease incentives received. Depreciation is charged to profit or loss on a straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. The lease payments included fixed payments less any lease incentive receivable. The lease payments also include amount under purchase, extension or termination option if the Group is reasonably certain to exercise option. Variable lease payments that do not depend on index or a rate are reconised as expenses in the accounting period in which they are incurred.

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in lease term, change in lease payments, change in the estimate of the amount expected to be payable under a residual value guarantee, or a change in the assessment of purchase, extension or termination options. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

As a lessor

At inception or on modification of a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each component on the basis of their relative standalone prices.

When the Group acts as a lessor, it determines at lease inception whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease.

The Group recognises lease payments received under operating leases as rental income on a straight-line basis over the lease term as part of other income. Initial direct costs incurred in arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as rental income in the accounting period in which they are earned.

Accounting policies applicable before 1 January 2020

As a lessee, leases in terms of which the Group substantially assumes all the risk and rewards of ownership are classified as finance leases. Property, plant and equipment acquired by way of finance leases is capitalised at the lower of its fair value and the present value of the minimum lease payments at the inception of the lease, less accumulated depreciation and impairment losses. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the profit or loss.

Assets held under other leases were classified as operating leases and lease payments are recognised in profit or loss on a straight-line basis over the term of the lease. Contingent lease payments are accounted for by revising the minimum lease payments over the remaining term of the lease when the lease adjustment is confirmed.

Determining whether an arrangement contains a lease

At inception of an arrangement, the Group determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to the Group the right to control the use of the underlying asset.

At inception or upon reassessment of the arrangement, the Group separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, an asset and a liability are recognised at an amount equal to the fair value of the underlying asset. Subsequently the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the Group's incremental borrowing rate.

(j) Impairment of financial assets

Accounting policies applicable from 1 January 2020

The Group recognises allowances for expected credit losses (ECLs) on financial assets measured at amortised cost (including cash and cash equivalents, trade receivables and other receivables, loans to others and related parties), debt investments measured at FVOCI, contract assets, lease receivables, and loan commitments issued which are not measured at FVTPL.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

ECLs are measured on either of the following bases:

- 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; or
- lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of a financial instrument.

Loss allowances for trade receivables, lease receivables and contract assets are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both current and forecast general economic conditions at the reporting date.

Loss allowances for all other financial instruments, the Group recognises ECLs equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition or credit-impaired financial assets, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due, significant deterioration in financial instruments's credit rating, significant deterioration in the operating results of the debtor and existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

The Group considers a financial asset to be in default when:

- the debtor is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset is more than 90 days past due.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Increased in loss allowance is recognised as an impairment loss in profit or loss. Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the Group recognises an impairment loss in profit or loss with the corresponding entry in other comprehensive income.

Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortised cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired" when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence of credit-impairment includes significant financial difficulty, a breach of contract such as more than 90 days past due, probable the debtor will enter bankruptcy.

Write-off

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering. Subsequent recoveries of an asset that was previously written off, are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

Accounting policies applicable before 1 January 2020

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated.

An impairment loss is recognised if the carrying amount of an asset exceeds its recoverable amount. The impairment loss is recognised in profit or loss.

When a decline in the fair value of an available-for-sale financial asset has been recognised directly in equity and there is objective evidence that the value of the asset is impaired, the cumulative loss that had been recognised directly in equity is recognised in profit or loss even though the financial asset has not been derecognised. The amount of the cumulative loss that is recognised in profit or loss is the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss.

Calculation of recoverable amount

The recoverable amount of held-to-maturity securities carried at amortised cost is calculated as the present value of the estimated future cash flows discounted at the original effective interest rate.

The recoverable amount of available-for-sale financial assets is calculated by reference to the fair value.

Reversal of impairment

An impairment loss in respect of a financial asset is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised in profit or loss. For financial assets carried at amortised cost and available-for-sale financial assets that are debt securities, the reversal is recognised in profit or loss. For available-for-sale financial assets that are equity securities, the reversal is recognised in other comprehensive income.

(k) Impairment of non-financial assets

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill and intangible assets that have indefinite useful lives or are not yet available for use, the recoverable amount is estimated each year at the same time.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. The impairment loss is recognised in profit or loss unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.

Calculation of recoverable amount

The recoverable amount of a non-financial asset is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Reversal of impairment

An impairment loss in respect of goodwill is not reversed. Impairment losses recognised in prior periods in respect of other non-financial assets are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(l) Interest-bearing liabilities

Interest-bearing liabilities are recognised at cost.

(m) Trade and other accounts payable

Trade and other accounts payable are stated at cost.

(n) Employee benefits

Defined contribution plans

Obligations for contributions to defined contribution plans are expensed as the related service is provided.

Defined benefit plans

A defined benefit plans is a post-employment benefit plan. The Group's net obligation in respect of defined benefit legal severance pay plan is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The discount rate is the yield at the reporting date on government bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognised immediately in other comprehensive income. The Company determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(o) Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

Decommissioning costs

The Group recorded provision for decommissioning cost whenever it is probable that there is an obligation as a result of the past event and reliable amount of obligation.

Decommissioning costs is based on discounting the expected future cash flows of provision for decommissioning costs. The estimates of decommissioning costs have been determined based on reviews and estimates by the Group's own engineers and managerial judgment.

(p) Fair value measurement

'Fair value" is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which the Group has access at that date. The fair value of a liability reflects its non-performance risk.

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When one is available, the Group measures the fair value of an instrument using the quoted price in an active market for that instrument. A market is regarded as 'active" if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If there is no quoted price in an active market, then the Group uses valuation techniques that maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would take into account in pricing a transaction.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Group measures assets and long positions at a bid price and liabilities and short positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price - i.e. the fair value of the consideration given or received. If the Group determines that the fair value on initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value on initial recognition and the transaction price. Subsequently, that difference is recognised in profit or loss on an appropriate basis over the life of the instrument but no later than when the valuation is wholly supported by observable market data or the transaction is closed out.

Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:
- Level 1: quoted prices in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: inputs for the asset or liability that are based on unobservable input.

If the inputs used to measure the fair value of an asset or liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

(q) Revenue

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax and is after deduction of any trade discounts and volume rebates.

Sale of goods

Revenue from sales of goods is recognised when a customer obtains control of the goods, generally on delivery of the goods to the customers. For contracts that permit the customers to return the goods, revenue is recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. Therefore the amount of revenue recognised is adjusted for estimated returns, which are estimated based on the historical data.

Sale of electricity

Income from the sale of electricity is recognised in profit or loss in accordance with delivery units supplied and price as stipulated in the contract. Incomes from the sale of electricity to Electricity Generating Authority of Thailand ("EGAT") is entitled to receive ADDER for the period of 7 years from the commencement of commercial sales. Thereafter, subsequent to this initial period income from sale of electricity is recognised at normal rates.

(r) Investment income

Investment income comprises rental income and interest income from investments and bank deposits.

Rental income

Rental income is recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income. Contingent rentals are recognised as income in the accounting period in which they are earned.

Interest income

Interest income is recognised in profit or loss as it accrues.

(s) Interest

Accounting policies applicable from 1 January 2020

Effective Interest Rate (EIR)

Interest income or expense is recognised using the effective interest method. The EIR is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- the gross carrying amount of the financial asset; or
- the amortised cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

Accounting policies applicable before 1 January 2020

Interest income is recognised in profit or loss at the rate specified in the contract.

Interest expenses and similar costs are charged to profit or loss for the period in which they are incurred, except to the extent that they are capitalised as being directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial periods of time to be prepared for its intended use or sale.

(t) Income tax

Income tax expense for the year comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries and joint ventures to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Future taxable profits are determined based on the reversal of relevant taxable temporary differences. If the amount of taxable temporary differences is insufficient to recognise a deferred tax asset in full, then future taxable profits, adjusted for reversals of existing temporary differences, are considered, based on the business plans for individual subsidiaries in the Group. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(u) Earnings per share

The Group presents basic earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the year.

(v) Related parties

Related parties are a person or entity that has direct or indirect control or joint control, or has significant influence over the financial and managerial decision-making of the Group; a person or entity that are under common control or under the same significant influence as the Group; or the Group has direct or indirect control or joint control or has significant influence over the financial and managerial decision-making of a person or entity.

(w) Segment reporting

Segment results that are reported to the Group's CEO (the chief operating decision maker) include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly corporate assets.

5 Related parties

Relationships with subsidiaries are described in notes 8. Key management and other related parties that the Group had significant transactions with during the year were as follows:

Name of entities	Country of incorporation/nationality	Nature of relationships
Key management personnel	Thailand	Persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of the Company.
TPI Polene Public Co., Ltd.	Thailand	Parent, 70.24% shareholding, some common directors
TPI Polene Power Investment Co., Ltd.	Cambodia	Subsidiary, 100.00% shareholding, some common directors
TPI Polene Power (Onnut) Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, some common directors
TPI Polene Power (International) Co., Ltd. (Formerly Zenith International Power Co., Ltd.)	Thailand	Subsidiary, 99.99% shareholding, some common directors
TPI Deep Sea Port Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, some common directors
TPI Olefins Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, some common directors
TPI Polene Power (Songkhla) Co., Ltd.	Thailand	Subsidiary, 99.97% shareholding, some common directors
TPI Solar Power Co., Ltd.	Thailand	Subsidiary, 99.97% shareholding, some common directors
TPI Wind Power Co., Ltd.	Thailand	Subsidiary, 99.97% shareholding, some common directors
TPI Polene Bio Organics Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
TPI Service Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors

Name of entities	Country of incorporation/nationality	Nature of relationships
TPI Refinery (1997) Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
TPI Healthcare Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
TPI Bio Pharmaceuticals Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
TPI Commercial Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
TPI Concrete Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
TPI All Seasons Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
Thai Propoxide Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
Thai Nitrate Co., Ltd.	Thailand	Subsidiary of the parent's company and some common directors
Polene Plastic Co., Ltd.	Thailand	Indirect subsidiary of the parent's company and some common directors
United Grain Industry Co., Ltd.	Thailand	Associate of the parent's company and some common directors
BUI Life Insurance Public Co., Ltd.	Thailand	Associate of the parent's company and some common directors
Thai Plastic Film Co., Ltd.	Thailand	Indirect subsidiary of the parent's company and some common directors
Thai Plastic Products Co., Ltd.	Thailand	Indirect subsidiary of the parent's company and some common directors
Pornchai Enterprise Co., Ltd.	Thailand	Some common directors
Bangkok Union Insurance Public Co., Ltd.	Thailand	Some common directors
Hong Yiah Seng Real Estates and Investment Co., Ltd.	Thailand	Some common directors
Saraburi Ginning Mill Co., Ltd.	Thailand	Some common directors
Leophairatana Enterprise Co., Ltd.	Thailand	Some common directors
Rayong Forest Co., Ltd.	Thailand	Some common directors
TPI Holding Co., Ltd.	Thailand	Some common directors

The pricing policies for transactions are explained further below:

Transactions	Pricing policies
Sale of goods and electricity power	Market price / agreed price
Purchase of goods and services fee	Market price / agreed price
Sale of assets	Book value / agreed price
Acquisition of investments	Book value
Other income	Agreed price
Shared service expense	Agreed price
Rental	Agreed price
Insurance premium	Market price
Interest income	1.65% and 2.13%
Interest expense	MLR - 1.5% and 3.90%

Significant transactions for the years ended 31 December with related parties were as follows:

(in thousand Baht)

Year ended 31 December	Consolidated financial statements 2020	Consolidated financial statements 2019	Separate financial statements 2020	Separate financial statements 2019
Parent company				
Sale of goods and electricity power	2,046,236	2,205,902	2,046,236	2,205,902
Purchase of goods and services fee	2,556,264	2,691,055	2,556,264	2,691,055
Acquisition of investment (see note 8)	-	105,988	-	105,988
Other income	3,821	4,010	3,821	4,010
Interest income	2,005	-	2,005	-
Shared service expense - cost of sale	93,779	93,779	93,779	93,779
Shared service expense - administrative expense	38,221	38,221	38,221	38,221
Dividend paid	1,888,000	1,770,000	1,888,000	1,770,000
Administrative expenses	-	759	-	759
Interest expense	17,967	-	17,967	-
Subsidiaries				
Interest income	-	-	-	3
Interest expense	-	-	168	-
Other related parties				
Sale of goods	1,006	1,539	1,006	1,539
Purchase of goods	5,426	4,747	5,426	4,747
Acquisition of investment (see note 8)	2,959	-	2,959	-
Other income	184	10	184	10
Dividend paid	439	411	439	411
Insurance premium	82,967	70,861	82,967	70,861
Administrative expenses	589	8,505	589	8,505
Interest expense	7,008	-	7,008	-
Key management personnel				
Key management personnel compensation				
Short-term employee benefits	45,217	45,631	45,217	45,631
Post-employment benefits	52	441	52	441
Total key management personnel compensation	**45,269**	**46,072**	**45,269**	**46,072**

Balances as at 31 December with related parties were as follows:

(in thousand Baht)

Trade accounts receivable	Consolidated financial statements 2020	Consolidated financial statements 2019	Separate financial statements 2020	Separate financial statements 2019
Parent company	900,199	558,089	900,199	558,089
Other related parties				
TPI Polene Bio Organics Co., Ltd.	1	2	1	2
TPI Concrete Co., Ltd.	31	62	31	62
TPI All Seasons Co., Ltd.	27	26	27	26
Thai Nitrate Co., Ltd.	2	1	2	1
United Grain Industry Co., Ltd.	-	1	-	1
Bangkok Union Insurance Public Co., Ltd.	5	9	5	9
BUI Life Insurance Public Co., Ltd.	3	12	3	12
Total	**900,268**	**558,202**	**900,268**	**558,202**
Less allowance for expected credit loss				
(2019: allowance for doubtful accounts)	-	-	-	-
Net	**900,268**	**558,202**	**900,268**	**558,202**
Expected credit losses				
(2019: Bad and doubtful debts) for the year	-	-	-	-

(in thousand Baht)

Short-term loans to related party	Interest rate 31 December *(% per annum)*	Separate financial statements 1 January	Increase	Decrease	31 December
2020					
Parent company	1.650	-	695,000	(695,000)	-
Subsidiary					
TPI Polene Power (Onnut) Co., Ltd.	2.125	800	-	(800)	-
		800	695,000	(695,800)	-
Accrued interest		1	2,005	(2,006)	-
Total		**801**	**697,005**	**(697,806)**	**-**
Less allowance for expected credit loss *(2019: Allowance for doubtful account)*		-			-
Net		**801**			**-**
2019					
Subsidiary					
TPI Polene Power (Onnut) Co., Ltd.	2.125	-	800	-	800
		-	800	-	800
Accrued interest		-	3	(2)	1
Total		**-**	**803**	**(2)**	**801**
Less allowance for expected credit loss (2019: Allowance for doubtful account)		-			-
Net		**-**			**801**

(in thousand Baht)

	Consolidated financial statements 2020	2019	Separate financial statements 2020	2019
Expected credit losses *(2019: Bad and doubtful debts expense)* of loans to for the year	-	-	-	-

(in thousand Baht)

Receivables and advance to related parties	Consolidated financial statements 2020	2019	Separate financial statements 2020	2019
Parent company	3,508	16,086	3,508	16,086
Subsidiaries				
TPI Deep Sea Port Co., Ltd.	-	-	-	7
TPI Polene Power (Songkhla) Co., Ltd.	-	-	-	7
TPI Solar Power Co., Ltd.	-	-	-	6
TPI Wind Power Co., Ltd.	-	-	-	6
Other related parties				
TPI Polene Bio Organics Co., Ltd.	2	2	2	2
United Grain Industry Co., Ltd.	-	2,138	-	2,138
BUI Life Insurance Public Co., Ltd.	749	881	749	881
Bangkok Union Insurance Public Co., Ltd.	35,634	41,648	35,634	41,648
Pornchai Enterprise Co., Ltd.	246	246	246	246
Total	**40,139**	**61,001**	**40,139**	**61,027**
Less allowance for expected credit loss *(2019: Allowance for doubtful account)*	-	-	-	-
Net	**40,139**	**61,001**	**40,139**	**61,027**
Expected credit losses *(2019: Bad and doubtful debts)* for the:	-	-	-	-

(in thousand Baht)

Trade accounts payable - related parties	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Parent company	166,918	209,560	166,918	209,560
Other related parties				
TPI Polene Bio Organics Co., Ltd.	870	518	870	518
TPI Healthcare Co., Ltd.	1,174	2,313	1,174	2,313
TPI Bio Pharmaceuticals Co., Ltd.	64	39	64	39
Total	**169,026**	**212,430**	**169,026**	**212,430**

	Interest rate		Separate financial statements			
	31 December 2019	31 December 2020	31 December 2019	Increase	Decrease	31 December 2020
Short-term loans from related party	*(% per annum)*			*(in thousand Baht)*		
Subsidiary						
TPI Polene Power (International) Co., Ltd.	-	MLR-1.5	-	105,000	(105,000)	-
Total			**-**	**105,000**	**(105,000)**	**-**
Less allowance for expected credit loss						
(2019: Allowance for doubtful account)			-			-
Net			-			-

(in thousand Baht)

Payables and advance from related parties	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Parent company	64,000	93,525	63,970	93,431
Other related parties				
TPI Concrete Co., Ltd.	1,357	433	1,357	433
TPI Polene Bio Organics Co., Ltd.	151	22	151	22
Pornchai Enterprise Co., Ltd.	4	4	4	4
Bangkok Union Insurance Public Co., Ltd.	504	1	504	1
TPI Healthcare Co., Ltd.	211	-	211	-
Total	**66,227**	**93,985**	**66,197**	**93,891**

(in thousand Baht)

Current portion of lease liabilities	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Parent company	3,639	-	3,639	-
Other related parties				
United Grain Industry Co., Ltd.	1,485	-	1,485	-
Pornchai Enterprise Co., Ltd.	378	-	378	-
Hong Yiah Seng Real Estates and Investment Co., Ltd.	1,128	-	1,128	-
Saraburi Ginning Mill Co., Ltd.	1,128	-	1,128	-
Leophairatana Enterprise Co., Ltd.	3,384	-	3,384	-
Total	**11,142**	**-**	**11,142**	**-**

(in thousand Baht)

Lease liabilities	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Parent company	464,238	-	464,238	-
Other related parties				
United Grain Industry Co., Ltd.	153,679	-	153,679	-
Pornchai Enterprise Co., Ltd.	162	-	162	-
Hong Yiah Seng Real Estates and Investment Co., Ltd.	4,312	-	4,312	-
Saraburi Ginning Mill Co., Ltd.	4,312	-	4,312	-
Leophairatana Enterprise Co., Ltd.	12,936	-	12,936	-
Total	**639,639**	**-**	**639,639**	**-**

Significant agreements with related parties

(a) The Company entered into several land, office building and factory building lease agreements with related parties for 3 years to 30 years were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Non-cancellable operating lease commitments				
Within one year	589	589	589	589
After one year but within five years	98	688	98	688
Total	**687**	**1,277**	**687**	**1,277**

(b) Several land rental agreements specified that the Company has to decommission the assets from rental area at the end of contract, causing the Company to set up the decommissioning costs as at 31 December 2020 in amount of Baht 265 million (2019: Baht 257 million) (see note 16).

(c) The Company entered into an electricity supply contract with parent company. The parent company will provide the waste heat to the Company that will be used in the manufacturing process for electricity. The Company shall supply the electricity solely to the parent company based on certain percentage as specified in the agreement. The agreement shall remain in full force and effect so long as, unless it is terminated by mutual agreement in writing of both parties.

(d) On 1 April 2016, the Company entered into sale & purchase and service agreement with the parent company. The parent company will provide services related to infrastructure, human resources, purchase and sale of goods and resources and other services whereby the Company agree to pay fee as specified in agreement. The initial period of the contract is for 3 years which commenced on 1 April 2016 and shall continue for consecutive period of three years, unless earlier terminated by either party.

6 Cash and cash equivalents

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Cash on hand	476	482	476	482
Cash at banks - current accounts	4,652	7,096	1,289	3,924
Cash at banks - savings accounts	1,784,570	668,472	1,646,671	533,522
Cash at banks - savings accounts (Private Funds)	886	13,506	886	13,506
Total	**1,790,584**	**689,556**	**1,649,322**	**551,434**

7 Inventories

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Finished goods	23,621	28,568	23,621	28,568
Work in process	474,580	321,062	474,580	321,062
Raw materials, package and chemical	100,666	114,633	100,666	114,633
Spare parts and supplies	668,363	612,742	668,363	612,742
Goods in transit	2,145	-	2,145	-
	1,269,375	1,077,005	1,269,375	1,077,005
Less allowance for declining in value	(20,515)	(24,500)	(20,515)	(24,500)
Net	**1,248,860**	**1,052,505**	**1,248,860**	**1,052,505**
Inventories recognised as an expense in 'cost of sales of goods':				
- Cost	6,031,642	5,529,730	6,031,642	5,529,730
- Reversal of write-down	(3,985)	-	(3,985)	-
Net total	**6,027,657**	**5,529,730**	**6,027,657**	**5,529,730**

8 Investment in subsidiaries

(in thousand Baht)

		Separate financial statements	
	Note	2020	2019 (Restated)
Subsidiaries			
At 1 January - as reported		**325,444**	**191,457**
Impact of changes in accounting policies	*3*		
-Change in accounting policy for investments in subsidiaries in separate financial statements		(5,458)	(546)
At 1 January - restated		**319,986**	**190,911**
Acquisition		2,959	133,987
Share of net profit (loss) of subsidiaries		7,006	(4,662)
Share of other comprehensive income of subsidiaries		(18)	(250)
At 31 December		**329,933**	**319,986**

TPI Polene Power Investment Company Limited

On 23 January 2018, TPI Polene Power Investment Company Limited ("TPIPPI") called for 100% paid-up share capital and the Company fully paid share capital amounting to USD 125,000 or equivalent to Baht 3.96 million.

On 26 December 2019, the Board of Directors' meeting pass the resolution to approve the Company to register the dissolution and liquidation of TPIPPI.

As at 31 December 2020, the registering of dissolution is in the process.

TPI Polene Power (International) Co., Ltd. (formerly Zenith International Power Co., Ltd.)

On 30 August 2019, the Company's Board of Directors' meeting passed the resolution to approve the acquisition of shares in TPI Polene Power (International) Co., Ltd. (formerly Zenith International Power Co., Ltd.), the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 24 September 2019, the Company obtained control of that company by acquiring 999,980 shares or equivalent to 99.99% of the paid-up share capital at the price of Baht 105.99 per share, in the amount of Baht 105,987,880.20 from the Parent, thereby become a subsidiary of the Company.

TPI Deep Sea Port Co., Ltd.

In October 2019, the Company was established TPI Deep Sea Port Co., Ltd. The authorised share capital of Baht 100,000,000 with 1,000,000 ordinary shares was registered on 11 October 2019. The Company holds 999,997 shares or 99.99% of the registered capital and TPI Deep Sea Port Co., Ltd. called for 25% paid-up share capital and the Company fully paid share capital amounting to Baht 24,999,925.

TPI Polene Power (Songkla) Co., Ltd.

In October 2019, the Company was established TPI Polene Power (Songkla) Co., Ltd. The authorised share capital of Baht 1,000,000 with 10,000 ordinary shares was registered on 4 October 2019. The Company holds 9,997 shares or 99.97% of the registered capital and TPI Polene Power (Songkla) Co., Ltd. called for 100% paid-up share capital and the Company fully paid share capital amounting to Baht 999,700.

TPI Solar Power Co., Ltd.

In October 2019, the Company was established TPI Solar Power Co., Ltd. The authorised share capital of Baht 1,000,000 with 10,000 ordinary shares was registered on 4 October 2019. The Company holds 9,997 shares or 99.97% of the registered capital and TPI Solar Power Co., Ltd. called for 100% paid-up share capital and the Company fully paid share capital amounting to Baht 999,700.

TPI Wind Power Co., Ltd.

In October 2019, the Company was established TPI Wind Power Co., Ltd. The authorised share capital of Baht 1,000,000 with 10,000 ordinary shares was registered on 4 October 2019. The Company holds 9,997 shares or 99.97% of the registered capital and TPI Wind Power Co., Ltd. called for 100% paid-up share capital and the Company fully paid share capital amounting to Baht 999,700.

TPI Olefins Co., Ltd.

On 27 March 2020, the Company's Board of Directors' meeting passed the resolution to approve the acquisition of shares in TPI Olefins Co., Ltd., the main objective is to operate electricity business and related business. Thereafter, on 4 April 2020, the Company obtained control of that company by acquiring 99,993 shares or equivalent to 99.99% of the paid-up share capital at the price of Baht 29.596 per share, in the amount of Baht 2.96 million from the related party, thereby become a subsidiary of the Company.

Investments in subsidiaries as at 31 December 2020 and 2019, dividend income from those investments for the years then ended, were as follows:

	Type of business	Separate financial statements									
		Ownership interest		Paid-up capital		Cost		Equity		Dividend income for the year	
		2020	2019	2020	2019	2020	2019	2020	2019 (Restated)	2020	2019
Subsidiaries		*(%)*		*(in thousand Baht)*							
TPI Polene Power Investment Co., Ltd.	Generate and distribute electricity in Cambodia (in the process of registering the dissolution)	100.00	100.00	3,957	3,957	3,957	3,957	3,123	3,142	-	-
TPI Polene Power (On Nut) Co., Ltd	Generate and distribute electricity from refuse derived fuel (RDF) (dormant)	99.99	99.99	187,500	187,500	187,500	187,500	188,955	182,763	-	-
TPI Polene Power International Co., Ltd. (Formerly Zenith International Power Co., Ltd.)	Investing in alternative energy business (dormant)	99.99	99.99	100,000	100,000	105,988	105,988	106,898	106,150	-	-
TPI Deep Sea Port Co., Ltd.	Port business operation (dormant)	99.99	99.99	25,000	25,000	24,999	24,999	24,998	24,998	-	-
TPI Olefins Co., Ltd.	Operate electricity business and related business (dormant)	99.99	-	1,000	-	2,959	-	3,049	-	-	-
TPI Polene Power (Songkhla) Co., Ltd.	Generate electricity from refuse derived fuel and biomass (dormant)	99.97	99.97	1,000	1,000	1,000	1,000	970	981	-	-
TPI Solar Power Co., Ltd.	Generate electricity from solar energy (dormant)	99.97	99.97	1,000	1,000	1,000	1,000	970	981	-	-
TPI Wind Power Co., Ltd.	Generate electricity from wind energy (dormant)	99.97	99.97	1,000	1,000	1,000	1,000	970	981	-	-
Total						**328,403**	**325,444**	**329,933**	**319,986**	**-**	**-**

All subsidiaries were incorporated in Thailand, except TPI Polene Power Investment Co., Ltd. which was in corporated in Cambodia.

None of the Company's subsidiaries are publicly listed and consequently do not have published price quotations.

9 Property, plant and equipment

(in thousand Baht)

	Consolidated financial statements									
	Land	Plants	Machinery	Tools and factory equipment	furniture, fixture and office equipment	Vehicle	Major spare parts	Assets under construction and installation	Decommissioning assets	Total
Cost										
At 1 January 2019	1,481,340	926,335	15,466,917	202,134	29,493	263	20,166	8,990,979	158,105	27,275,732
Additions	4,100,911	-	48,063	18,350	7,244	204	33,279	2,645,031	81,318	6,934,400
Transfers	-	639,216	8,536,788	-	6,289	-	-	(9,182,293)	-	-
Disposals	-	-	-	-	(30)	-	-	-	-	(30)
At 31 December 2019 and 1 January 2020	**5,582,251**	**1,565,551**	**24,051,768**	**220,484**	**42,996**	**467**	**53,445**	**2,453,717**	**239,423**	**34,210,102**
Additions	3,962,977	-	38,864	22,365	6,910	117	147,795	1,497,795	-	5,676,093
Transfers	-	19,089	199,477	-	3,193	-	-	(221,759)	-	-
At 31 December 2020	**9,545,228**	**1,584,640**	**24,290,109**	**242,849**	**53,099**	**584**	**200,510**	**3,729,753**	**239,423**	**39,886,195**
Depreciation										
At 1 January 2019	-	42,725	2,466,070	94,085	18,966	24	-	-	11,042	2,632,912
Depreciation charge for the year	-	50,961	728,172	15,893	3,874	41	-	-	7,819	806,760
Disposals	-	-	-	-	(14)	-	-	-	-	(14)
At 31 December 2019 and 1 January 2020	**-**	**93,686**	**3,194,242**	**109,978**	**22,826**	**65**	**-**	**-**	**18,861**	**3,439,658**
Depreciation charge for the year	-	52,957	763,226	11,976	4,641	51	-	-	8,074	840,925
At 31 December 2020	**-**	**146,643**	**3,957,468**	**121,954**	**27,467**	**116**	**-**	**-**	**26,935**	**4,280,583**
Net book value										
At 1 January 2019	**1,481,340**	**883,610**	**13,000,847**	**108,049**	**10,527**	**239**	**20,166**	**8,990,979**	**147,063**	**24,642,820**
At 31 December 2019 and 1 January 2020	**5,582,251**	**1,471,865**	**20,857,526**	**110,506**	**20,170**	**402**	**53,445**	**2,453,717**	**220,562**	**30,770,444**
At 31 December 2020	**9,545,228**	**1,437,997**	**20,332,641**	**120,895**	**25,632**	**468**	**200,510**	**3,729,753**	**212,488**	**35,605,612**

(in thousand Baht)

	Separate financial statements									
	Land	Plants	Machinery	Tools and factory equipment	furniture, fixture and office equipment	Vehicle	Major spare parts	Assets under construction and installation	Decommissioning assets	Total
Cost										
At 1 January 2019	1,481,340	926,335	15,466,917	202,134	29,493	263	20,166	8,990,979	158,105	27,275,732
Additions	4,100,911	-	48,063	18,350	7,244	204	33,279	2,645,031	81,318	6,934,400
Transfers	-	639,216	8,536,788	-	6,289	-	-	(9,182,293)	-	-
Disposals	-	-	-	-	(30)	-	-	-	-	(30)
At 31 December 2019 and 1 January 2020	**5,582,251**	**1,565,551**	**24,051,768**	**220,484**	**42,996**	**467**	**53,445**	**2,453,717**	**239,423**	**34,210,102**
Additions	3,962,977	-	38,864	22,365	6,910	117	147,795	1,493,421	-	5,671,719
Transfers	-	19,089	199,477	-	3,193	-	-	(221,759)	-	-
At 31 December 2020	**9,545,228**	**1,584,640**	**24,290,109**	**242,849**	**53,099**	**584**	**200,510**	**3,725,379**	**239,423**	**39,881,821**
Depreciation										
At 1 January 2019	-	42,725	2,466,070	94,085	18,966	24	-	-	11,042	2,632,912
Depreciation charge for the year	-	50,961	728,172	15,893	3,874	41	-	-	7,819	806,760
Disposals	-	-	-	-	(14)	-	-	-	-	(14)
At 31 December 2019 and 1 January 2020	**-**	**93,686**	**3,194,242**	**109,978**	**22,826**	**65**	**-**	**-**	**18,861**	**3,439,658**
Depreciation charge for the year	-	52,957	763,226	11,976	4,641	51	-	-	8,074	840,925
At 31 December 2020	**-**	**146,643**	**3,957,468**	**121,954**	**27,467**	**116**	**-**	**-**	**26,935**	**4,280,583**
Net book value										
At 1 January 2019	**1,481,340**	**883,610**	**13,000,847**	**108,049**	**10,527**	**239**	**20,166**	**8,990,979**	**147,063**	**24,642,820**
At 31 December 2019 and 1 January 2020	**5,582,251**	**1,471,865**	**20,857,526**	**110,506**	**20,170**	**402**	**53,445**	**2,453,717**	**220,562**	**30,770,444**
At 31 December 2020	**9,545,228**	**1,437,997**	**20,332,641**	**120,895**	**25,632**	**468**	**200,510**	**3,725,379**	**212,488**	**35,601,238**

The original cost of the Company's fully depreciated plant and equipment that was still in use as at 31 December 2020 amounted to Baht 934 million *(2019: Baht 932 million)*.

Capitalised borrowing costs relating to the acquisition of the land and the construction of the new factory of the Group and the Company as at 31 December 2020 are amounted to Baht 114 million and Baht 114 million, respectively *(2019: Baht 61 million and Baht 61 million, respectively)*, with a capitalisation in the consolidated and separate financial statements of 2% - 3.9% *(2019: 3.5% - 3.9%)*.

10 Leases

As a lessee

(in thousand Baht)

At 31 December 2020	Consolidated financial statements	Separate financial statements
Right-of-use assets		
Land	641,073	641,073
Buildings	530	530
Vehicles	9,016	9,016
Total	**650,619**	**650,619**

In 2020, additions to the right-of-use assets of the Group and the Company were Baht 43.19 million and Baht 43.19 million, respectively.

The Group leases a number of land , buildings and vehicles for 2-30 years, with extension options at the end of lease term. The rental is payable monthly as specified in the contract.

Extension options

Some property leases contain extension options exercisable by the Group up to one year before the end of the non-cancellable contract period. Where practicable, the Group seeks to include extension options in new leases to provide operational flexibility. The extension options held are exercisable only by the Group and not by the lessors. The Group assesses at lease commencement date whether it is reasonably certain to exercise the extension options. The Group reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control.

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
For the year ended 31 December	2020	2019	2020	2019
Amounts recognised in profit or loss				
Depreciation of right-of-use assets:				
- Land	31,477	-	31,477	-
- Buildings	377	-	377	-
- Vehicles	3,146	-	3,146	-
Interest on lease liabilities	25,205	-	25,205	-
Expenses relating to short-term leases	8,844	-	8,844	-
Lease expense	-	40,022	-	40,022
Contingent rent expense	-	865,120	-	865,120

In 2020, total cash outflow for leases of the Group and the Company were Baht 37.83 million and Baht 37.83 million, respectively.

11 Interest-bearing liabilities

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Current				
Short-term loans from financial institutions	239,625	-	239,625	-
Current debentures	4,000,000	-	4,000,000	-
Lease liabilities				
(2019: Finance lease liabilities)	14,849	-	14,849	-
Total interest-bearing liabilities				
- current	**4,254,474**	**-**	**4,254,474**	**-**
Non-Current				
Debentures	8,000,000	8,000,000	8,000,000	8,000,000
Lease liabilities				
(2019: Finance lease liabilities)	645,181	-	645,181	-
Total interest-bearing liabilities				
- non-current	**8,645,181**	**8,000,000**	**8,645,181**	**8,000,000**
Total	**12,899,655**	**8,000,000**	**12,899,655**	**8,000,000**

The periods to maturity of interest-bearing liabilities as at 31 December were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Within 1 year	4,254,474	-	4,254,474	-
1 - 5 years	8,066,789	8,000,000	8,066,789	8,000,000
After 5 years	578,392	-	578,392	-
Total	**12,899,655**	**8,000,000**	**12,899,655**	**8,000,000**

As at 31 December 2020 and 2019, the Company has no unutilised credit facilities.

Debentures

As at 31 December 2020, the Company had the unsecured, unsubordinated debentures in registered form with debentures holders' representative, payable quarterly totalling Baht 12,000 million *(31 December 2019: Baht 8,000 million)* as follows:

	Consolidated and Separate financial statements							
	The period to maturity within one year		The period to maturity over one year		Total			
Issued Date	2020	2019	2020	2019	2020	2019	Interest Rate	Term
	(in thousand Baht)						*(% p.a.)*	
28 November 2018	4,000,000	-	-	4,000,000	4,000,000	4,000,000	3.90	3 years
9 August 2019	-	-	4,000,000	4,000,000	4,000,000	4,000,000	3.50	3 years 3 months
19 August 2020	-	-	4,000,000	-	4,000,000	-	3.90	3 years 11 months
Total	**4,000,000**	**-**	**8,000,000**	**8,000,000**	**12,000,000**	**8,000,000**		

12 Trade accounts payable

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2020	2019	2020	2019
Related parties	4	169,026	212,430	169,026	212,430
Other parties		263,490	227,403	263,490	227,403
Total		**432,516**	**439,833**	**432,516**	**439,833**

13 Other payables

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Retention payable	407,525	1,058,706	407,525	1,058,706
Other payables - Machine	167,502	363,225	167,502	363,225
Accrued expenses	76,875	78,859	76,732	78,797
Deposit from sales and guarantee	6,023	6,799	6,023	6,799
Others	133,291	76,371	133,227	76,371
Total	**791,216**	**1,583,960**	**791,009**	**1,583,898**

14 Other current liabilities

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Payable to Revenue Department	33,092	36,578	33,092	36,578
Suspend output tax	99,306	103,450	99,306	103,450
Others	6,659	6,048	6,659	6,048
Total	**139,057**	**146,076**	**139,057**	**146,076**

15 Non-current provisions for employee benefits

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Statement of financial position				
Non-current provisions for:				
Post-employment benefits	**152,705**	**151,119**	**152,705**	**151,119**
Year ended 31 December				
Statement of comprehensive income:				
Recognised in profit or loss:				
Post-employment benefits	**2,978**	**37,408**	**2,978**	**37,408**
Recognised in other comprehensive income:				
Actuarial losses recognised in the year	**-**	**30,759**	**-**	**30,759**

Defined benefit plan

The Group operate defined benefit plans based on the requirement of Thai Labour Protection Act B.E. 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service.

The defined benefit plans expose the Company to actuarial risks, such as longevity risk, currency risk, interest rate risk and market (investment) risk.

Movement in the present value of the defined benefit obligations.

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
At 1 January	151,119	87,698	151,119	87,698
Include in profit or loss:				
Current service cost and interest on obligation	2,978	37,408	2,978	37,408
Included in other comprehensive income				
Actuarial loss	-	30,759	-	30,759
Other				
Benefit paid	(1,392)	(4,746)	(1,392)	(4,746)
At 31 December	**152,705**	**151,119**	**152,705**	**151,119**

Actuarial gains and losses recognised in other comprehensive income were mainly arose from the change of employee turnover, discount rate and future salary growth.

Actuarial assumptions

The following were the principal actuarial assumptions at the reporting date (expressed as weighted averages).

(%)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Discount rate	2.00	2.00	2.00	2.00
Future salary growth	2.46	6.66	2.46	6.66

Assumptions regarding future mortality have been based on published statistics and mortality tables.

At 31 December 2020, the weighted-average duration of the defined benefit obligation was 27 years *(2019: 27 years)*.

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	Increase	Decrease	Increase	Decrease
At 31 December 2020				
Discount rate (1% movement)	(12,218)	14,367	(12,218)	14,367
Future salary growth (1% movement)	11,814	(10,191)	11,814	(10,191)
At 31 December 2019				
Discount rate (1% movement)	(20,390)	24,996	(20,390)	24,996
Future salary growth (1% movement)	21,733	(18,337)	21,733	(18,337)

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

16 Decommissioning costs

(in thousand Baht)

	Consolidated and Separate financial statements
At 1 January 2019	167,958
Provisions made	88,897
At 31 December 2019 and 1 January 2020	**256,855**
Provisions made	8,079
At 31 December 2020	**264,934**
At 31 December 2019 and 1 January 2020	
Non-current	**256,855**
At 31 December 2020	
Non-current	**264,934**

17 Share capital

	Par value per share *(in Baht)*	2020 Number	2020 Amount	2019 Number	2019 Amount
		(thousand shares / thousand Baht)			
Authorised					
At 31 December					
- ordinary shares	*1*	**8,400,000**	**8,400,000**	**8,400,000**	**8,400,000**
Issued and paid					
At 1 January					
- ordinary shares	*1*	8,400,000	8,400,000	8,400,000	8,400,000
At 31 December					
- ordinary shares	*1*	**8,400,000**	**8,400,000**	**8,400,000**	**8,400,000**

18 Reserves

Reserves comprise:

Appropriations of profit

Legal reserve

Section 116 of the Public Companies Act B.E. 2535 Section 116 requires that a public company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward, to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

As at 31 December 2020, the Company allocated profit from operation to legal reserve in amount of Baht 76 million, the total legal reserve are Baht 840 million. *(2019: the Company allocated profit from operation to legal reserve in amount of Baht 230 million, the total legal reserve are Baht 764 million)*.

Other components of equity

Currency translation differences

The currency translation differences account within equity comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

Movements in reserves

Movements in reserves are shown in the statements of changes in equity.

19 Segment information and disaggregation of revenue

The Group comprises the following main business segments:

- Energy & Utilities
- Petrol and gas stations

Information regarding the results of each reportable segment is included below. Performance is measured based on segment profit before tax, as included in the internal management reports that are reviewed by the Group's CODM. Segment profit before tax is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

(a) Reportable segment results

	Consolidated financial statements							
For the year ended 31 December	Revenue from external customers		Inter-segment revenue		Total segment revenue		Reportable segment profit (loss) before interest, tax and depreciation	
	2020	2019	2020	2019	2020	2019	2020	2019
	(in thousand Baht)							
Energy & Utilities	10,586,783	9,851,493	-	-	10,586,783	9,851,493	5,695,331	5,562,808
Petrol and gas stations	532,567	719,708	-	-	532,567	719,708	(1,814)	2,976
Total	**11,119,350**	**10,571,201**	**-**	**-**	**11,119,350**	**10,571,201**	**5,693,517**	**5,565,784**
Finance costs							(285,182)	(159,476)
Depreciation							(875,925)	(806,873)
Others							95,596	109,355
Profit before income tax expense for the year							**4,628,006**	**4,708,790**

The Group was incorporated both domestic and international. There are no material revenues derived from, or assets located in, foreign countries, and timing of revenue recognition of the Group is at a point in time.

(in thousand Baht)

	Consolidated financial statements	
	Reportable segment profit (loss) before tax	
For the year ended 31 December	2020	2019
Energy & Utilities	4,655,122	4,713,032
Petrol and gas stations	(27,125)	(4,265)
Total	**4,627,997**	**4,708,767**
Elimination of inter-segment (profit) loss	9	23
Profit (loss) before income tax expense for the year	**4,628,006**	**4,708,790**

(b) Reportable segment financial position

(in thousand Baht)

	Segment assets	
	2020	2019
Energy & Utilities	40,146,047	34,198,184
Petrol and gas stations	72,703	52,198
	40,218,750	**34,250,382**
Unallocated assets	3,556,402	3,602,192
Total assets	**43,775,152**	**37,852,574**

Geographical segments

The Group was incorporated both domestic and international. There are no material revenues derived from, or assets located in, foreign countries.

Major customer

Revenues from 2 customers of the Group's represents approximately Baht 10,611 million *(2019: Baht 9,882 million)* of the Group's total revenues.

20 Investment income

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Interest income	28,819	63,570	21,386	60,523
Others	14,041	15,124	14,041	15,148
Total	**42,860**	**78,694**	**35,427**	**75,671**

21 Other income

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Other income-claim insurance	99,587	43,048	99,587	43,048
Revenue from machine rental	141,363	94,317	141,363	94,317
Others	40,842	26,928	40,815	26,905
Total	**281,792**	**164,293**	**281,765**	**164,270**

22 Distribution costs

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Personnel expenses	28,205	31,100	28,205	31,100
Utilities expenses	8,355	10,921	8,355	10,921
Rental 1,455	10,159	1,455	10,159	
Depreciation	9,643	2,976	9,643	2,976
Others	18,779	20,523	18,779	20,523
Total	**66,437**	**75,679**	**66,437**	**75,679**

23 Administrative expenses

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Personnel expenses	69,430	71,709	69,429	71,709
Shared service expenses	41,884	40,316	41,760	40,213
Professional fees	15,076	38,062	14,999	38,002
Registration fees	26,400	27,705	26,392	20,301
Depreciation	2,512	17,186	2,512	17,186
Insurance expenses	3,690	3,170	3,690	3,170
Donation	65,052	62,901	65,052	62,901
Others	208,685	171,101	208,643	170,960
Total	**432,729**	**432,150**	**432,477**	**424,442**

24 Employee benefit expenses

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Management				
Wages and salaries	24,498	25,485	24,498	25,485
Defined benefit plans	52	441	52	441
Others	20,718	20,146	20,718	20,146
	45,268	46,072	45,268	46,072
Employee				
Wages and salaries	515,544	524,919	515,544	524,919
Defined benefit plans	2,926	12,295	2,926	12,295
Others	43,955	46,044	43,955	46,044
	562,425	583,258	562,425	583,258
Total	**607,693**	**629,330**	**607,693**	**629,330**

Defined contribution plans

The defined contribution plans comprise provident funds established by the Company for its employees. Membership to the funds is on a voluntary basis. Contributions are made monthly by the employees at rates ranging 3% of their basic salaries and by the Company at rates ranging 3% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by a licensed Fund Manager.

25 Expenses by nature

The statements of income include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
Included in cost of sales of goods:	2020	2019	2020	2019
Changes in inventories of finished goods and work in progress	148,571	266,242	148,571	266,242
Raw materials and consumables used	3,838,801	3,299,697	3,838,801	3,299,697
Employee benefit expenses	510,059	526,521	510,059	526,521
Depreciation	863,770	786,711	863,770	786,711
Included in distribution costs:				
Employee benefit expenses	28,205	31,100	28,205	31,100
Depreciation	9,643	2,976	9,643	2,976
Included in administrative expenses:				
Employee benefit expenses	69,429	71,709	69,429	71,709
Depreciation	2,512	17,186	2,512	17,186

26 Finance costs

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2020	2019	2020	2019
Interest expense:					
Short-term loans from financial institutions		11,670	-	11,838	-
Debentures		354,510	211,616	354,510	211,616
Lease		25,205	-	25,205	-
Total interest expense		**391,385**	**211,616**	**391,553**	**211,616**
Other		8,080	8,374	8,080	8,374
		399,465	**219,990**	**399,633**	**219,990**
Less amounts included in the cost of qualifying assets:					
- Construction contracts work in progress	*10*	(114,283)	(60,514)	(114,283)	(60,514)
Net		**285,182**	**159,476**	**285,350**	**159,476**

27 Income tax

(in thousand Baht)

Income tax recognised in profit or loss	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Current tax expense				
Current year	107,512	98,129	107,143	98,129
Adjustment for prior years	5,921	(2,987)	5,921	(2,987)
	113,433	95,142	113,064	95,142
Deferred tax expense				
Movements in temporary differences	8,748	6,840	8,748	6,840
Total income tax expense	**122,181**	**101,982**	**121,812**	**101,982**

(in thousand Baht)

	Consolidated and Separate financial statements					
	2020			2019		
Income tax	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Recognised in other comprehensive income						
Defined benefit plan actuarial gains (losses)	-	-	-	(30,759)	6,152	(24,607)
Total	**-**	**-**	**-**	**(30,759)**	**6,152**	**(24,607)**

Reconciliation of effective tax rate	Consolidated financial statements			
	2020		2019	
	Rate *(%)*	*(in thousand Baht)*	Rate *(%)*	*(in thousand Baht)*
Profit before income tax expense		4,628,006		4,708,790
Income tax using the Thai corporation tax rate	20	925,601	20	941,758
Double allowance and deduction		(31,646)		(24,507)
Profit was derived from promoted activities		(812,608)		(822,148)
Expenses not deductible for tax purposes		34,913		9,866
Under (over) provided in prior years		5,921		(2,987)
Total	**2.6**	**122,181**	**2.2**	**101,982**

Reconciliation of effective tax rate	Separate financial statements			
	2020		2019	
	Rate *(%)*	*(in thousand Baht)*	Rate *(%)*	*(in thousand Baht)*
Profit before income tax expense		4,627,636		4,713,452
Income tax using the Thai corporation tax rate	20	925,527	20	942,690
Double allowance and deduction		(31,941)		(24,507)
Profit was derived from promoted activities		(812,608)		(822,148)
Expenses not deductible for tax purposes		34,913		8,934
Under (over) provided in prior years		5,921		(2,987)
Total	**2.6**	**121,812**	**2.2**	**101,982**

(in thousand Baht)

	Consolidated and Separate financial statements			
Deferred tax assets and liabilities	Assets		Liabilities	
At 31 December	2020	2019	2020	2019
Total	82,322	92,388	(60)	(1,377)
Set off of tax	(60)	(1,377)	60	1,377
Net deferred tax assets	**82,262**	**91,011**	**-**	**-**

Movements in deferred tax balances are as follows:

(in thousand Baht)

	Consolidated and Separate financial statements			
		(Charged) / Credited to		
	At 1 January 2020	Profit or loss	Other comprehensive income	**At 31 December 2020**
Deferred tax assets				
Property, plant and equipment	63,511	(11,468)	-	52,043
Inventories	4,900	(797)	-	4,103
Provisions for employee benefits	23,977	317	-	24,294
Lease liabilities	-	1,882	-	1,882
Total	**92,388**	**(10,066)**	**-**	**82,322**
Deferred tax liabilities				
Revaluation on fair value of financial assets	(1,377)	1,318	-	(60)
Total	**(1,377)**	**1,318**	**-**	**(60)**
Net	**91,011**	**(8,748)**	**-**	**82,262**

(in thousand Baht)

	Consolidated and Separate financial statements			
		(Charged) / Credited to		
	At 1 January 2019	Profit or loss	Other comprehensive income	**At 31 December 2019**
Deferred tax assets				
Property, plant and equipment	75,338	(11,827)	-	63,511
Inventories	4,900	-	-	4,900
Provisions for employee benefits	11,293	6,532	6,152	23,977
Revaluation on fair value of trading investment	168	(168)	-	-
Total	**91,699**	**(5,463)**	**6,152**	**92,388**
Deferred tax liabilities				
Revaluation on fair value of trading investment	-	(1,377)	-	(1,377)
Total	**-**	**(1,377)**	**-**	**(1,377)**
Net	**91,699**	**(6,840)**	**6,152**	**91,011**

28 Promotional privileges

By virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520, the Company has been granted privileges by the Board of Investment relating to natural gas stations, power plants and fuel production from garbage and waste. The privileges granted include:

(a) exemption from payment of import duty on machinery and equipment approved by the Board;

(b) exemption from payment of corporate income tax for certain operations for a period of 8 years from the dates on which the income is first derived from such operations;

(c) a 50% reduction in the normal income tax rate on the net profit derived from certain operations for a period of 5 years, commencing from the expiry date in (b) above;

(d) a deduction of twice the actual transportation, electrical and water supply expenses for a period of 10 years from the respective revenues and a 25% reduction of the capital expenditure for the installation or the construction of the facilities in addition to the normal depreciation; and

(e) losses occur during the period could be carried forward 5 years commencing from the expiry date of the privileges to deducted from the profit that occur after the period of exemption of cooperate income tax.

As a promoted company, the Company must comply with certain terms and conditions prescribed in the promotional certificates.

Summary of revenue from promoted and non-promoted businesses:

(in thousand Baht)

	Consolidated and Separate financial statements					
	2020			2019		
	Promoted businesses	Non-Promoted businesses	Total	Promoted businesses	Non-Promoted businesses	Total
Domestic sales	9,581,155	1,538,195	11,119,350	8,799,853	1,771,348	10,571,201
Total	**9,581,155**	**1,538,195**	**11,119,350**	**8,799,853**	**1,771,348**	**10,571,201**

29 Basic earnings per share

The calculations of basic earnings per share for the years ended 31 December 2020 and 2019 were based on the profit for the years attributable to ordinary shareholders of the Company and the number of ordinary shares outstanding during the years as follows:

(in thousand Baht / thousand shares)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019 (Restated)
Profit attributable to ordinary shareholders of the Company (basic)	**4,505,824**	**4,606,808**	**4,505,824**	**4,606,808**
Weighted average number of ordinary shares outstanding (basic)	**8,400,000**	**8,400,000**	**8,400,000**	**8,400,000**
Earnings per share (basic) (in Baht)	**0.536**	**0.548**	**0.536**	**0.548**

30 Dividends

At the annual general meeting of the shareholders of the Company held on 19 April 2019, the shareholders approved the appropriation of 2018 annual dividend at Baht 0.40 per share, amounting to Baht 3,360 million. After a deduction of the interim dividends of Baht 0.30 per share which were paid to the Company's shareholders in 2018, the remaining dividends of Baht 0.10 per share, totalling Baht 840 million. The dividend was paid to the shareholders on 3 May 2019.

At the Board of Director's meeting of the Company held on 30 August 2019, the Board of Director's meeting passed a resolution to declare the interim dividend payment from retained earnings as of 30 June 2019, in amount of Baht 0.10 per share for the Baht 8,400 million common shares, amounting to Baht 840 million. The dividend was paid to the shareholders on 13 September 2019.

At the Board of Director's meeting of the Company held on 29 November 2019, the Board of Director's meeting passed a resolution to declare the interim dividend payment from retained earnings as of 30 September 2019, in amount of Bath 0.10 per share for the Baht 8,400 million common shares, amounting to Baht 840 million. The dividend was paid to shareholders on 27 December 2019.

At the annual general meeting of the shareholders of the Company held on 30 July 2020, the shareholders acknowledged the interim dividend payment of 2019 annual dividend at Baht 0.40 per share, amounting to Baht 3,360 million. After a deduction of the interim dividends of Baht 0.20 per share which paid to the Company's shareholders in 2019, the remaining dividends of Baht 0.20 per share, totalling Baht 1,680 million. The dividend was paid to the shareholders on 15 May 2020 and no further dividend payment shall be made from the fiscal year 2019.

At the Board of Director's meeting of the Company held on 25 August 2020, the Board of Director's meeting passed a resolution to declare the interim dividend payment from retained earnings as of 30 June 2020, in amount of Baht 0.12 per share for the Baht 8,400 million common shares, amounting to Baht 1,008 million. The dividend was paid to the shareholders on 22 September 2020.

31 Financial instruments

(a) Carrying amounts and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not include fair value information for financial assets and financial liabilities measured at amortised cost if the carrying amount is a reasonable approximation of fair value.

(in thousand Baht)

		Consolidated financial statements						
		Carrying amount			Fair value			
At 31 December 2020	*Note*	Financial instruments measured at FVTPL	Financial instruments measured at amortised cost	Total	Level 1	Level 2	Level 3	Total
Financial assets								
Debt securities								
(Private funds)		43,774	-	43,774	-	43,774	-	43,774
Debt securities		1,252,608	188,049	1,440,657	1,252,608	188,753	-	1,441,361
Promissary Note		-	199,856	199,856	-	199,953	-	199,953
Total financial assets		**1,296,382**	**387,905**	**1,684,287**				
Financial liabilities								
Promissary Note	*11*	-	239,625	239,625	-	239,685	-	239,685
Debentures	*11*	-	12,000,000	12,000,000	-	12,071,092	-	12,071,092
Total financial liabilities		**-**	**12,239,625**	**12,239,625**				

(in thousand Baht)

		Separate financial statements						
		Carrying amount			Fair value			
At 31 December 2020	*Note*	Financial instruments measured at FVTPL	Financial instruments measured at amortised cost	Total	Level 1	Level 2	Level 3	Total
Financial assets								
Debt securities								
(Private funds)		43,774	-	43,774	-	43,774	-	43,774
Debt securities		1,252,608	5,183	1,257,791	1,252,608	5,558	-	1,258,166
Promissary Note		-	199,856	199,856	-	199,953	-	199,953
Total financial assets		**1,296,382**	**205,039**	**1,501,421**				
Financial liabilities								
Promissary Note	*11*	-	239,625	239,625	-	239,685	-	239,685
Debentures	*11*	-	12,000,000	12,000,000	-	12,071,092	-	12,071,092
Total financial liabilities		**-**	**12,239,625**	**12,239,625**				

(in thousand Baht)

	Consolidated financial statements				
	Carrying amount	Fair value			
		Level 1	Level 2	Level 3	Total
At 31 December 2019					
Financial assets measured at fair value					
Debt securities held for trading	1,329,349	200,249	1,129,100	-	1,329,349
Debt securities held for trading (Private funds)	1,321,347	-	1,321,347	-	1,321,347
Financial assets and financial liabilities not measured at fair value					
Debt securities held to maturity	186,532	-	187,099	-	187,099
Debentures	8,000,000	-	8,091,745	-	8,091,745

(in thousand Baht)

	Separate financial statements				
	Carrying amount	Fair value			
		Level 1	Level 2	Level 3	Total
At 31 December 2019					
Financial assets measured at fair value					
Debt securities held for trading	1,329,349	200,249	1,129,100	-	1,329,349
Debt securities held for trading (Private funds)	1,321,347	-	1,321,347	-	1,321,347
Financial assets and financial liabilities not measured at fair value					
Debt securities held to maturity	5,261	-	5,667	-	5,667
Debentures	8,000,000	-	8,091,745	-	8,091,745

Measurement of fair values

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- *Level 1*: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- *Level 2*: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- *Level 3*: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Valuation techniques

The following tables show the valuation techniques used in measuring Level 2 fair values.

Type	Valuation technique
Corporate debt securities	Thai Bond Market Association Government Bond Yield Curve as of the reporting date.
Corporate debt securities (Private funds)	*Market comparison/discounted cash flow:* The fair value is estimated considering (i) current or recent quoted prices for identical securities in markets that are not active and (ii) a net present value calculated using discount rates derived from quoted prices of securities with similar maturity and credit rating that are traded in active markets, adjusted by an illiquidity factor.
Debenture	A valuation technique incorporating observable market data which is adjusted with counterparty credit risk (excluding own credit risk) and other risks to reflect true economic value.

(b) Movement of marketable equity and debt securities

(in thousand Baht)

Marketable equity and debt securities	Consolidated and Separate financial statements			
	At 1 January	Increase (decrease)	Fair value adjustment	At 31 December
2020				
Current financial assets				
Debt securities measured at				
- FVTPL	1,521,596	(221,234)	(3,980)	1,296,382
Total	**1,521,596**	**(221,234)**	**(3,980)**	**1,296,382**
2019				
Current investments				
Trading securities	2,530,465	(1,016,848)	7,979	1,521,596
Total	**2,530,465**	**(1,016,848)**	**7,979**	**1,521,596**

(c) Financial risk management policies

Risk management framework

The Group's board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The board of directors has established the risk management committee, which is responsible for developing and monitoring the Group' s risk management policies. The committee reports regularly to the board of directors on its activities.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to maintain a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group audit committee oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group audit committee is assisted in its oversight role by internal audit. Internal audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the audit committee.

(c.1) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investments in debt securities.

(c.1.1) Trade accounts receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the factors that may influence the credit risk of its customer base, including the default risk associated with the industry and country in which customers operate. Detail of concentration of revenue are included in note19 (b).

The Group limits its exposure to credit risk from trade accounts receivables by establishing a maximum payment period of 30 days.

The following table provides information about the exposure to credit risk and ECLs for trade accounts receivables and contract assets.

(in thousand Baht)

At 31 December 2020	Consolidated financial statements		Separate financial statements	
	Trade accounts receivables	Allowance for impairment losses	rade accounts receivables	Allowance for impairment losses
Related parties				
Within credit terms	217,881	-	217,881	-
Overdue:				
1-30 days	170,283	-	170,283	-
31-60 days	138,209	-	138,209	-
More than 60 days	373,895	-	373,895	-
Total	**900,268**	**-**	**900,268**	**-**
Less allowance for impairment	-		-	
Net	**900,268**		**900,268**	
Other related parties				
Within credit terms	1,525,077	-	1,525,077	-
Overdue:				
1-30 days	341	-	341	-
Total	**1,525,418**	**-**	**1,525,418**	**-**
Less allowance for impairment	-		-	
Net	**1,525,418**		**1,525,418**	
Net total	**2,425,686**		**2,425,686**	

Loss rates are based on actual credit loss experience over the past 3 years. These rates are multiplied by scalar factors to reflect differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

(in thousand Baht)

Trade accounts receivables - related parties	Consolidated financial statements	Separate financial statements
At 31 December 2019		
Within credit terms	217,446	217,446
Overdue:		
Less than 3 months	340,756	340,756
	558,202	**558,202**
Less allowance for doubtful accounts	-	-
Net	**558,202**	**558,202**
Trade accounts receivables - other parties		
At 31 December 2019		
Within credit terms	1,589,635	1,589,635
Overdue:		
Less than 3 months	439	439
	1,590,074	**1,590,074**
Less allowance for doubtful accounts	-	-
Net	**1,590,074**	**1,590,074**
Total	**2,148,276**	**2,148,276**

The Group requires various customers to provide cash, and bank guarantees as collateral.

The normal credit term granted by the Group ranges from 15 days to 30 days.

(c.2) Liquidity risk

The Group monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's operations and to mitigate the effects of fluctuations in cash flows.

The following table are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted and include contractual interest payments and exclude the impact of netting agreements.

(in thousand Baht)

At 31 December 2020	Consolidated and Separate financial statements				
		Contractual cash flows			
			More than 1 year but		
	Carrying amount	1 year or less	less than 5 years	More than 5 years	Total
Non-derivative financial liabilities					
Trade payables	432,516	428,998	3,518	-	432,516
Loans from financial institutions	239,625	239,625	-	-	239,625
Lease liabilities	660,030	39,927	153,424	876,905	1,070,256
Debentures	12,000,000	4,000,000	8,000,000	-	12,000,000
	13,332,171	**4,708,550**	**8,156,942**	**876,905**	**13,742,397**

	Consolidated and Separate financial statements				
	Effective interest rate	within 1 year	After 1 year but within 5 years	After 5 year	Total
	(% per annum)		*(in thousand Baht)*		
2020					
Current					
Short-term loans from financial institutions	1.70	239,625	-	-	239,625
Debentures	3.90	4,000,000	-	-	4,000,000
Non-current					
Debentures	3.50	-	4,000,000	-	4,000,000
Debentures	3.90	-	4,000,000	-	4,000,000
Total		**4,239,625**	**8,000,000**	**-**	**12,239,625**
2019					
Non-current					
Debentures	3.90	-	4,000,000	-	4,000,000
Debentures	3.50	-	4,000,000	-	4,000,000
Total		**-**	**8,000,000**	**-**	**8,000,000**

(c.3) Market risk

The Group is exposed to normal business risks from changes in market interest rates and currency exchange rates and from non-performance of contractual obligations by counterparties. The Group does not hold or issue derivatives for speculative or trading purposes.

(c.3.1) Foreign currency risk

The Group is exposed to foreign currency risk relating to purchases of spare parts, supplies, machines and equipment.

(in thousand Baht)

Exposure to foreign currency at 31 December	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
United States Dollars				
Cash and cash equivalents	3,234	3,253	81	81
Other payables	(473,491)	(1,360,994)	(473,491)	(1,360,994)
	(470,257)	**(1,357,741)**	**(473,410)**	**(1,360,913)**
EURO				
Cash and cash equivalents	7	6	7	6
Other payables	(8,419)	-	(8,419)	-
	(8,412)	**6**	**(8,412)**	**6**
Others				
Cash and cash equivalents	302	334	302	334
	302	**334**	**302**	**334**
Gross balance sheet exposure	**(478,367)**	**(1,357,401)**	**(481,520)**	**(1,360,573)**

(c.3.2) Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Group's operations and its cash flows because debt securities and loan interest rates are mainly fixed. The Group is primarily exposed to interest rate risk from its debenture (see note 11). The Group mitigates this risk by ensuring that the majority of its debt securities and borrowings are at fixed interest rates.

32 Capital management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board monitors the return on capital, which the Group defines as result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

33 Commitments with non-related parties

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2020	2019	2020	2019
Capital commitments				
Contracted but not provided for:				
Agreements for construction, machine and equipment	**458,104**	**281,061**	**416,701**	**281,061**
Other commitments				
Short-term lease commitments	500	5,707	500	5,707
Unused letters of credit	97,915	498,667	97,915	498,667
Bank guarantees	117,113	10,827	117,113	10,827
Total	**215,528**	**515,201**	**215,528**	**515,201**

Power Purchase Agreement

The Company entered into Power Purchase Agreements, which uses garbage as fuel and waste heat from the cement production process as a fuel supplement, in term of "Non-firm" with Electricity Generating Authority of Thailand ("EGAT") for the period of 5 years since start trading month. The contracts can be extended for a period of 5 years subject to the provision of written notice to the counterparty not less than 30 days before the contracts expired. Regarding to the agreements, the Company obtained adder form base tariff of electricity for period of 7 years since start trading date. The Company has to comply with conditions as specified in the Power Purchase Agreements. At present, the Company has agreements with Electricity Generating Authority of Thailand as follows:

Power Purchase Agreement	Contracted Capacity	Start trading date
1st agreement (7 November 2014 - 31 December 2019) 1st agreement (extended) (1 January 2020 - 31 December 2024)	18 Megawatt	16 January 2015
2nd agreement (13 November 2013 - 31 July 2020) 2nd agreement (extended) (1 August 2020 - 31 July 2025)	55 Megawatt	6 August 2015
3rd agreement (17 August 2017 - 31 March 2023)	90 Megawatt	5 April 2018

34 Litigation

On 16 December 2019, individuals in total of 222 people sued Energy Regulatory Commission (ERC) et al to the Central Administrative Court which the Company was listed as the 5th Defendant. The Plaintiffs requested that the approval of Environmental and Health Impact Assessment (EHIA) report for the project of 150 megawatts thermal power plant, the license to operate electricity generating business and the construction approval of the Company be revoked. The Plaintiffs also requested that the Court take evidence out of Court and issued an interim measure and ordering that the electricity generating system be temporarily stopped until the final decision is reached.

On 25 December 2019, the Court inquired both Parties in considering the request for interim measure and rendered its decision on 28 January 2020 denied the request for interim measure.

Subsequently, On 31 January 2020, the Court ordered to accept the complaint and request the Company to file the answers within the time limit. The case is under the preparation of answers.

On 7 December 2020, the Court sent the objection to the answer of the 5th Defendant (the Company) and requested the Company to submit additional answer to the Court within the prescribed period which shall be due on 20 February 2021, the case is under process of preparation of the additional answer.

The Company's legal consultant considered the complaint and its appendixes and hereby opines that the Company lawfully received the license to operate the electricity generating business and the construction approval from the competent authorities. The complaint of the Plaintiffs is untrue. As the case is in the preparation for answer, the Company has causes to relieve itself of any liability generated from the complaint depending on the Central Administrative Court Decision. Moreover, the Company has pressed charges against the 222 Plaintiffs to the Muak Lek police station, Saraburi, for taking the false information to charge the person in the Court. The case is under the investigation of the police.

35 Other

The Company purchased plots of land in Chana district, Songkhla province, to develop the Security, Prosperity, Sustainability Triangle Model City 4 project, in Chana district, Songkhla Province, as the Future Industrial City, according to the Thai Government Policy to develop and administer the southern border provinces for peace and security of the country with the cabinet approval following the motion from Southern Border Provinces Administrative Center (SBPAC) requesting the government to include Chana district, Songkhla province, specifically to be a part of southern special economic zone under Southern Border Provinces Administration Act, B.E. 2553, and the Company to propose investment plan worth Baht 396,000 million to extend prosperity to the provinces by creating employment for the people and economic benefits to such area. On May 7, 2019, the cabinet approved the development of such projects and assigned the SBPAC and other relevant authorities to proceed with the project without delay.

On March 6, 2020, the SBPAC sent a letter to the Company informing the Company that the SBPAC has proposed such issues to the Southern Corridor Strategy Development Committee (the "SCSDC") meeting no.1/2562 on October 31, 2019, in which the SCSDC approved the proposal, and thereafter on January 21, 2020 the cabinet has acknowledged and approved the SCSDC resolution. The SBPAC also coordinated with the relevant authorities involved with the private sector investment plan, i.e., the Department of Public Works and Town & Country Planning, Ministry of Interior, and Songkhla Provincial Administration Organization, to consider the change of the city plan color for the project benefits of usage, to comply with the urgent investment plan as proposed by the private sector and to have the Ministry of Energy to consider and support the production of electricity from new power plant to cope with the industrial development under the Country Power Development Plan (PDP), to be revised according to the cabinet approval allowing the private sector i.e. TPIPP, to invest and sell 3,700 MW of electricity to government enterprise (EGAT) in this Model Futuristic Advanced Industrial City, which has received approval to change the city plan color in Chana District Songkla with the proper approval from authority (Office of the energy regulatory commission) including the proposed condition for the private sector to conduct feasibility study on the Environmental Impact Assessment : EIA) and/or the Environmental and Health Impact Assessment : EHIA), as the case may be, so that the project developments could run in parallel from the year 2021 onwards.

The SBPAC has made "Strategic Environment Assessment (SEA)" according to Nation Economic Development Board (the "NEDB") which is an analytical and particularly process to support the formulation of development policies, plans and programs. The goal of which is to balance and optimize economic social and environment considerations based on the principles of sustainable development. The SCSDC, whereby the Prime Minister is the Chairman, and the Deputy Prime Minister, Gen Pravit Wongsuwan, as the authorized person to act on behalf of the Prime Minister to implement the SEA plan, approved the project of TPIPP, and the Cabinet resolved to acknowledge the resolution deemed as the Cabinet's approval of the project in accordance with the plan and policy of the Security, Prosperity, Sustainability Triangle Model City 4 project of the SBPAC. In addition, the SCSDC has resolved to expedite the Department of Public Works to change the City Plan color from green zone to purple zone, and that the Ministry of Energy, Energy Regulatory Commission ("ERC"), and state-owned enterprises to complete the PPA as soon as possible (within March 2021), and it is the Company's responsibility to complete the Environmental Impact Assessment ("EIA") and Environmental and Health Impact Assessment ("EHIA").

In case of mass coordination, public and civil society in 3 sub-districts of Chana District, Songkhla Province, the Company was requested to coordinate and work closely with the working group as established by the SBPAC, under the proposals of local residents to support working process of the private sector through public sector to reinforce unity of the task force to be beneficial for the economic development and the quality of local people genuinely to be in line with the objectives of the project in Chana District, Songkhla Province, as an exclusive perfect fully-integrated economic zone, which is an important mechanism to drive the development of the entire fully-integrated economy of the lower southern region, which can link to the southern border provinces and other regions of Thailand and neighboring countries, as well as to link economic development to other countries around the world. This will make the southern border provinces to be safer and be a vital part to support the solution to the unrest in the southern border provinces and to accommodate the future economic and social development, similar to other regions of Thailand in the long run. The SBPAC also requested that the Company to carry on with all related issues to strictly comply with the relevant legal issues, cabinet resolution, rules and government agencies' processes.

On January 25, 2021, Songkhla Provincial Administration Organization announced the Company as the winner of the bidding for jointly private procurement in the construction and management of solid waste disposal system, Songkhla Provincial Administration Organization by Tender Method. The winner of the bidding will receive tipping fee from waste disposal of Baht 400 per ton (adjustable upward by 10% in every 3 year) and receive revenue from electricity sales derived from waste disposal under a power purchase agreement of 7.92 MW for the period of 20 years, at the rate of Baht 5.78 per unit for the first 8 years and Baht 5.08 per unit for the next consecutive 12 years respectively.

บริษัท ทีพีไอ เพาเวอร์ จำกัด (มหาชน)
TPI POLENE POWER Public Company Limited

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