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TPI POLENE Public Company Limited

Annual Registration Statement / Annual Report 2023 (Form 56-1 One Report)



WE BUILD THE FUTURE



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**GROW GREEN
AND SUSTAINABLY**
Towards Sustainable
Development under ESG policy



Environmental Dimension

“Develop into a green industry and adhere to improving production processes

Energy management and environmentally friendly, aiming for a low-carbon society and to reach ‘carbon neutrality’ by 2043”



Social Dimension

“Create a responsible organization with an emphasis on the balanced consideration of stakeholders, Human rights operations are carried out together with stakeholders throughout the value chain including employees, suppliers, customers, and surrounding communities and society, Create a learning organization culture and develop the potential of employees, To be ready for revolution Create value and enhance the quality of life of communities and society to grow sustainably”



Governance Dimension

“Conduct business with an adherence to good governance principles under the Codes of Conduct and good corporate governance policies, Flexibility to adapt to new business concepts

Organization-wide risk management under the anti-corruption policy, Ready to Cost-effectiveness of innovative products and services for society and the environment”

TPIPL and Green Innovation

Technology throughout the Value Chain



Green Mining / Green Quarry

Adopt technology by converting drillers, loaders, dump trucks, excavators in mines that use diesel-powered engines to all EV engines trucks.

Green Cement Process

Approximately 25% of waste is used as fuel to replace coal in cement production process.



Green Logistics

Switched to electric trains for transporting cement and ready-mixed concrete.



Green Manufacturing

Manufacture environmentally friendly construction material products that help reduce global warming, such as Green Clinker, Hydraulic Cement or Green Cement, Green Fiber Cement and Green Concrete Roof Tile, thus, enable us to obtain Carbon Credit.



Green Marketing / Management

Employ electric vehicles for sales and marketing operations, as well as vehicles of the management in lieu of fuel – powered vehicles.

Green Packing Line / Warehouse

Use 100% electric forklift.



Mr. Khantachai Vichakkana
Chairman of the Board and
Independent Director

Mr. Prachai Leopairatana
Chief Executive Officer

Message from the Board of Directors

TPI Polene Paving the Way towards Sustainable Business Development, with Green Technology, Products, and Innovations, Aiming to Mitigating the Negative Impact of Climate Change

To All Shareholders

The severity and fluctuations of the climate, resulting in a continually increasing impact on people's well-being over the years, have prompted the TPI Polene Group to prioritize addressing climate change, which necessitates urgent action. Furthermore, the Company has conducted its business with a focus on sustainable development in the Environmental, Social, and Governance (ESG) areas. Consequently, its cement plants have obtained certification and permission to utilize the logo "Green Industry" from the Industrial Environment Technology Promotion Division, Department of Industrial Works, Ministry of Industry, as part of their journey towards becoming a "Green Industry." This commitment entails enhancing production processes, managing energy efficiently, and maintaining environmental quality continuously, thereby operating as an environmentally responsible business with social accountability across the organization's supply chain. This accreditation enables TPI Polene to receive benefits in product procurement from government agencies and local administrative organizations equivalent to those for environmentally friendly products.

By 2023, TPI Polene Group plans to substitute waste fuel for coal across all four production lines of its cement plants, targeting a 25% displacement of the required heat. By 2025, the aim is to completely 100% replace coal with waste fuel in power plants, creating clear concreteness of business operations, reducing business risk amidst coal price fluctuations, compared to the relatively constant waste costs. This aim also include the reduction of risks from the climate change issue garnering international attention, leading to the goal of reducing greenhouse gases and adhering to guidelines for reducing greenhouse gas emissions in the future. This will result in the reduction of the Company's business operating costs and greenhouse gas emission risk.

Additionally, TPI Polene is dedicated to conducting business by prioritizing the care and responsibility towards stakeholders both within and outside the organization. This commitment entails promoting and supporting suppliers to operate with good governance, while ensuring compliance with relevant laws and regulations as outlined in the organization's Code of Conduct and ESG policy. Through such dedication, TPI Polene seeks to generate positive returns for shareholders, investors, customers, and suppliers, while also promoting for human rights, employee well-being, and enhancing the overall quality of life within the TPI Polene Group. Moreover, TPI Polene places a high priority on preserving the natural environment, thereby fostering societal happiness and promoting sustainable coexistence.

Consistently rising 2023 operating performance

In 2023, the Company and its subsidiaries registered earnings before interest, taxes, depreciation and amortization (EBITDA) of Baht 10,055 million. As of December 31, 2023, the Company and its subsidiaries' net IBD/ EBITDA ratio equated 6.41 times. It is classified as a company with debt repayment potential.

In 2023, the Company and its subsidiary registered normal operating profit for the year of Baht 4,509 million. In 2023, the Company and its subsidiaries registered profit for the year of Baht 4,305 million, which was comprised of normal operating profit of Baht 4,509 million, net foreign exchange gain of Baht 88 million and tax expense of Baht 292 million.

The Offering for Sale of Baht 21,935.20 million Debentures in 2023

In 2023, TPI Polene Group successfully completed fundraising through the issuance and sale offering of debentures in a total amount of Baht 21,935.20 million with TRIS Rating Company Limited TRIS affirmed credit rating of such debentures at the level of "A-" (Single A Minus), with a "Stable" Outlook. The proceeds from the fundraising were utilized mainly to refinance mature debentures. The remaining funds were allocated towards investing in machinery to enhance production efficiency across its cement plants, LDPE/EVA plants, power plant, and modern pharmaceuticals plant, as well as for working capital to support business operations.

TPI Polene Group continues to achieve satisfactory operating results and consistently implements cost reduction measures alongside various projects aimed at increasing profits. These efforts are directed towards maintaining its capability to meet high-level interest payments and principal repayments.

Climate Change Management

The Board of Directors and senior executives, after assessing risks, supportive measures, and considering the implications of climate change, have set a carbon neutrality goal to be achieved by 2043, surpassing Thailand's aim to achieve carbon neutrality by 2050.

TPIPL assessed risks associated with climate change and established both short-term and long-term goals and strategies for reducing greenhouse gases, which pose risks to its business operations. The Company has allocated funds to adapt its technology to be more environmentally friendly, such as utilizing waste as fuel instead of coal in the cement production process, reducing its dependence on fossil fuels, and transitioning to electricity from renewable sources. Moreover, it has introduced electric vehicles and heavy machinery, such as EV Dump Trucks, in place of engines powered by fossil fuels or diesel. The return on this investment is significant, enabling the Company to advance its low-carbon strategy effectively in response to climate change risks and ultimately achieve its goal of reducing greenhouse gas emissions.

In 2023, the four production lines of the cement plants were able to utilize waste fuel instead of coal representing 14% of the required heat. This figure falls short of the target set at 25%, as the cement plants have been progressively installing machinery to enable the use of waste fuel instead of coal across the four production lines. The final production line completed the installation of machinery only in December 2023. Consequently, the average rate of using waste fuel instead of coal in 2023 has not yet reached the 25% target.

As for the electricity generation process of TPI Polene Power Public Company Limited (a subsidiary), the Company has successfully used all renewable waste fuels in the B6 steam generator and is in the process of constructing additional steam generators to use waste fuel in place of coal. The TG8 power plant is expected to operate completely with the use of waste fuel in 2025, allowing the Company to entirely terminate the use of coal by that year. Additionally, there is a solar power plant and wind power (Renewable Energy) expected to commence operations in 2024. This will result in obtaining a renewable energy production certificate (REC100), ultimately making the TPI Polene Group entirely coal-free in terms of power generation.

In 2023, TPI Polene Group converted waste into fuel, replacing coal in both electricity and cement production processes, amounting to approximately 2.77 million tons. This initiative led to a reduction in greenhouse gas emissions by approximately 6.43 million tons of carbon dioxide equivalent. (Calculations based on the emission factor for the above waste release indicate 2.32 tons of greenhouse gas emissions per 1 ton of waste released into a landfill.)

Reduction of Transportation and Maintenance Costs Along with Solving Environmental Issues

TPI Polene Group has persistently decreased transportation and maintenance expenses while also tackling Climate Change Mitigation and environmental impacts across its value chain, encompassing employees, partners, customers, and social communities. This is accomplished through the adoption of electric vehicles in lieu of combustion engine vehicles that rely on oil as fuel for transporting construction stones within the Company's factories. Furthermore, the utilization of a conveyor system to transport stones from the quarry to the factory serves to further diminish dependence on combustion vehicles utilizing oil as fuel. In addition, TPI Polene Group has replaced combustion system transport vehicles with electric vehicles that are environmentally friendly. This initiative has led to reductions in transportation costs, fuel expenses, and maintenance costs, while also decreasing greenhouse gas emissions, which contribute to global warming. Furthermore, this transition aims to mitigate the impact of PM2.5 dust on air quality, thereby fostering a healthier environment.

Focus on Green Products

In 2023, TPI Polene recognized the importance of driving solutions to climate change and transitioning to a

low-carbon economy and society. They achieved this by producing products that reduce greenhouse gas emissions, substituting other raw materials for limestone, utilizing waste fuel instead of coal, and sourcing electricity from renewable energy sources. These efforts resulted in the creation of Green Products that support Green Construction, including Green Clinker, Hydraulic Cement or Green Cement, Green Fiber Cement, and Green Concrete Roof Tile, among others. These products play a crucial role in reducing greenhouse gas emissions, thereby mitigating global warming.

Leader in Specialty Polymer Business

The Company continues to focus on the technology market, aiming to become the leader in the specialty polymer business, which is environmentally friendly and offers added value and higher profit margins than the general market. The Company is improving its production technology to be more flexible, a capability that other large manufacturers cannot match. Therefore, the Company must conduct research and develop knowledge internally. As the sole manufacturer in Southeast Asia, the Company has developed and produced product samples for testing and trialing new markets before integrating new technology into actual production lines in the future. The Company successfully produced new hotmelt-grade EVA specialty products by 2023. Consequently, the Company can focus on producing high-value grades for photovoltaic and hotmelt applications instead of shoe and coating grades. As a result, the proportion of its products consists mostly of high-value-added products.

Development of Technology and Innovation to Reduce Risks and Create Opportunities for Sustainable Growth

TPI Polene Group continues to seek investment opportunities in businesses with high-profit margins and growth, while also managing production costs and reducing administrative expenses to increase its potential in conducting business. Additionally, the Company continues to focus on developing technology and utilizing innovation to drive its businesses, aiming to reduce risks and create opportunities for sustainable growth. Nowadays, every business must invest in new technology to increase efficiency and competitive potential. Failure to consider new investments may result in lost business opportunities, potentially leading to an inability to generate sustainable income or even causing the Company to eventually cease operations if it cannot keep up with disruptive industry trends. TPI Polene Group has integrated sustainability risk (ESG Risk), including environmental, social, and governance risks, into its mission and strategy, aiming to build confidence among stakeholders in a balanced manner.

Value Creation for Better World

TPI Polene Group has also emphasized value creation for a better world through the production and sales of plant-related products derived from organics, such as organic biofertilizers and soil conditioners. These products are environmentally friendly, preventing soil spoilage. Additionally, they offer new innovative solutions like wood vinegar, which can repel insects from plants, vegetables, and fruits without the use of dangerous insecticides that pose risks to farmers and consumers. Moreover, these products are priced cheaper than chemical fertilizers, increase yields per Rai and reduce harm caused by the use of pesticides, reducing production costs and increasing safety for better quality of life of farmers. This initiative also supports government policies promoting organic agriculture. In addition, TPI Polene Group has also sold products related to livestock and fisheries, such as synbiotics. Synbiotics aid in building immunity and digesting food scraps that cause putrid smells, which can turn into methane gas and serve as a breeding ground for harmful germs. When animals are fed with synbiotics, they receive good nutrition, promoting good health, have immunity against diseases, without the use of antibiotics and eliminating bad smells in animal shelters. This allows farmers to reduce animal feed costs and mitigate greenhouse gas emissions, thus contributing to global warming prevention. It is a project that provides food safety and food security for humans.

TPI Polene Group has also invested in projects to produce and sell healthcare products and modern medicines for humans and has received investment promotion from the Board of Investment. The Company expects to register these modern medicines with the Food and Drug Administration and apply for a license to certify Good Manufacturing



Practice (GMP) standards. This project aims to manufacture healthcare products and a range of generic medicines for everyday ailments such as stomach pain relief, sore throat remedies, mouthwash, and muscle relaxants, thereby reducing the need for costly medicine importation. The TPI Polene Group employs a team of pharmacists dedicated to researching and developing these products, utilizing raw materials consisting of active ingredients listed in contemporary pharmacopoeias. Through the implementation of modern, hygienic, and clean production methods, the Company ensures the production of healthcare products and safe medicines for consumers.

In 2023, TPI Healthcare Co., Ltd. invested in adding a production line for its beverage product named “Provita,” a probiotic drink mixed with vitamins designed to aid in digestion and boost the body’s immunity and neutralize microbes that can cause diarrhea. In addition, the company also manufactures and sells Bio Knox products, which can kill Viruses such as Covid and others upon touching or consuming, causing the Virus-Covid to be eliminated within 5 minutes.

Sustainable Development Performance

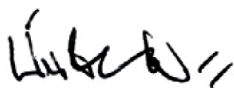
With the success of the Company adopting sustainable values to continuously drive business operations, resulting in the year 2023, TPI Polene Group received awards and certifications from recognized organizations in promoting sustainable development, in terms of Environment Social and Governance (ESG). Details are summarized as follows:-

1. In 2023, the Company was recognized among the ESG100 securities companies for its exceptional performance in environmental, social, and governance (ESG) criteria within the Real Estate and Construction category. This marks the second consecutive year (2022-2023) that the Company has received this accolade, solidifying its position as a company with promising investment opportunities within the real estate and construction sector. The award is administered by the Thaipat Institute.
2. The Company was rated as “SET ESG Ratings : AA “ for the year 2023 by the Stock Exchange of Thailand.

3. The Company received the Corporate Governance Report of Thai Listed Companies (CGR) for the year 2023 from the Thai Institute of Directors Association (IOD) with a 5-star rating, indicating Excellent CG Scoring.
4. The Company received the 3G Excellence Award in CSR Activities for 2023 from the Global Good Governance Awards (3G Awards) 2023 Event, organized by the financial consulting company ‘Cambridge IFA International Financial Advisory, United Kingdom’.
5. The Company received two honorary awards from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project for the year 2023. These awards include the Award for Good Deeds Returning to the Land in the Agricultural Innovation Field and the Excellence Award in Technology Management, Innovation, Research, and Development Field.
6. The Company received the SET Awards 2023 for the Outstanding Innovative Company Award among listed companies for its innovation in “Diffuser-Profile Vortex Generator,” organized by the Stock Exchange of Thailand and Money & Banking Magazine.

On behalf of the Board of Directors of TPI Polene Public Company Limited and its affiliates, we extend our heartfelt appreciation to shareholders, debenture holders, financial institutions, employees, and all stakeholders for their unwavering support and trust in the TPI Polene Group. Your support has been instrumental in our continuous success in business operations. This collective support and trust serve as a driving force for our executives and employees to collaborate towards achieving sustainable business growth and mitigating environmental pollution. Through our efforts, we have successfully reduced greenhouse gas emissions and minimized the impacts of climate change, contributing to the resolution of global warming issues and fostering a sustainable environment. These initiatives not only strengthen our organization but also benefit the economy, society, and the nation as a whole, while ensuring the well-being of all stakeholders in a balanced manner guided by the principles of good governance.

Sincerely Yours,



(Mr. Khantachai Vichakkana)
Chairman of the Board and Independent Director



(Mr. Prachai Leopairatana)
Chief Executive Officer

Key Sustainable Development Performance of TPI Polene Group in 2023

 Economic Dimension	 Environmental Dimension	 Community and Social Dimension	 Corporate Governance Dimension
Gross income Baht 44,963 million	Aiming to use 25% of waste fuel instead of coal in cement production process by 2023 In 2023, cement plants used waste fuel equal to 14% of total waste	Community and social contributions Baht 71.26 million	Low-carbon products sales value Baht 28,288.78 million
Employee wages and welfare Baht 7,300 million	Aiming to use waste fuel instead of coal in 100% electricity generation process by 2025 In 2023 TPIPL & TPIPP use 2.77 million tons of waste fuel	Injury Frequency Rate (IFR) of Employees and Contractors TPIPL 0.536 and 0.87 TPIPP 1.31 and 0 per million hours worked	Biological product sales value Baht 95.21 million
Tax expense Baht 186.91 million	greenhouse gas emissions reduction (From the base year 2020) TPIPP: 6.43 mil. tons of carbon dioxide equivalent	Number of working hours without an accident TPIPL: 22,979,705 hours (increased by 3.34.% over 2022) TPIPP: 1,700,016 hours (increased by 2.05.% over 2022)	The product has been certified with the label to reduce global warming Total of 20 products
EBITDA Baht 10,055 million	Implementation of a 6 MW rooftop solar power plant project by TPIPP (COD is expected to commence in 2024)	Rates of injury and occupational ailments that require all records TPIPL 0 person/1 million hours TPIPL 0 person/1 million hours	No complaints of privacy violations⁽¹⁾
Net profit Baht 4,305 million	Implementation of the 73.21 MW solar power plant project (by TPIPP)	Work-related deaths of employees and contractors TPIPL = 0 TPIPP = 0	Business partners acknowledge the code of conduct of business partners TPIPL 96%
Dividend per share Baht 0.10	Implementation of a 5 MW wind power plant project (COD is expected to commence in 2024)	Average training hours for employees TPIPL 22.49 hour/person/year TPIPP 33.88 hour/person/year	Violation of human rights (Discrimination, Child Labor, Illegal Labor) TPIPL = 0 TPIPP = 0
	Reduction of external water consumption (From the base year 2022) TPIPL 9,804,527. cubic meters or a 8.69% decrease TPIPP 8,545,911 cubic meters or a 9.70% decrease	Turnover Rate TPIPL = 2.67% TPIPP = 2.42%	
	Proportion of recycled water (From the base year 2022) TPIPL 1,362,200 million cubic meters or a 55.52% of total water consumption TPIPP 4.49% of total water consumption	Satisfaction in the work and bond of employees to the organization TPIPL = 84.17 % TPIPP = 83.20%	
	Support the budget for forestation to plant at least 100 rai of forest per year	Technology Development Project, Innovation, and Service 21 projects	
	Emission reduction (Zero Waste) TPIPL 99.91% TPIPP 33.06% in 2023	Product Research and Development Project 12 projects	ESG risk suppliers assessment = 15 suppliers, representing 67.51% of total order value
	Hazardous/non-hazardous waste TPIPP 0% / 100% TPIPL recycled 99.43% of total waste		Overall customer satisfaction/satisfaction with solving problems for customers TPIPL 87.40% and 94.40%
	Investment projects for reducing environmental impact TPIPL Baht 1,776 million TPIPP Baht 15,476.44 million		
	Recycled scrap soil to be reused 597,564 tons or 100%.		

Task Force on Climate-Related Financial Disclosures (TCFD) 2023

TPI Polene Group recognizes climate risk management as a significant sustainability concern for the organization and has announced the goal of achieving carbon neutrality by 2043. TPI Polene Power Public Company Limited, a subsidiary, has committed to achieving carbon neutrality by 2037, aligning with sustainable development objectives. This ambition hinges on leveraging climate management data following the Task Force on Climate-related Financial Disclosures (TCFD) framework to formulate strategies and set goals for greenhouse gas reduction in both the short and long terms. Moreover, this data will guide investment and financial planning, reinforcing the organization's commitment to sustainability and environmental stewardship.

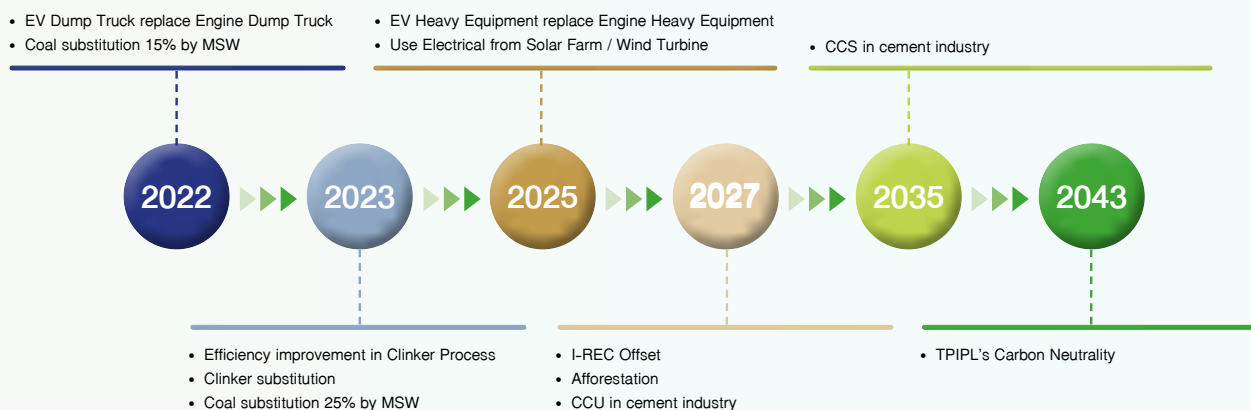
In 2023, the Company managed climate change, dividing it into four main components: Governance, Risk Management, Strategy, and Metrics and Targets, as a framework for disclosing climate management data.

The risk assessment revealed that physical risks, such as water shortages and floods, are classified as medium and low level, respectively. These risks do not pose significant troubles to the Company, as it can continuously assess the situation and implement appropriate measures to mitigate them.

Risks related to legal factors or regulations for controlling greenhouse gas emissions will be addressed through mechanisms such as carbon tax collection and the use of a carbon tax as a tool to prevent trade through the Carbon Border Adjustment Mechanism (CBAM). The Company has supported the use of electric vehicles and clean energy, among other initiatives. All of these pose high risks to the business of producing cement from fossil fuels and cause low to moderate risk to the supply chain; however, they are considered opportunities for the business of producing cement from low-carbon energy sources.

The Company has assessed such risks, resulting in the utilization of capital to enhance production efficiency and improve technology to be more environmentally friendly. The improvements include using waste as fuel instead of coal in the cement production process and utilizing electricity from solar energy, wind energy, etc. Utilization of heavy machinery and electric-based trucks reduces the proportion of clinker used in cement production, favoring the production of Hydraulic Cement over Portland cement, Type 1. The Company employs a low-carbon strategy to address climate change risks, enabling it to achieve the goal of long-term reduction in greenhouse gas emissions.

TPIPL's (Cement) GHG Reduction Strategies



Decarbonization of Electric

EV replace Engine Dump Truck

Coal substitution 25% by RDF

CCU

CCS

CO₂ abated 20 % in 2027

CO₂ abated 100 % in 2039

Cement (Ton)

Clinker (Ton)

CO₂ emissions (tonCO₂)

Net emissions (tonCO₂)

Carbon Credit (tonCO₂)

Legend: GDP (B), Emission, Net CO₂, Cement (Ton), Clinker (Ton)



TPI Polene Group has set a target for carbon neutrality by the year 2043. To this end, TPI Polene group has developed a strategic roadmap targeting carbon neutrality by 2043 across its subsidiary companies. The details are as follows :

2. Savings in clinker production by reducing fossil fuel consumption during clinker combustion processes, with a shift towards biomass fuels, industrial waste-derived fuel, or municipal waste-derived fuel. This process was commenced in 2021 and is expected to be completed by 2023.

Energy : The TPI Polene Group has established plans and actions, aiming for a complete transition to 100% renewable energy as follows:

- a. Converting waste heat into electricity through recovery techniques
- b. Using biomass fuel, industrial waste-derived fuel, or municipal waste-derived fuel as substitutes for coal in power generation processes, outlined in the projects below:
 - i. The transition from coal to municipal waste-based fuel in B6 boiler, which generates steam for a waste-to-energy plant operating at 55 bar steam pressure using alternative fuel derived from municipal waste, started in 2023. Additionally, a new boiler project, designed for a 132 bar pressure to supply steam for a 150 MW power plant, will use municipal waste as a complete substitute for coal. This project is expected for completion and full replacement by waste-based fuel by 2025.
 - ii. A plan to transition from coal to biomass fuel in a 6 MW power plant in 2023.
- c. The Solar Farm, an electricity generation plant utilizing ground-mounted solar panels, capitalizing solar energy as a cost-free primary energy source. The Company employs durable solar panels with long service life for electricity production. The construction phase of the project was scheduled in the year 2023, with operational

commencement for electricity production set for 2024.

- d. The Solar Roof project involves the installation of solar panels on rooftops to generate electricity from solar energy. Solar modules, positioned on the factory buildings' rooftops, are engineered to capture sunlight, converting it into electrical charges. These charges, driven by the cell's internal electric field, produce direct current (DC) electricity, which is transformed into alternating current (AC) electricity through an inverter for practical use. The construction phase of the project was scheduled in the year 2023, with operational commencement for electricity production set for 2024.
- e. Wind Power Electricity generation Project aims to utilize wind energy for electricity generation. The core machinery, the 'wind turbine,' transforms the kinetic energy of wind into mechanical energy, as the motion of wind rotates the turbine blades around a rotor, driving a generator to produce electricity. Wind energy, characterized by its natural origin, cleanliness, and inexhaustibility, enables electricity generation without emitting pollutants or greenhouse gases, ensuring environmental safety. The construction phase of the project was scheduled in the year 2023, with operational commencement for electricity production set for 2024.
- f. Under the RE100 (The transition to 100% renewable energy sources) framework, the TPI Polene Group commits to utilize electricity from renewable clean energy sources for its cement production processes, along with the strategic procurement of Renewable Energy Certificates (RECs) to ensure that cement production is powered purely by renewable energy sources.

4. EV Mining Truck : TPI Polene Group has transitioned the method of limestone transportation from diesel and NGV-powered mining trucks to electrically driven mining trucks (EV Mining Truck) with a capacity of 60 tons, totaling 41 units, for transporting limestone to the cement plant between 2022 to 2024.

5. Energy efficiency program aim to reduce energy consumption. The details are as follows:

- a. The Regenerative Downhill Conveyor project is an innovative electrical generation system through a conveyor belt system, transitioning from truck-based raw material transportation to conveyor belts. This transition not only results in energy savings and a reduction in both transportation and maintenance costs but also captures the gravitational energy from the conveyance of limestone from limestone transported down from mines located at higher elevations, which is characteristic of a Downhill Conveyor, to generate electricity. This has led to a considerable reduction in the Company's energy costs previously incurred from diesel fuel for raw material transportation, while simultaneously producing electricity that can be reintroduced into the electrical supply system.
- b. Polytrack Grate is a new aeration technology with reduced pressure that provides consistent aeration with low energy consumption (reduce at least 1 kWh per ton of clinker). This results in energy savings and can also reduce wear and tear on the machine due to the reduced air velocity through the vents, thus reducing maintenance costs. Currently, the Company can reduce energy costs from using coal and can also save electricity.

6. Recycle Raw Materials by installing the CDE Plant, as a washing recycle plant enables the cleaning and recycling of soil and stone residuals from mining operations into usable stone for cement production. This enables the Company to reduce the amount of mining waste and reduce the cost of raw material production. It is a circular process that allows leftover resources from production to be reused effectively.

7. Afforestation to help absorb greenhouse gases released into the atmosphere: TPI Polene Group has engaged in continuous afforestation activities from the year 1992 to the present, committed to expanding the nation's forests for greater absorption of greenhouse gases.



8. Carbon Capture & Utilization/Storage (CCUS) Technology : This involves a detailed study of technology for capturing, utilizing, and storing carbon dioxide emissions from power plant, aiming to capture carbon dioxide from high-pitched smokestacks at power plants and storing them underground or beneath the ocean floor, preventing CO₂ from entering the atmosphere. This study serves as a provisional plan for potential future investments in the event that existing processes for reducing greenhouse gas emissions prove insufficient, and the technology offers cost-effectiveness for future investment.

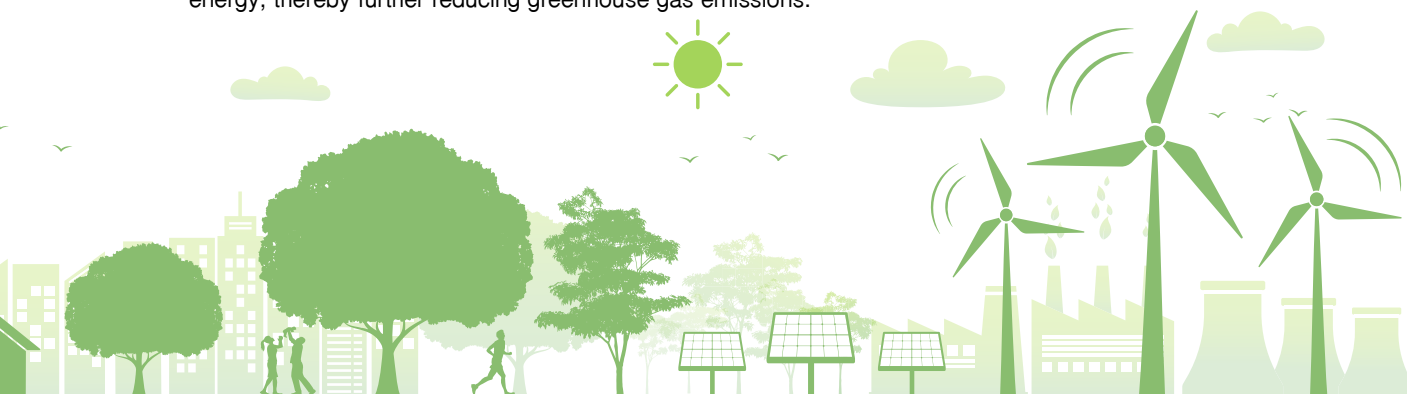
In 2023, TPI Polene Group initiated waste fuel production projects for the general benefit or the national benefit. The projects, through the segregation of over 2.77 million tons of municipal waste from landfill disposal, contributed to a decrease in greenhouse gas emissions from landfill activities by up to 6.43 million tons of CO₂ equivalent.

TPI Polene Group Conducting Business Based on BCG and ESG Guidelines

TPI Group Carbon Neutrality by 2043



TPI Polene Group has prioritized sustainability policies and business operations based on BCG and ESG guidelines, including carbon neutrality campaign, saving the world campaign and ZERO WASTE campaign throughout the Group's production processes. The use of hydraulic cement instead of Portland cement is actively encouraged and supported due to its lower proportion of clinker, resulting in reduced carbon dioxide emissions. Consequently, when hydraulic cement is utilized as a raw material for constructing green buildings according to LEED and TREES standards, it contributes to a decrease in greenhouse gases and mitigates global warming. Additionally, starting from 1 June 2023, TPI Polene Group has implemented a policy to manufacture products aimed at reducing greenhouse gas emissions. This involves increasing the production of Green Products such as Green Clinker, Green Cement, Green Fiber Cement, and Green Concrete Roof Tiles (Green CRT). These products utilize alternative raw materials, alternative fuels, and electricity sourced from renewable energy, thereby further reducing greenhouse gas emissions.





Vision and Strategy for Business Operations



TPI Polene is a leading manufacturer in construction materials, special polymer, and renewable clean energy power plant businesses, with excellence and international standards. The Company sustainably grows with innovation and technology in all aspects of work to enhance competitiveness at the forefront of the industry. It prioritizes ESG risk management and sets organizational strategies to build confidence among stakeholders and prepare to deal with climate change, which affects business operations. This proactive approach aims to reduce risks and create opportunities for sustainable growth.





Business Strategies

- Seek investment opportunities with high growth rates and good returns, while also considering the mitigating impacts of climate change and ensuring risks are at a manageable level.
- The Company has its own product research and development team to develop products that meet the needs of diverse consumers and reduce greenhouse gas emissions.
- Apply technology and innovation to manage business continuity in a sustainable, comprehensive and rapid manner.
- Improve production efficiency to enhance competitive potential.
- Seek market opportunities, including the development of products that create additional value, adhere to international standards, prioritize environmental friendliness, and respond to the needs of stakeholders throughout the value chain, including employees, suppliers, customers, and social communities.
- Quickly and efficiently distribute products to destinations, including online sales channels and New Normal stores in communities, to expand the consumer base across all business lines, thereby supporting the launch and market expansion of TPI Polene's products.
- Develop work processes while reducing administrative costs for maximum efficiency, taking into account the health and safety of personnel within the organization.
- Develop a financial management plan aimed at reducing costs, which includes effectively managing liquidity and financial risks to maintain a manageable level.
- Manage ESG risks by analyzing sustainability issues and incorporating risk management at various levels to build stakeholder confidence.
- Adjust organizational culture and prepare personnel to keep up with digital disruption in business. Foster a working style that is flexible and easily adaptable, thereby increasing work efficiency and reducing operating costs to continuously enhance competitiveness.
- Create business value with the BCG Model for shareholders and investors through stable profit growth, generating good returns, and expanding the business to grow sustainably alongside social development and environmental preservation.
- Conduct business responsibly and contribute to the development of a high quality of life for society and communities. Manage operations across the supply chain and cultivate relationships with suppliers and customers. Respect and protect human rights by ensuring equitable treatment of employees in terms of wages and labor. Support the continuous development of personnel abilities and instill confidence in the quality of life and work for employees, aligning with leading companies to foster loyalty to the organization.

Financial Highlights

	Unit	2021	2022	2023
Operational Performance				
Total Revenue	(Baht Mil.)	41,279	50,963	44,963
Total Sales	(Baht Mil.)	38,920	48,133	42,807
Gross Profit	(Baht Mil.)	12,529	12,807	9,908
Operating Profit (Loss) before interest and income tax	(Baht Mil.)	9,128	9,508	6,585
Operating Profit (Loss) before income tax	(Baht Mil.)	7,067	7,573	4,509
Net Profit (Loss)	(Baht Mil.)	6,918	7,845	4,305
Financial Status				
Total Assets	(Baht Mil.)	135,714	144,499	163,415
Total Current Assets	(Baht Mil.)	35,032	39,131	45,850
Total Liabilities	(Baht Mil.)	78,152	81,685	98,788
Total Interest Bearing Debt	(Baht Mil.)	68,143	71,372	85,144
Net Interest Bearing Debt **	(Baht Mil.)	56,479	59,747	64,446
Total Shareholder's Equity	(Baht Mil.)	57,562	62,814	64,626
Key Financial Ratio				
Gross Profit Margin	(%)	32.19	26.61	23.14
Net Profit Margin	(%)	16.76	15.39	9.57
Paid-up Capital	(Baht Mil.)	19,127	18,935	18,935
Par Value per share	(Baht)	1.00	1.00	1.00
Book Value per share	(Baht)	3.01	3.32	3.41
Earnings per share	(Baht)	0.297	0.370	0.170
Dividend per share	(Baht)	0.09	0.10	0.10
Dividend payout Ratio *	(%)	30.30	27.03	58.82
Debt to Equity Ratio	(times)	1.36	1.30	1.53
Net Debt to Equity Ratio **	(times)	1.16	1.12	1.21
Interest Bearing Debt to Equity Ratio	(times)	1.18	1.14	1.32
Net Interest Bearing Debt to Equity Ratio **	(times)	0.98	0.95	1.00

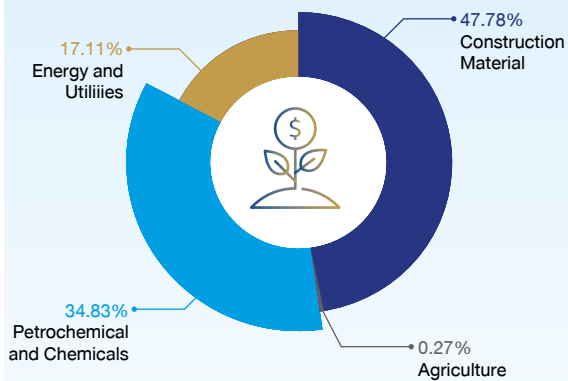
Remarks : * Dividend payment rate based on Separated Financial Statements

** After deducting Cash and Cash Equivalent and Current Investments

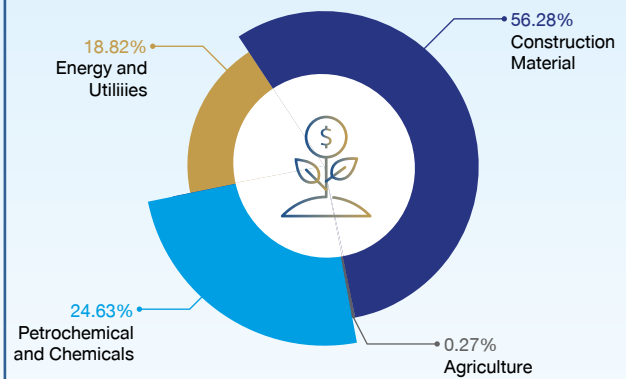


Total Sales Revenues

Sales revenue in 2022

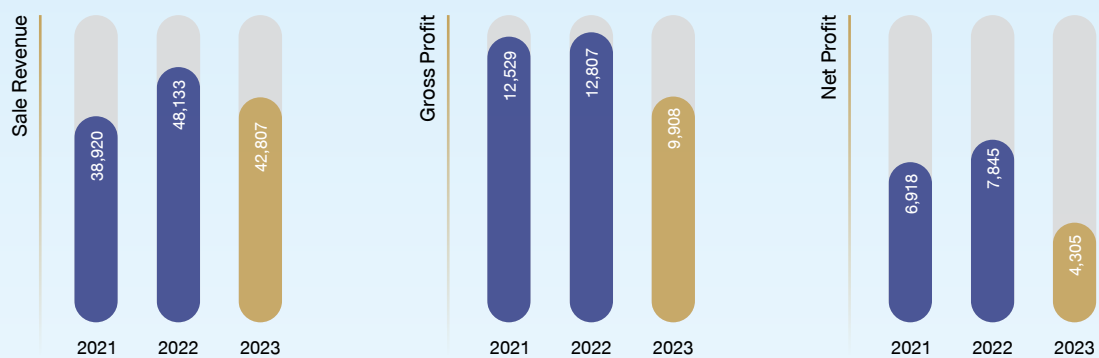


Sales revenue in 2023



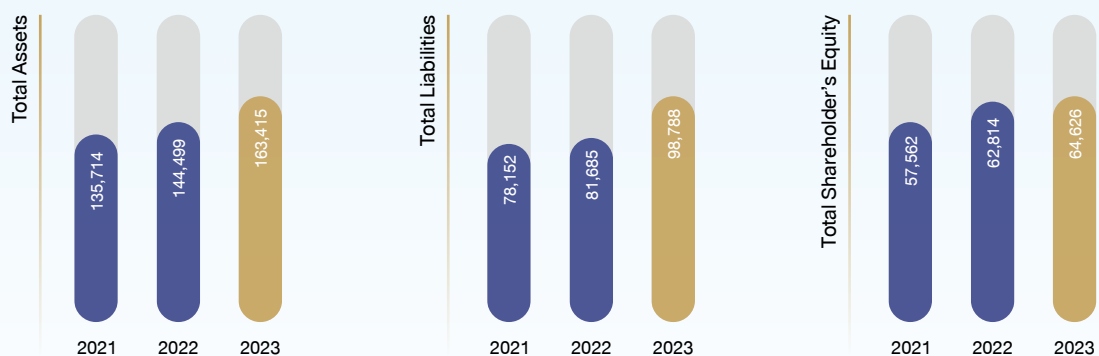
Total Revenues and Net Profit

Unit: Baht Mil



Financial Status

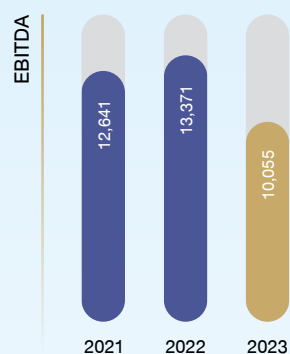
Unit: Baht Mil





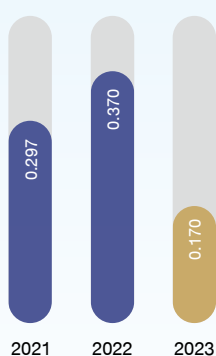
Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA)

Unit: Baht Mil

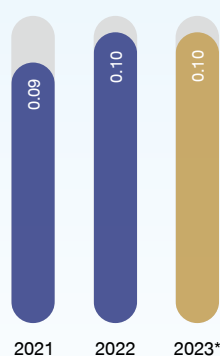


Profit and Dividend

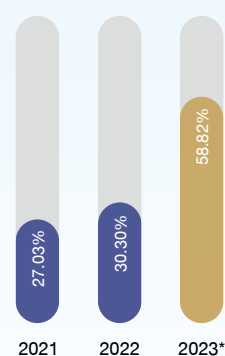
Earnings per share



Dividend per share



Dividend Pay out Ratio (%)



Remarks : * The dividend payment for the Company's 2023 operating results is divided into an interim dividend payment for the first half of 2023 of Baht 0.03 per share, which was already paid to shareholders, and the dividend payment for the second half of 2023 of Baht 0.07 per share, which was approved at the Company's Board of Directors' meeting no.2/2567, and is also required to be approved in the 2024 Annual General Shareholder's Meeting.

Financial Ratio

	Unit	2021	2022	2023
EBITDA / sales ratio	Times	0.32	0.28	0.23
Interest coverage ratio	Times	4.96	5.22	3.45
Debt to Equity ratio	Times	1.16	1.12	1.21
Return on Equity	%	12.61	13.03	6.76
Return on total assets	%	5.33	5.60	2.80

Our Pride Awards in 2023

The awards received both nationally and internationally in 2023 serve as confirmation of the outstanding performance of TPI Polene Public Company Limited (“TPIPL”) and TPI Polene Power Public Company Limited (“TPIPP”) in the realms of economy, society, and environment.

National Awards



Sustainability Disclosure Award

TPIPL and TPIPP received the Award of Honor (Sustainability Disclosure Award) for the year 2023, marking the second consecutive year. This award recognizes their excellence in sustainability information disclosure, as evaluated from the Sustainability Report and Form 56-1 One Report for the year 2022 by Thaipat Institute.



Outstanding Innovative Company Awards 2023

TPIPL received the Outstanding Innovative Company Award for 2023, acknowledging its innovative work in developing “Diffuser-Profile Vortex Generator.” This achievement reflects the Company’s commitment to creating innovations aimed at reducing energy costs, enhancing organizational competitiveness, and fostering sustainable economic and social growth.



TPIPL and TPIPP Being Ranked in ESG 100 Securities Companies for the year 2023

In 2023, TPIPL was selected as one of the ESG100 securities companies for the second consecutive year (2022-2023) in the real estate and construction sector, while TPIPP was selected for the fourth consecutive year (2018, 2021-2023) in the resource sector. These reflect the outstanding operations of the TPI Polene Group in Environmental, Social, and Governance (ESG) aspects, based on the assessment of listed securities in 2023 by the Thaipat Institute.



“Excellent” Corporate Governance Scoring (5-star Level)

TPIPL and TPIPP have continuously developed their corporate governance practices and have finally achieved an Excellent CG Scoring (5-star Level) in the Corporate Governance Report of Thai Listed Companies (CGR) scheme for the year 2023, as recognized by the Thai Institute of Directors Association (IOD).



TPIPL Receiving ‘Circular Economy’ Certificate for the year 2023

TPIPL received the Circular Economy Certificate for cement plants 1, 2, 3, and 4 through the assessment under the project to develop and upgrade industrial establishments to apply the principles of the Circular Economy in organizations, from the Department of Primary Industries and Mines.



SET ESG Ratings : AA

In 2023, TPIPL and TPIPP were assessed and designated as “ SET ESG Ratings : AA”, reflecting their commitment to conducting ESG business practices that consider the environment, society, and governance for the sustainable benefit of all stakeholders.



‘Circular Economy’ Certificate for the year 2023

TPIPP received the Circular Economy Certificate for waste fuel power plant and waste fuel production plant through the assessment under the project to develop and upgrade industrial establishments to apply the principles of the Circular Economy in organizations, from the Department of Primary Industries and Mines.



Plaque of Honor for the Excellent Work in Social Development

TPIPL received a plaque of honor for the Excellence Work in Social Development for the year 2023 from the Department of Social Development and Welfare, Ministry of Social Development and Human Security.



Green Industry Level 4 : Green Culture Award for the years 2021 – 2024

TPIPL and TPIPP received the Green Industry Level 4 Green Culture Award for the cement production plant: Line 1, 2, 3, Total Waste Quality Adjustment Plant (Waste Disposal Plant) and TG Power Plants 1, 2, 3, respectively from the Ministry of Industry.



CSR-DIW Continuous Award for the year 2023

For the 9th consecutive year since 2015, TPIPL and TPIPP were awarded plaques and certificates in recognition of their commitment to promoting sustainable social and community responsibility among industrial factories. This accolade was received under the CSR-DIW Continuous Award category for the year 2023 from the Department of Industrial Works, Ministry of Industry, for:

- Cement production plant: Line 1, 2, 3 and 4; Mortar plants 1, 2, 3 and 4 and lightweight block production plant and for the 8th consecutive year since 2016 for:
- Power plants TG1-3 (60MW), TG4 (30MW), TG5 (60MW), TG6 (70MW), TG7 (40MW) and TG8 (150MW).



Award from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project for the year 2023

TPIPL received the Award of Honor from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project for the year 2023, in the Agricultural Innovation Field, organized by For Thai Social Foundation.



Excellence Award from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project for the year 2023

TPIPL received the Award of Honor from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project for the year 2023, for the Excellence Award in Technology Management, Innovation, Research, and Development Field, organized by For Thai Social Foundation.



Green Industry Level 3 : Green System Award

TPIPL and TPIPP received the Green Industry Level 3: Green System Award for the cement production plant, Line 4 for the years 2021-2024 and the Power Plants TG 4, 5, 6, 7 and 8 for the years 2023-2026 from the Ministry of Industry.



Award of Honor from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project for the year 2023, organized by For Thai Social Foundation

Mr. Prachai Leophairatana, TPIPL’s Chief Executive Officer, received two plaques of honor from the “One Million Good Deeds with Brave in Repayment to the Land” (“Neung Lan Kla Kwam Dee Torb Than Pan Din”) Project, organized by the For Thai Society Foundation, comprising the Award for “Good Deeds Returning to the Land” for the year 2023 in the Agricultural Innovation Field and the “Excellence” Award for the year 2023 in Technology Management, Innovation, Research, and Development Field.



Eco Factory Award

TPIPL received the Eco Factory – Beginner for Waste Processor Award from the Water and Environment Institute for Sustainability, Federation of Thai Industries, in collaboration with the Industrial Estate Authority of Thailand.

International Awards



Global CSR – 3G Excellence Award in CSR Activities 2023 and 3G Environmental Responsibility Award 2023

TPIPL received the 3G Excellence Award in CSR Activities 2023, and TPIPP received the 3G Environmental Responsibility Award 2023 from the Global Good Governance Awards (3G Awards) 2023, organized by the financial consulting company Cambridge IFA International Financial Advisory of the United Kingdom. These awards aim to recognize organizations that have successfully applied social responsibility in their daily business operations.



Most Sustainable Conglomerate Group in Thailand 2023 and Best Green Renewable Energy Power Plant in Thailand 2023

TPIPL received the Most Sustainable Conglomerate Group in Thailand 2023 Award, while TPIPP received the Best Green Renewable Energy Power Plant in Thailand 2023 Award. Both accolades were conferred by the World Business Outlook.



ASIA's GREATEST BRANDS 2022 – 2023 Awards

TPIPL and TPIPP received the ASIA's GREATEST BRANDS 2022 – 2023 Awards from Asia One Magazine, recognizing their outstanding work that is accepted and trusted by consumers.



Asia's Greatest CEO 2022 - 2023 Award

Asia One Magazine presented the Asia's Greatest CEO 2022 - 2023 Award to Mr. Prachai Leophairatana, Chief Executive Officer (CEO) of TPI Polene Group, who has played a key role in promoting the economic sector in Thailand and participating at both the micro and macro levels of Thailand and Asia.



Best Corporate Governance Company Thailand 2023 Award

TPIPL received the Best Corporate Governance Company Thailand 2023 Award from International Business Magazine, certifying that the Company is one of the leading organizations protecting all investors' and stakeholders' rights and reflecting responsibility for the economy, society, community, and environment.



The Best Corporate Governance Company Thailand 2023 Award

TPIPL received the Best Corporate Governance Thailand 2023 Award from International Business Magazine.



The International Diamond Prize for Excellence in Quality 2023 from European Society for Quality Research

TPIPP received the International Diamond Prize for Excellence in Quality 2023 from the European Society for Quality Research (ESQR) in Switzerland. This honor recognizes quality management practices and strategies, driving towards excellence in organizational management.



TPIPL receives Top AGRI Biotech Company in Thailand 2023

According to Agri Business Review, Asia-Pacific Region, the company has successfully pioneered and invented 100 % organic polymers used as adsorbents, helping to create a secure agricultural future in Asia-Pacific region.



TPIPL receives World's Best Companies to Work for 2024 award from WORLD'S LEADERS MAGAZINE, APAC

As a Group of Companies committed to creating innovation in both product development and production processes, adhering to the principles of bio-circular green economy, and environmental, social, and governance (ESG) aspects, reflecting our dedication to making a positive impact on the planet.



TPIPL received the Best ESG Practices for sustainable development in Thailand award. (Best ESG Practices for Sustainable Development in Thailand) and TPIPP received the Best Innovations in renewable energy industry in Thailand. (The Best Innovation in Renewable Energy Industry in Thailand 2023) From The Global Economics, a leading UK financial magazine.



TPIPP wins Best ESG Energy Efficiency Initiative Company Thailand 2023

As Thailand's ESG Energy Efficiency Innovation Leader 2023 for the third consecutive year from International Finance Magazine (IFM), UK.

Key Developments of TPI Polene Group in 2023

1. Cement, Ready-mixed Concrete and Other Construction Material Businesses

1. From 2021 to 2023, the Company, recognizing the escalating severity of global warming and climate change issues, invested in a project aimed at enhancing kiln machinery for cement plants. This initiative aims to curtail heat consumption during the production process across four production lines (PREPOL-SC Step Combustors Project), enabling a 25% reduction in coal usage by replacing it with waste fuel within the cement production process. As a result, the Company has not solely relied on coal fuel, which can reduce energy costs and save on machine repair costs. Reducing the use of coal, which is expensive and fluctuates according to world market conditions, by using alternative waste fuel that is cheaper will help the Company reduce the production of greenhouse gases. The project was completed with all four production lines in 2023.

2. The Company's investment in the Electric Dump Trucks project, totaling 41 trucks, not only aims to save on transportation costs but also to contribute to the reduction of greenhouse gas emissions from combustion engines and PM2.5 dust. The project is scheduled to be gradually completed between 2022 and 2024.

3. The Company has invested in a Quarry Equipment Modification project, which can save on transportation costs and help reduce the production of greenhouse gases and PM2.5 dust. The project is scheduled to be gradually completed between 2023 and 2024.

4. TPI Polene Group has invested in the Electric Concrete Mixers project, totaling 10 units, aiming to save on transportation costs and reduce greenhouse gas emissions from the use of combustion engines and PM2.5 dust. Additionally, the Company has invested in a Quarry Equipment Modification project, which can save on transportation costs and help reduce the production of greenhouse gases and PM2.5 dust. The project is scheduled to be gradually completed between 2023 and 2024.

5. Since 1 June 2023, the Company has produced Green Products, such as Green Clinker, hydraulic cement (Green Cement), Fiber Cement, and Green Concrete Roof Tile, marking its entry into the Green Construction era.

6. Electric mixers have been integrated into trucks employed for transporting ready-mixed concrete to customers in the ready-mixed concrete business, enabling savings of approximately 30% on fuel costs.

7. Diamond blade sharpening machines have been installed in the fiber cement business to aid in the production of fiber cement products, resulting in savings of around 30% on diamond blade sharpening expenses.

2. Specialty Polymer Business

1. The machines in the special polymer production plant have been improved to increase the Polymerization Conversion Rate, resulting in the overall EVA production capacity increasing by approximately 10%. Some production capacity has been adjusted in 2023 and will be completed in 2025.

2. The Company can develop a new type of value-added product in the hot glue group with specially formulated liquid and improved heat resistance properties. This product has been produced since 2022, and it can create added value with a high-profit margin in the specialized industrial water-based adhesive group, where there are few manufacturers. In 2023, the Company successfully expanded its market share in this product group, becoming one of the top three market leaders in both East Asia and Southeast Asia.

3. The Company has successfully trialed the production of ethylene copolymers and new chemicals from the Pilot Reactor. These materials exhibit excellent adhesion to PET OPP plastics, and metalized film, while also enhancing impact resistance and facilitating the forming of engineering plastics. Furthermore, there are only a handful of producers of these plastic pellets compared to EVA plastic pellet manufacturers. The Company commenced providing samples to customers in 2023 for testing purposes, aimed at assessing properties and market response. The Company has planned the machinery upgrades in its current production lines to commence manufacturing this product by the end of 2025. Introducing this new product will enable the Company to expand its offerings to better fulfill customer requirements, addressing the anticipated escalation of volatility and uncertainty in the petrochemical market.

4. The Company imported machinery from a European manufacturer and successfully installed it in its new EVA powder manufacturing plant, boasting a production capacity of 5,000 tons per year. Following trials and operational readiness by 2023, the machinery has enabled the Company to capitalize on the burgeoning market for EVA powder s in the expanding region.

5. The Company has formulated a specialized industrial water-based adhesive tailored to mitigate PM 2.5 dust pollution in construction sites. By applying this coating to gravel road surfaces, it effectively curtails the dispersion of dust caused by vehicular and machinery traffic within the construction zone. This innovative approach not only minimizes water usage but also reduces labor and the reliance on water sprayers. Initial testing has yielded positive feedback from domestic clients, propelling the Company's ambitions to broaden its market presence in 2024.

6. The Company plans to continue developing and improving its machines and products that require cutting-edge technology. This provides an alternative for the Company to sustain profitability in the long run.

3. Power Plant Business (under TPI Polene Power Public Company Limited)

1. B6 Boiler Fuel Replacement Project

In 2023, TPI Polene Power commenced full steam production from Boiler B6 utilizing waste fuel exclusively, effectively discontinuing coal usage. This aligns with its policy aimed at diminishing reliance on fossil fuels and curbing greenhouse gas emissions. Furthermore, it enables an upsurge in municipal waste disposal while concurrently reducing electricity production costs.

2. Solar Farm Construction Project

The construction site, located in Kaeng Khoi District, Saraburi Province, features installed power on the ground for Phase 1, amounting 61.226 megawatt peak / 52.20 megawatt AC, and Phase 2, amounting to 11.99 megawatt peak / 9.6 megawatt AC. The primary objective is to supply electricity to cement plants, thereby supporting the increasing demand for renewable energy. Presently, the project's progress stands at approximately 10%, and it is anticipated to be completed, with electricity supplied to the distribution system by the end of 2024.

3. Waste Incinerator and B16 Boiler Construction Project

This waste management facility serves as an incinerator specifically designed to handle the remaining waste resulting from waste sorting in fuel production, with a focus on managing leftover material. The waste undergoes incineration in a stoker-fired kiln. With a capacity to process 800 tons per day, the facility harnesses the heat generated from incineration to produce 80 tons of steam, capable of generating 15 megawatts of electrical power. Currently, the project has achieved approximately 20% completion, with an anticipated completion date set for the end of 2024.

4. Solar Roof Construction Project

To distribute electricity to TPI Polene's tile and fiber cement factory, a solar roof with a capacity of 6.012 megawatts peak / 5.1 megawatts AC has been installed. Currently, the project has progressed to about 10%, and it is expected to be completed, supplying electricity to the distribution system, by the end of 2024.

5. Wind Turbine Wind Turbine Power Plant Project

The project will install a 5-megawatt wind turbine in the limestone mining concession area to generate electricity for

sale to TPI Polene's cement plants. It has already obtained permits from the Department of Primary Industries and Mines for operations, the amendment to the mining plan has been approved by the Environmental Committee. Construction is expected to commence in mid-2024, with commercial production anticipated to begin the same year.

6. Boiler Fuel Replacement Project for Power Plant, TG 8, with capacity of 150 megawatts

On 27 April 2022, TPI Polene Power signed a contract to procure machinery and equipment, including construction and installation for three sets of RDF Boilers 160TPH, as part of the development plan for the power plant, TG 8. The objective is to transition from coal to waste fuel by 2022, with additional boilers currently being installed. The project has reached 25% completion and is slated for full operation using waste fuel by 2025. This transition will enable TPI Polene Power to generate a total of 440 megawatts of electricity, converting all plants to renewable energy sources.

7. Waste Fuel Production Plant Project, Line 3

This project involves the deployment of five sets of production machines designed to process waste materials, generating 3,000 tons of fuel daily. The project aims to transition from coal to waste fuel utilization. Commercial production began in October 2023.

8. IBA Plant

TPI Polene Power has made investments in a sorting and recycling plant dedicated to heavy ash, a waste of the incineration process in boilers, with the goal of repurposing it to add value. This reclaimed material serves as a substitute for shale minerals in cement production and can also replace sand in construction applications. Moreover, any metal separated from the factory will be sold to a steel smelting plant for recycling purposes. The plant, with a daily production capacity of 2,000 tons, is currently being constructed and is at 30% completion, with an expected completion date in February 2024.

9. Community Solid Waste Management and Handling Project in Ko Tao Sub-district Municipality, Songkhla Province

Located in Mueang District, Songkhla Province, the project has the capacity to dispose of 500 tons of waste daily. Currently, it is in the process of installing a 9.95 megawatt generator with the intention of selling 7.92 megawatts of electricity to the Provincial Electricity Authority under a Power Purchase Agreement (PPA) already signed. The project has secured a construction permit and is currently under construction, with progress at approximately 10%. Anticipated completion is expected around the beginning of 2026, at which point electricity sales into the system will commence.

10. Community Waste Fuel Power Plant at the City of Nakhon Ratchasima Municipality, Nakhon Ratchasima Province

TPI Polene Power has emerged as the victor in the project management selection process. However, pending a decision from the Supreme Administrative Court due to requests from competitors in the auction, the final verdict is yet to be determined. Assuming a favorable outcome, it is anticipated that the contract will be finalized, enabling project implementation by 2025, with completion slated for around 2026. Upon contract signing, the municipality intends to engage TPI Polene Power for waste disposal, involving transportation to the Saraburi power plant during its construction phase.

11. Community Waste Fuel Power Plant at Mueang Mukdahan Municipality, Mukdahan Province

TPI Polene Power has submitted a bid for the community solid waste management project in Mueang Mukdahan Municipality, Mukdahan Province. This project involves the development of a closed system electric power plant that prioritizes environmental friendliness, the plant boasts an installed capacity of 9.9 megawatts, with an electricity sales capacity of 8 megawatts. TPI Polene Power, having secured the bid. Consequently on February 27, 2024, the Company has successfully signed a power purchase agreement with the Provincial Electricity Authority.

4. TPI Polene Group Restructuring Its Business Operations In Compliance with Product Groups as follows:

1. TPI Polene Bio Organics Company Limited sells plant-related products such as organic bio-fertilizer and soil conditioners, etc.

2. TPI Bio Pharmaceuticals Company Limited offers MIT (Made in Thailand) registered products for livestock and fisheries, including synbiotics, Microme Knox, yellow spray powder, and Bio-San. Furthermore, innovations such as synbiotics, probiotics, and Bio-San products have been registered within the bio-supplement group. The Company is also undertaking a project to invest in constructing a pharmaceutical compounding plant. This facility will produce modern medicines for humans (in powder and tablet forms), with the goals of treating minor ailments that commonly occur in daily life and decreasing the need to import expensive medicines from abroad. The Company will seek registration of modern medicines for human use with the Food and Drug Administration, and additionally pursue a license meeting GMP standards.



TPI Polene Group employs a dedicated team of pharmacists tasked with researching and developing products. They utilize raw materials comprised of active ingredients listed in modern pharmacopoeias and adhere to contemporary and hygienic production methods. This ensures the creation of safe medicines tailored to meet consumer needs, including

1. Medicines relieving stomach pain, distention, bloating, and flatulence.
2. Lozenge relieving sore throat
3. Antiseptic Mouthwash
4. Muscle relaxant

3. TPI Healthcare Co., Ltd. distributes healthcare products such as Bio Knox powder, mouthwash, soap and grease remover, etc. In 2023, TPI Healthcare Co., Ltd. has additionally invested for production line expansion for Provita beverage products, which are probiotic drinks infused with vitamins, instead of outsourcing production and distributes through modern trade channels, online channels, or general stores and also promotes products through influencers to create awareness among consumers to be more accessible to the products.



Part 1

Business Operations and Operating Results

Business Operations and Operating Results

1. Structure and Business Operation of TPI Polene Group

TPI Polene Group can be categorized by 4 types of businesses as follows:

1. **Construction business sector**: manufacture & sale of cement, mortar, clinker, Hydraulic cement ready-mixed concrete, CRT/FCB, lightweight concrete, fiber cement, wood substitutes, doors, frames and cornices, ceilings, exterior and interior decoration materials, house and building paints, etc.



2. **Petrochemical and Chemical Products business sector**: manufacture & sale of specialty polymer, EVA Emulsion and EVA Powder, EVA Encapsulant / EVA Interlayer / Solar Film, ammonium nitrate and nitric acid etc.



3. Energy and Utilities business sector: Waste-based fuel power plants, a waste heat recovery power plant, a coal-fired power plant, a waste-based fuel power plant, Industrial Waste Disposal Plant, Pyrolysis plants, oil and NGV service stations, etc.



4. Agricultural business and others:

4.1 Healthcare products such as Calcium and Vitamin C Supplements, Bio Knox, Cleaning Products, Microme Knox Solution, Probiotic Provita Drink with Vitamins, Mouthwash, Vegetable soap, liquid bath soap and hand soap, TPIPL drinking water, dishwashing liquid. Stain remover and water-based hand alcohol sanitizer and gel, etc.



4.2 Products for plants such as organic fertilizers, plants nutrients, bio - hydroponic and soil conditioners, etc.



4.3 Products for animal such as bio-stimulants for cattle and fishery, etc. TPI Bio-san, hygiene products for animals and the farming, livestock and fisheries.



4.4 Other businesses such as life insurance business, etc

1.1 Policy and Business Overview

TPI Polene Group conducts business with a keen awareness of the intensifying effects of climate change, which are linked to the Group's operations. Consequently, the Group adheres to the Sustainability policy (ESG & Bio Circular-Green for Sustainability), setting a goal of achieving carbon neutrality through the Low Carbon Economy (LCE) strategy, the Group prioritizes the further development of innovative solutions and the application of technology in its production and operational processes. This approach aims to enhance product value and unlock the potential of personnel while striving to zero waste from production processes. Moreover, the Group is committed to eliminating community waste by processing it into waste fuel instead of relying on traditional landfills, which have adverse impacts on local communities. Additionally, the Group is transitioning from fossil fuels to clean, green, and renewable energy sources to minimize greenhouse gas emissions, thereby mitigating its contribution to global chaos and fostering overall economic stability.

TPI Polene Group has a research and development team dedicated to accelerating the development of green construction products that are environmentally friendly and socially responsible. The aim is to create a balance between business growth, employee well-being in the workplace, respect for human rights, environmental conservation, and fostering a robust Thai society. The Group strives to play a part in driving the economy sustainably while continuously delivering returns and enhancing the quality of life for shareholders and related stakeholders. This commitment is underpinned by adhering to good corporate governance principles at all levels of the organization.

1.1.1 Revenue Structure

TPI Polene Group is principally engaged in the manufacture and supply of products, mainly in its core businesses and reciprocal businesses, which has helped strengthen the revenue and growth of TPI Polene Group, which can be summarized as follows:-

Unit: Million Baht

Product / Service	Operated by	% of TPIPL's Shareholding	2023		2022		2021	
			Mil.Baht	%	Mil.Baht	%	Mil.Baht	%
1. Construction Material	TPI Polene Plc. TPI Concrete Co., Ltd.	- 99.99	24,092	56.28	23,000	47.78	16,969	43.60
2. Petrochemical and Chemical Products	TPI Polene Plc. Thai Nitrate Co., Ltd	- 99.99	10,542	24.63	16,767	34.83	12,550	32.25
3. Energy and Utilities	TPI Polene Power Plc.	70.24	8,056	18.82	8,234	17.11	9,266	23.81
4. Organic Products	TPI Polene Bio Organics Co., Ltd.	99.99	117	0.27	132	0.27	134	0.35
Total			42,807	100.00	48,133	100.00	38,920	100.00

Note: Revenues of the Company and its subsidiaries received from third parties

1.1.2 Major Events and developments

The Company was registered as a limited company in the name of "Polene Company Limited" on September 24, 1987 by the Leophairatana family as the founder and manager of the business until now with an initial registered capital of Baht 100,000. At the outset, it operated as an intermediary in the purchase of PE (Polyethylene) resins from Thai Petrochemical Industry Public Company Limited ("TPI", which has now changed its name to IRPC Public Company Limited.)

Polene Company Limited changed its name to TPI Polene Company Limited on October 24, 1989 and consequently in March 1990, its LDPE plant, tax benefits, and other privileges under BOI promotional certificates were transferred to TPIPL from TPI. On November 20, 1990, TPIPL shares were listed on the Stock Exchange of Thailand and expanded its business into the production and distribution of clinker and cement in 1992 and it was later converted to a public company on February 17, 1994. The Company has expanded into various businesses.

Currently, TPI Polene Group is the largest producer and distributor of cement and construction materials, Specialty Polymer, ready-mixed concrete, and power plants through its subsidiary, TPI Polene Power Public Company Limited, which is also Thailand's largest producer and distributor of electricity generated from waste fuel with an installed capacity of 440 megawatts. In addition, the Company has expanded its business through its subsidiaries, operating in agriculture and other businesses, such products for plants, livestock products, and biohygiene products.

Registered Capital : Baht 23,560,235,000

Paid-up Capital : Baht 18,935,235,000

Par value : Baht 1

1.1.3 Report on the purpose of using the proceeds from the fundraising

1) Use of proceeds from the offering for sale of debentures

In 2023, the Company and its subsidiaries offered debentures with a total value of Baht 21,935.20 million, which can be summarized as follows:

Fund Utilization Purpose	Amount (MB)	Period	Progress
1. Debentures No. 1/2023			
1. To repay debt from issuing debt instruments	2,454.20	April 2023	Complete repayment on 3 April 2023
2. To invest in machinery and equipment in the cement business, specialty polymer business, and modern drug production plant	1,978.25	By 2027	On 30 September 2023, a repayment of Baht 1,670 million was made, with the remaining balance of Baht 308.25 million scheduled for repayment by the year 2027.
3. To use as working capital	567.55	By 2023	Complete repayment on 1 April 2023
Total	5,000.00		
2. Debentures No. 2/2023			
1. To repay debt from issuing debt instruments	4,000.00	January 2024	Complete repayment on 30 January 2024
2. To repay short-term bills of exchange	1,873.00	March 2024	Repayment shall be made in March 2024
3. To repay debt from issuing debt instruments	2,062.20	April 2024	Complete repayment on 2 April 2024
Total	7,935.20		
3. Debenture of TPI Polene Power Plc. No. 1/2023			
1. To invest in machinery and equipment of the Company for enhancement of power plant	1,014.00	By 2023	Complete repayment on 2 October 2023
2. To invest in machinery and equipment of the Company for enhancement of power plant TG8	4,026.00	By 2025	On 2 October 2023, a repayment of Baht 820 million was made, with the remaining balance of Baht 3,206 million scheduled for repayment by the year 2025.
3. To invest in machinery and equipment of the Company for enhancement of other boilers	699.00	By 2023	Complete repayment on 2 October 2023
4. To use as working capital	261.00	By 2023	Complete repayment on 2 October 2023
Total	6,000.00		
4. Debenture of TPI Polene Power Plc. No. 2/2023			
To repay debt from issuing debt instruments	3,000.00	December 2023	Complete repayment on 10 December 2023
Grand Total	21,935.20		

The Company and its subsidiaries utilize the funds raised from the issuance and offering of each series of debentures in accordance with the specified purposes outlined in the Offering Circular of the debentures.

The Company and its subsidiaries utilize the funds from the bill of exchange offered as working capital for business operations and repay the debts of bill of exchange within the specified period.

2) Governing Law for Enforcement of Debt Instruments

Debt instruments are enforced and interpreted under related Thai governing law.

1.1.4 The commitments made by the Company in the Offering Circular and/or the terms and conditions of the approval of the SEC (if any) and/or conditions for listing securities of the SET (if any).

- None -

1.1.5 Name, Head office location, Type of business, Company registration number, Telephone, Facsimile, Company website, Total number and type of shares sold

Thai Company Name : บริษัท ทีพีโอ โพลีน จำกัด (มหาชน)

English Company Name : TPI Polene Public Company Limited

Abbreviation : TPIPL

Registration Number : 0107537000564 (formerly Bor. Mor. Jor. 303)

Nature of Business : The Group operates the business of manufacturing and distributing various products as follows:

1. Construction business sector: manufacture & sale of clinker, cement, Hydraulic cement, mortar cement, ready-mixed concrete, concrete roof tiles, fiber cement, wood substitutes, exterior and interior decoration materials, cement paints, etc.

2. Petrochemical and Chemical Products business sector: manufacture & sale of Specialty Polymer, EVA Emulsion and EVA Powder, EVA Encapsulant / EVA Interlayer / Solar Film), ammonium nitrate and nitric acid etc.

3. Energy and Utilities business sector: Waste fuel power plants, a waste heat recovery power plant, a coal-fired power plant, Industrial Waste Disposal Plant, Pyrolysis plants, oil and NGV service stations, etc.

4. Agricultural business and others, comprising bio-hygiene products, products for plants and farming and healthcare products.

Accounting End Date : December 31 of every year

Head Office : 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.tpipolene.co.th>

Cement Plant : Moo 5, Mittraparp Road, Tambol Tubkwang, Amphur Kangkhoy, Saraburi 18260

Power Plant

Cement Mortar Plant

Lightweight Concrete Plant

Pyrolysis and Waste-based fuel Plants

Tel. Number : +66 (0) 3633-9111

Fax Number : +66 (0) 3633-9228-30

LDPE/EVA Plant and EVA powder : 999 Moo 5 Sukhumvit Road, Tambol Chuengnoen, Amphur Muang, Rayong 21000

Tel. Number : +66 (0) 3880-3090-9

Fax Number : +66 (0) 3880-3086

Concrete Roof Tiles and Fiber Cement Plants : 77 Moo 7, within CRT Plant sub-road from Sai Ban Kork Street, Banlardkaopoon and Highway no.1014, Tambol Ban Kang, Amphur Chaloem Phrakiat, Saraburi 18260

Tel. Number : +66 (0) 3667-0370-5

Fax Number : +66 (0) 3667-0377

Solar Film Plant : 49/1 Moo 1, Phichainarong Songkham Road, Tambol Nachong, Amphur Muang Saraburi, Saraburi 18260

Tel. Number : +66 (0) 3673-1724

Ammonium Nitrate and Nitric Acid Plant : 140/7 Moo 4, Sukhumvit Road, Tambol Tapong, Amphur Muang, Rayong 21000

Tel. Number : +66 (0) 3866-4724-7

Investors Relation Unit

Tel. Number : +66 (0) 2213-1039 ext. 12983 and 12985

Corporate Secretary

Tel. Number : +66 (0) 2213-1039 ext. 12220

Reference Person

Share Registrars : Thailand Securities Depository Company Limited

Office Location : The Stock Exchange of Thailand, Rajadapisek Road, Khwang Dindaeng, Dindaeng, Bangkok 10110

Tel. Number : +66 (0) 2009-9000,

Call Center : +66 (0) 2009-9999

Fax Number : +66 (0) 2009-9991

Auditor : KPMG Phoomchai Audit Limited

Office Location : 1 Empire Tower, Floor 48-50, South Sathorn, Yannawa Subdistrict, Sathorn District, Bangkok 10120

Tel. Number : +66 (0) 2677-2000

Fax Number : +66 (0) 2677-2222

Legal Advisor : SCL Nishimura & Asahi Co., Ltd.

34th Floor, Athenee Tower, 63 Wireless Road, Lumpini, Pathumwan, Bangkok 10330

Tel. 02-126-9100 Fax 02-126-9120

Debenture Registrar

CIMB THAI PUBLIC COMPANY LIMITED

Location : 44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330

Phone : +66 (0) 2626-7507-8, +66 (0) 2626-7591

Fax : +66 (0) 2657-3390

BANK OF AYUDHYA PUBLIC COMPANY LIMITED

Location : 1222 Rama 3 Road, Bangpongpan, Yannawa, Bangkok 10120

Phone : +66 (0) 2296-2000, +66 (0) 2296-5696

Fax : +66 (0) 2683-1302

Legal Advisor for Issuing and Offering debentures

Weerawong, Chinnavat and Partners Co., Ltd.

Address : 540 Mercury Tower, 22nd Floor, Ploenchit Road, Lumpini, Pathumwan, Bangkok 10330

Phone : +66 (0) 2264-8000



1.2 Nature of Business

1.2.1 Product Information

Products of TPI Polene Group can be classified according to the type of business as follows:

- I. Construction Material
- II. Petrochemical and Chemical Industry
- III. Power and Utilities Industry
- IV. Agro-industry, healthcare products, etc.

I. Construction Material

TPIPL is the manufacturer and distributor of clinker, Portland cement, mortar cement, adhesive mortar, grout and ready-mixed concrete, concrete roof tiles, fiber cement, light weighted concrete and cement paint., ect under the logo “TPIPL”, which can be summarized as follows:

1. Product characteristics, production capacity, and strength

Products	Production capacity, strengths, technology development, and innovation
1. Cement and clinker	
Total production capacity	13.5 MTPA
Market share	The largest manufacturer and distributor of cement 1 in 3 in the country. with a market share that accounts for 25 percent of the domestic market.
Brand name	TPIPL
Strengths	<ul style="list-style-type: none">• TPIPL has the advantage of low production costs as machinery and equipment are located in the same area, adjacent to the Company's limestone quarry.• The first cement plant in the country that can use waste-based fuel as an alternative fuel for coal, which reduces the cost of cement production.• TPIPL is the first cement manufacturer in Thailand, awarded ISO 9002 Certification from the International Standard Institute, for surpassing industrial and environmental protection standards. This has enabled the Company to export cement to the state of California, where surrounding communities are highly aware of environmental conservation.• TPIPL is the first cement manufacturer in Thailand with approved Carbon Label for both cement and mortar products and with certified production processes that can reduce greenhouse gas emissions.• Have our own research and development team which has a competitive advantage over others.• TPIPL has a palletless cement packing system to reduce product delivery costs and increase lift time of the products. It reduces the cost of product delivery.• A modern factory that focuses on automated operating systems to reduce production costs.• Production technology of TPI 299 (Hydraulic cement) has been developed to replace TPI green cement (mixed cement) to reduce greenhouse gases by 10-15% under TIS standards.• Developed technology to produce TPI 299 (hydraulic cement) to replace Portland cement to reduce greenhouse gas emissions by 10-15% under TIS standards.• The first cement manufacturer in the country to be certified with ISO 9001:2015 quality standards from international institutions.• The management system has been certified under four international standard systems, namely: Quality Management System Standard (ISO 9001:2015), Environmental Management System Standard (ISO 14001:2015), Occupational Health and Safety Management System Standard. (TIS18001:2011 and OHSAS 18001:2007) and energy management system standards (ISO50001:2011) by industrial standards of Thailand, the United States (ASTM), and the European Federation (EU).• Cement factory laboratories were certified by the Office of Industrial Standards to be in accordance with ISO/IEC 17025:2017 and TIS 17025:2018 standards.
2. Mortar Cement	
Total production capacity	3 MTPA
Market share	One of the two largest mortar cement producers in the country.



Products	Production capacity, strengths, technology development, and innovation
Brand name	TPIPL
Strengths	<ul style="list-style-type: none"> • There are 43 kinds of products to respond the needs of customers. • Certified for quality management system standards (ISO 9001:2015), environmental management system standards (ISO 14001:2015), occupational health and safety management system standards (TIS18001:2011 and OHSAS 18001:2007). • Certified for the International Energy Management System (Energy Management System) ISO 50001: 2011 from the International Institute of AJA Registrars.
3. Ready mixed concrete	
Total production capacity	There are 67 batching plants in operation with a total production capacity of approximately 3.85 million cubic meters per annum.
Market share	<ul style="list-style-type: none"> • TPI Concrete is one of the three largest manufacturers and distributors of ready-mixed concrete in the country. • With a market share of 10% and 16% of ready-mixed concrete demand in the country and in Bangkok and surrounding areas respectively. • Total ready-mixed concrete production capacity accounts for 9% in the country.
Brand name	TPIPL
Strengths	<ul style="list-style-type: none"> • Develop green ready-mixed concrete that can reduce greenhouse gas emissions by up to 5 – 10%. • Develop ready-mixed concrete by using fly ash, a waste material from power plants, to replace cement by 50%. • Certified for quality management system standards in the scope of production and services (TIS/ ISO 9002), occupational health and safety management system standards (TIS 18001:2007), ready-mixed concrete industry standard, TIS 213-2560 and business management standard that affects the environment (ISO 14001:2015) in 2021 and General Requirements on the Competence of Testing and Calibration Laboratories (TIS. ISO 17025-2561) in 2023. • The first Thai ready-mix concrete manufacturer certified "Made in Thailand "(MiT) product by the Federation of Thai Industries. which focuses on the use of raw materials in the country.
4. Construction Materials	
Lighted Weight Concrete	<ul style="list-style-type: none"> • Production capacity of 300,000 cubic meters per annum • Certified for quality standards industrial standards TIS 1505-2541

Products	Production capacity, strengths, technology development, and innovation
<ul style="list-style-type: none"> Fiber cement (boards, ceilings, walls, floors and substitutes for wood and digital boards and door products, frame, concrete roof tiles etc.) 	<ul style="list-style-type: none"> A production capacity of 380,000 tons per annum. Environmentally friendly products: a green industry to reduce energy, consumption and help reduce the destruction of trees. The first manufacturer in Thailand that uses digital printing technology to print various images on the surface of the products, designed with natural patterns or designs according to customer requirements. Surpassed test EN12467:2002 and A1:2006 and received CE mark Certified International quality standard ISO 9001:2015 and Environmental Management System Standard (ISO14001:2015) from British Standards Institution (BSI) and TIS 1427-2561 Industrial Product Standard. Has been selected as “White Factory” at the provincial level from the Department of Labor Protection and Welfare Saraburi under the “To be number one” project since 2019. Received a certificate for products manufactured in Thailand MIT (Made in Thailand) from the Federation of Thai Industries.
<ul style="list-style-type: none"> Concrete roof tiles and cover concrete floor tiles 	<ul style="list-style-type: none"> Production capacity of more than 45 million sheets per annum or more than 4 million square meters of roof area per annum The product has been certified by TIS Industrial Standards. Received a certificate for products manufactured in Thailand MIT (Made in Thailand) from the Federation of Thai Industries Thailand
<ul style="list-style-type: none"> Cement paint for housing/ building and others construction materials 	<ul style="list-style-type: none"> A high quality product. There are a variety of products to choose for application purposes.

Details of each product and application purpose are as follows:

Product types	Application purpose
1. Cement	Consists of various types of cement suitable for structural work, molding work, foundation work, general construction work, construction work that does not require bearing heavy loads, plastering, masonry work that requires high compressive strength, oil well drilling work, anti-sulphate cement, and for decoration work, adhesive cement, etc.
2. Dry Mortar	There are about 43 types to choose according to the application purpose, well Suited for plastering, masonry and surface leveling work, plastering work on lightweight blocks, tile work, multipurpose repair work, etc.
3. Clinker	Raw material for the production of many types of cement.
4. Ready-mixed concrete	Main products in the construction of various buildings, floor pouring work bridges, roads, etc.
5. Lighted weight concrete	Can be used for both load bearing walls and non-load bearing walls.
6. Concrete roof tiles products	Concrete roof tiles and decorative tiles for concrete floors and walls, etc.
7. DIY products and others	A variety of products types according to applications such as cement paint for, Interior and exterior paints, sealants, asphalt and multi-purpose welding mortars, etc. etc.

2. Market and Competition and Industry Trends

2.1 Marketing Policy :

2.1.1 Competitive Strategy

The real estate market in 2023 remained stable following the election, primarily due to ongoing economic activities. The decision to open the country to international tourists, coupled with uncertain confidence among private sector players and consumers, contributed to this stability. However, there are potential risks stemming from escalating energy costs, rising interest rates, inflation, and unpredictable weather patterns. Additionally, the possibility of prolonged conflicts in Ukraine and Israel-Hamas could disrupt global energy prices.

Delays in approving government construction projects and in finalizing the 2024 annual budget until after the 4th quarter of 2023 are factors exerting pressure on the economy and business operations within the real estate and construction materials sectors in 2024. The trend in the real estate sector in early 2024 is expected to continue slowing down due to global economic uncertainty, delayed government budget disbursement, slow recovery of the Chinese economy, increasing energy prices and oil costs worldwide due to drought, the Israel-Hamas war, labor shortages in the construction sector, financial liquidity risk, pressure from regulations, and the risk of halting construction to reduce PM 2.5 dust levels. However, there is a growing trend in construction expansion, supported by investments

from the private sector, particularly in commercial real estate projects as well as factory and retail construction. To advance in the construction materials sector, planning strategies must prioritize innovation to develop products that fulfill the requirements of target groups, including completeness, ease of use and maintenance, weather resistance, and environmental safety.

- **Aiming at developing products to meet integrated standards for residences :** Due to shifts in consumer behavior and an aging population, the Group is implementing aggressive online marketing strategies coupled with rapid, precise, and secure product delivery, as well as robust after-sales service, with the aim of swiftly reaching a broad customer base and consistently ensuring utmost satisfaction. The Company has its own research and product development team, prioritizing the development and addition of product value while responding to customer needs. Additionally, the Company serves as a model for inventing and developing innovations to create a Green Product category, thereby reducing impacts on the climate and providing comprehensive services. These efforts aim to ensure confidence in the Company's products, resulting in sustainable business growth.
- **Product quality :** The Company has a policy to develop the production process to create quality products using modern technology. It aims to expand into new product lines with designs that differentiate from competitors in the same market, offering competitive prices. Additionally, the Company ensures a complete transportation system for delivering products to customers exactly as desired.

The Company endeavors to innovate new products tailored to customer needs while implementing production processes that utilize raw materials to create low-carbon, environmentally friendly goods, ultimately contributing to an enhanced quality of life for society. Furthermore, it has expanded its product range to include a diverse array of offerings with various functional features, including D.I.Y products designed for customer convenience, featuring easy and rapid installation, as well as attractive patterns and colors. Additionally, the Company provides recommended services delivered by a skilled team accessible through both online and offline channels, with the goal of bolstering sales in both domestic and international markets.

- **Price and Cost :** All four cement lines of the Company are situated in close proximity to its limestone quarry, the primary source of raw materials. This strategic placement facilitates efficient production management, providing a competitive edge in cost efficiency through policies aimed at increasing production efficiency and continuously reducing cement production costs. The integration of new technologies and production innovations, such as reducing heat consumption and repair costs and substituting waste fuel for coal, further enhances cost-effectiveness. Additionally, the implementation of the BCG policy across every step of the value chain, from employees to suppliers, customers, and social communities, affords the Company a significant advantage in terms of cement production costs.

The Company holds a competitive edge due to its lower production costs compared to rivals, particularly in the manufacturing of ready-mixed concrete, fiber cement, concrete tiles, and lightweight blocks. These products utilize cement and stone, the primary raw materials that the Company specializes in producing.

- **Quality management system and product quality development :** The Company remains committed to its quality policy, "Committed to producing and selling quality products," which has led it to become the first cement producer to attain ISO 9002 international quality standard certification from an international institute. All product types have been certified to industry standards and have also obtained the MiT (Made in Thailand) standard from the Federation of Thai Industries. Prior to release, they undergo quality inspections conducted by the quality control team.
- The Company's development of TPI Red 299 hydraulic cement, referred to as global warming reducing cement, promotes environmental friendliness and aids in reducing greenhouse gas emissions. This encompasses a range of green products in the fiber cement group, such as synthetic wood doors, fiber cement frames, and lightweight furniture boards. The product holds a United States patent number and boasts durability, moisture resistance, and termite-proof properties, rendering it ideal for furniture components. Aligned with ESG (Environmental, Social, and Governance) trends, it underscores environmental responsibility.



In 2023, the Company also became a producer of ready-mixed concrete with a focus on environmentally friendly production. Aligned with the policy of conducting business in harmony with environmental preservation and societal development according to ESG principles, TPI Concrete has introduced new innovations for refining the production process and designing concrete products. This enables the Company to consistently offer a variety of products capable of meeting the diverse concrete needs of project owners in both the public and private sectors.

- **Services** : The Company aims to create and develop a logistics system to quickly deliver products and services to customers. It covers target groups including small construction material retailers, modern trade, and project customers, as well as the export market with safety standards in transporting goods. The Company also serves distribution centers for products and raw materials distributed at important strategic points throughout the country, with a network linking in inventory management and a good experience for customers by connecting all channels for purchasing products and services, both offline and online. The Company offers a virtual showroom platform, designed to enhance customer convenience by providing a comprehensive view of products and services in a 360-degree virtual format. This includes online access to information and services such as roof removal and installation for both projects and regular customers, all supported by a team of expert technicians operating under the TPI Polene brand.
- **Reputation** : The Company markets construction material products under the “TPIPL” Brand, aiming to foster brand loyalty by emphasizing superior quality compared to industry standards. Alongside

this commitment, the Company provides excellent sales services to customers, including prompt goods delivery, fostering strong relationships with distributors, and offering competitive pricing. In foreign markets, the focus of sales efforts will primarily be on competing based on product quality and pricing.

- **Advertising and product public relations** : In addition to advertising through billboards and various publications, the Company also focuses on developing digital marketing strategies. This involves creating content to reach all target groups via the internet and other digital media platforms such as YouTube, Line OA, Facebook, Google Ads, TikTok, mobile media, and digital media of Suvarnabhumi TV, aiming to create comprehensive awareness among customers. Promotional programs, campaigns, and seminars are jointly organized with distributors, Modern Trade groups, architect and engineer organizations to drive sales. A team of architects offers design services, providing valuable advice to customers on building designs. Product patterns are customized to meet customer needs, with installation services readily available from a dedicated team of professionals.

2.1.2 Characteristics of customers and target customers:

(1) Cement, dry mortar, lightweight blocks, fiber cement, concrete tile, and paint for building interiors and exteriors

The Company distributes cement and dry mortar independently, with 70% of sales obtained through approximately 1,200 distributors nationwide. Among these distributors, 30% are the Company’s exclusive agents, while the remaining 70% come from direct sales to construction projects, including contractors and general consumers. As of 31 December 2023, the Company’s top 10 major customers, excluding TPI Concrete Company Limited and affiliated businesses that utilize cement as a raw material



for producing other ready-to-use construction materials, accounted for approximately 31% of total sales volume.

The Company distributes concrete tiles and fiber cement through over 400 nationwide distributors, including modern trade stores, project owners, contractors, and direct users. Additionally, sales to regular customers are facilitated through online channels.

The Company places a high priority on servicing project customers, closely overseeing the progress of their projects. Furthermore, it offers product servicing and delivery within projects so that customers can efficiently execute their projects. Key target customer groups encompass:

1. Distributors for delivery to various construction projects, both private and government sectors.
2. Construction projects of private and government sectors.
3. Construction contractors for private and government sectors.
4. Manufacturers using it as a raw material for producing products, such as furniture manufacturers.
5. Modern trade stores such as Thai Watsadu, Boonthavorn, HomePro, HomeWorks, Do Home, Cent Mall Global House, Grand Home Mart, and Mega Home, etc., offer products for sale, including fiber cement, concrete tiles, and D.I.Y. (Do It Yourself) products such as TPI High Bond Adhesive Mortar (M501), TPI Adhesive Mortar for Common tiles laying (M500), TPI Multil Purpose Repair Mortar (M600), TPI Water Plug Cement (M800), and TPI Stucco Ready Made Mortar (M900), among others.
6. Architects, Decorators and Artists
7. The Company has developed additional sales platforms to cater to its online customer group, aligning with changing marketing strategies. This includes establishing sales channels and adding

small retail stores in potential areas. By setting up a New Normal store to distribute TPI Polene Group's products and reach the community thoroughly, retail customers can now enjoy faster and more convenient access to the Company's products and services.

8. As Thailand transitions into an aging society with a growing number of elderly individuals, the elderly customer group, a target demographic, is steadily expanding. It is essential to prioritize the selection of safe construction materials in everyday life, given their critical role in ensuring safety. Additionally, this customer group has significant potential for expenditure.

(2) Ready-mixed Concrete

TPI Concrete Company Limited, known as TPI Concrete, distributes its ready-mixed concrete through around 266 dealers domestically, with no exports, and operates without dependency on any specific sales agent. By the end of 31 December 2023, the breakdown of sales volume between dealers and direct sales stood at 48% and 52%, respectively, comprising the total sales volume of ready-mixed concrete in the country.

TPI Concrete adheres to a sustainability policy in operating its business for long-term sustainability, employing BCG and ESG models. It utilizes green marketing strategies and actively works to reduce carbon production, greenhouse gases, and global warming. The Company uses hydraulic cement to substitute for Portland cement and produces ready-mixed concrete with a formula designed to reduce global warming. This formula utilizes hydraulic cement as a raw material for producing ready-mixed concrete or low-heat concrete, thereby reducing heat buildup in large concrete structures. The enhanced durability of this concrete makes it resilient against diverse environmental conditions, aligning with the growing emphasis on sustainable living practices. This is particularly relevant in the construction of residential, governmental, and private sector buildings, where there's a heightened focus on Green Building initiatives. An example of this shift can be seen in projects like the Skytrain - Southern Purple Line Project, where requirements mandate the use of hydraulic cement in the ready-mixed concrete instead of traditional Portland cement, Type 1.

The market that uses the most ready-mixed concrete in Thailand is the areas in Bangkok and its perimeters, particularly two private projects that will be landmarks in 2024, namely the Dusit Central Park Project and the One Bangkok Project. They utilize TPI concrete and are still under construction.

TPI Concrete anticipated that its market share would reach 16% in 2023. However, due to delays in forming the new government, which occurred after the Cabinet was established in September 2023, there was a subsequent delay in preparing the 2024 Annual Budget and in disbursing corresponding funds. As a result, the country's economy grew at a lower rate than expected. Once the government finalizes the budget for 2024, the Company anticipates a swift acceleration of government construction projects aimed at bolstering the nation's economy. This includes prioritizing major initiatives like the high-speed rail project connecting Bangkok to Nong Khai, as well as enhancements to airports, motorways such as checkpoint M6 (Bang Pa-in - Nakhon Ratchasima), checkpoint M81 (Bang Yai — Kanchanaburi), and various highways nationwide. Regarding private sector constructions, TPI Concrete holds market share in various construction types such as condominium buildings, low-rise villages, factories, department stores, and modern trade establishments, etc.

TPI Concrete strategically places its production units along main roads in Bangkok and perimeters, reaching into provinces across all regions of the country. This strategic approach supports significant investment endeavors from both public and private sectors, leading to a steady rise in sales for large-scale projects. This deliberate positioning plays a crucial role in advancing the growth of TPI Concrete's ready-mixed concrete business, with a specific focus on key customer segments, such as:

1. Distributors to deliver to large and small customers;
2. Construction projects and contractors;
3. Franchise nationwide with a production and distribution system following the same business operation standards as TPI Concrete.

2.1.3 Sales and distribution channels

The Company has distribution channels both domestically and internationally, selling cement and clinker, with a domestic-to-export ratio of approximately 71:29 of the total sales volume.

The Company's sales distribution showcases a domestic-to-export ratio of around 25:75 for fiber cement and approximately 97:3 for concrete tiles in terms of total sales volume.

Domestic sales

The Company's cement and dry mortar distribution from the factory encompasses three delivery channels for customers: by car, rail, and boat. Situated in Kaeng Khoi District, Saraburi Province, the Company's cement production plant boasts 13 strategically positioned

warehouses across the nation. Catering to approximately 1,200 distributors nationwide, cement is supplied in both Bulk and Bag forms, with the Company adept at meeting retail customer demands across diverse regions in desired quantities. The TPI Polene Group employs locomotives for transporting cement via rail to warehouses and distribution centers nationwide, aiming to decrease transportation expenses and enhance the efficiency of its cement delivery system, resulting in expedited operations.

The Company transports fiber cement, concrete tiles and other construction materials by car.

The Company extends credit to its regular customers, stipulating collateral requirements. The average collection period for merchandise costs is delineated as follows:

- 1) A period of 60 days for domestic cement sales.
- 2) Payment for cement sales to export borders is strictly limited to cash transactions.
- 3) A period of 60 days for selling fiber cement and concrete roof tiles products.
- 4) A period of 60 days for ready-mixed concrete sales.

Exports

The Company primarily exports clinker, along with some cement and dry mortar. The largest export markets include Bangladesh and ASEAN countries.

The Company primarily focuses on exporting cement to CLMV countries (ASEAN nations situated in the Mekong Basin region). In 2023, the export volume of clinker and cement experienced a decline in tandem with the global real estate sector's slowdown. Additionally, the Company has diversified its exports to include fiber cement boards, expanding its reach into new markets such as Turkey, South Africa, Saudi Arabia, and others.

The Company predominantly employs FOB Basis and Ex-Factory Basis as delivery terms for shipping goods in foreign export sales, with payment accepted via letter of credit and Telegraphic Transfer (T/T).

Furthermore, the Company exports fiber cement and concrete tiles to various destinations including Australia, New Zealand, the Middle East, South Africa, Asia, and Europe. In response to the decreased export volume of construction materials in 2023 due to economic conditions in CLMV countries, the Company has diversified its exports to encompass new markets such as America, Australia, New Zealand, South and East Africa, India, Brunei, Dubai, and Europe, among others.

2.2 Market Conditions and Competition, and Industry Trends

2.2.1 2.1.1 Market Conditions and Domestic Competition

Estimated cement production capacity of manufacturers in Thailand⁽¹⁾

Company	Production capacity as of 31 December 2023 (Million Tons)	Market Share (%)
1. Siam Cement Group Public Co., Ltd.	23.0	38.2
2. Siam City Cement Public Co., Ltd.	14.7	24.4
3. TPI Polene Public Co., Ltd.	13.5	22.4
4. Asia Cement Public Co., Ltd.	5.0	8.3
5. Jalapathan Cement Co., Ltd.	2.3	3.8
6. Thai Pride Cement Co., Ltd.	0.9	1.5
7. Cemex (Thailand) Company Limited	0.8	1.4
Total	60.2	100.0

Source : Information from the Cement Industry Group, the Federation of Thai Industries (CTMA)

Note : ⁽¹⁾It is a licensed or registered production capacity, which may differ from the actual production capacity depending on machine maintenance and efficiency.

Thailand has a cement supply with an installed production capacity from all cement producers totaling approximately 60.2 million tons per year. However, due to various practical factors, some cement factories have operated for an extended period with machines that are not functioning, leading to production halts for repairs and maintenance, or permanent cessation of cement production. This is primarily due to outdated machinery that is not deemed cost-effective for improvement or repair. As a result, the cement supply does not match the installed production capacity of cement factories throughout the country. The Company expects that the production capacity for cement in the country is approximately 40 million tons per year, with a demand for cement of approximately 33 million tons. The remaining 7 million tons, or the equivalent of six million tons of clinker (approximately 20% of the current domestic cement demand), will be exported to international markets.

Cement Industry Condition

Domestic Market

In 2023, cement consumption in Thailand was approximately 33 million tons, similar to 2022, which stood at approximately 32 million tons. This stability was attributed to several factors contributing to the overall improvement of the country's economy. These factors include the declining spread and severity of the COVID-19 disease throughout the year, the classification of COVID-19 as a local disease indicating the ability to control it, and the rising prices of agricultural products, particularly rice and fruits. Consequently, investment in the construction sector increased, leading to a gradual rise in the usage of cement, with this trend expected to continue improving in 2024.

However, the Russian-Ukrainian and Israeli-Palestinian wars are still ongoing, causing the price of energy to increase, which results in the rising cost of cement production. This may lead to a slowdown in cement usage, with expectations of growth not being met.

In 2024, the Company expects domestic demand for cement to slightly expand compared to 2023. This growth is supported by factors such as investments from both the public and private sectors in the construction of public utility systems, public transportation systems, and transportation networks in both central and regional areas, aimed at fostering the country's growth. Additionally, entry into the ASEAN Economic Community (AEC) will lead to increased investment in facilities for the Special Economic Zone, as announced by the government. Consequently, this will result in an increased demand for cement from both the public and private sectors.

International Markets

Exports of cement and clinker in the first half of 2023 decreased compared to 2022 due to lower expansion in the global construction sector. Additionally, Bangladesh, the main market for the Company's clinker exports, has faced an economic crisis and a shortage of dollars, leading to risks in making payments. Moreover, cement producers from other countries such as Vietnam and Indonesia are competing by significantly lowering clinker prices. These reasons are obstacles that caused the decrease in exports in 2023.

The Company primarily exports cement to markets such as Bangladesh and ASEAN countries, with the demand for cement closely tied to the pace of expansion and infrastructure development in these regions.

Ready – Mixed Concrete Industry Condition

The ready-mixed concrete business market has major producers and distributors such as The Concrete Products and Aggregate Company Limited (CPAC), Siam City Concrete Company Limited, Asia Concrete Company Limited (Bua Concrete) and TPI Concrete Company Limited.

During the first quarter up to May 2023, concrete producers increased their selling prices in response to rising production costs attributed to the high prices of fuel, including coal (stemming from the conflict between Russia and Ukraine), which resulted in higher costs of raw materials used in concrete production. Additionally, the tourism sector experienced notable improvement, with over 21 million tourists entering Thailand, marking a significant increase compared to 2022. The economic condition was lower than expected in terms of recovery. This is because there are many affecting factors, including the inflation rate and interest rate, which increased throughout the year, causing purchasing power within the country to decrease and household debt to increase. This has affected the real estate sector, especially properties priced at less than Baht 3 million, which were heavily impacted due to the increasing strictness of financial institutions in granting loans and the rising costs of construction materials and land. Consequently, the price of real estate has increased, resulting in a slowdown in purchasing real estate, except for premium and luxury real estate projects. These have received excellent feedback because this group of buyers consists mostly of Thai individuals with high incomes and foreign investors and tourists, who are not significantly affected by the Thai economic situation. As a result, real estate entrepreneurs have launched more luxury real estate projects. In 2023, some of the most sought-after types of real estate included Wellness Real Estate, pet-friendly condominiums, and green buildings.

As for the real estate market trend in 2024, it is expected that the real estate market is more likely to recover. From many factors, including the increasing behavior of buying homes in secondary cities and tourist cities, changes in Bangkok's urban planning to support the expansion of the city and the opening of the Pink Line This creates more opportunities for construction of real estate projects in middle and outer Bangkok. However, there are still factors that exert pressure on the decision to buy real estate, including household debt, the burden of public expenses, higher inflation and interest rates, as well as the Russian-Ukrainian and Israel-Hamas war situations, which may affect oil prices, tourism, and the world economy. In 2024, the construction sector anticipates a sustained recovery driven by a surge in various construction endeavors, such as private real

estate developments and infrastructure projects spanning transportation routes, railways, highways, expressways, and government high-rise buildings all approved subsequent to the establishment of the government.

For fiber cement, concrete tiles, and lightweight concrete, all of which utilize cement as their primary raw material, it's evident that entrepreneurs with cement factories will likely enjoy a competitive edge in managing production costs. To increase the sales volume of ready-mixed concrete, production units can be added near construction areas through the establishment of ready-mixed concrete production facilities, which would require permission from relevant government agencies. When considering the type of machinery, the size of the production unit, and adherence to environmental protection standards, it is necessary to obtain licenses for storing cement as well as for utility consumption, including electricity and tap water. These requirements pose significant restrictions and obstacles for new manufacturers seeking to enter this business.

Market Condition of Fiber Cement and Concrete Tile Industry

Six major manufacturers and distributors dominate the fiber cement and concrete tile market, including Siam Cement Public Company Limited (SCG Brand and CPAC Brand), Diamond Building Products Public Company Limited (Diamond Brand), TPI Polene Public Company Limited (TPI Brand), Siam City Cement Public Company Limited (Conwood Brand), Mahaphant Fibre-Cement Public Company Limited (Mahaphant Brand), and Oranyanich Company Limited (Oran Brand). Those equipped with cement factories enjoy a significant edge in managing production expenses.

Domestic Market

The recovery of the Thai business sector from the vulnerability posed by the upward trend in interest rates has impacted the interest-sensitive real estate industry, leading to diminished investment capacity within the private sector. Instead of initiating new construction, high-rise building projects are on hold, awaiting the release of the original projects. Low-rise building construction projects tend to experience better recovery due to several factors. These include the expansion of major developers into metropolitan areas and major cities, hotel renovations to accommodate tourists in highly popular destinations, manufacturer competition focused on adjusting service styles and expanding sales channels to reach more target groups. Furthermore, there's an emphasis on increasing convenience and speed, developing innovative products that align with customers' lifestyles, prioritizing easy installation

and quick completion of work, and offering integrated services and products that are environmentally friendly and resident-friendly.

The conflict between Russia and Ukraine has led to increased costs for energy and construction materials, shortages in skilled labor, inflation, and rising interest rates. These combined factors are putting pressure on large operators in the construction sector, prompting a slowdown in their business activities. The lack of liquidity is directly impacting small and medium-sized entrepreneurs, leading to delays in both low-rise and high-rise construction projects. This delay is further exacerbated by a wait-and-see approach to the situation. Consequently, there is a direct effect on products within the fiber cement and concrete tile groups, given that these entrepreneurs form the primary customer base across the product distribution and service supply chain. With demand lagging behind supply, intense price competition and a focus on service provision have emerged. Manufacturers are actively emphasizing service quality and leveraging media channels to expand their customer reach.

International Markets

Fiber cement primarily finds export markets in Australia, New Zealand, the Middle East, Asia, and Europe. Additionally, the Company exports concrete roof tiles to Cambodia and Myanmar. In 2023, amidst global economic and political challenges, exports of fiber cement and concrete tiles to Myanmar and Laos experienced a slowdown. Nevertheless, the Company persevered by sustaining its existing customer base in China, Bangladesh, and ASEAN countries while actively seeking to broaden its export reach to Australia, New Zealand, the Middle East, Asia, and Europe.

Factors Affecting Opportunities or Limitations in Cement Business Operations

The Company perceives minimal threat from new entrepreneurs entering the market due to stringent regulations in Thailand's cement industry. Cement producers are required to secure a production license and maintain a certain production volume. Moreover, the industry demands capital-intensive investment, particularly in limestone mining, the primary raw material for cement production, which is limited in Thailand. Entrepreneurs must navigate licensing procedures and obtain concessions, making entry into the market challenging.

Given that ready-mixed concrete, fiber cement, concrete tiles, and lightweight blocks all rely heavily on cement as their primary raw material, it's apparent that

entrepreneurs who own cement factories stand to gain a competitive edge by exerting greater control over production costs. Additionally, the construction of a ready-mixed concrete production unit must receive permission from relevant government agencies. The machinery type, production unit size, and environmental protection measures must adhere to standards and secure licenses for cement storage, electricity consumption, and tap water usage. These regulatory requirements present significant restrictions and obstacles for new manufacturers seeking to enter this industry.

3. Sourcing of products or services

3.1 Production Facilities

TPI Polene Group operate plants as follows:

(1) Four cement production lines, with total capacity of 13.5 million tons per annum are located in Kaeng Khoi, Saraburi province, which uses a “dry production process” using rotary kilns and heating towers, cement storage silos, office filling lines, and joint production control tools for most machinery in cement plants. The Company bought this equipment from Krupp Polysius AG of the Republic of Germany, a company renowned for its mortar machinery. As for machine maintenance, the Company shuts down production plants to repair equipment and machinery every 11 months (mainly kiln maintenance), which takes about 20 days for repair and maintenance.

(2) Three mortar cement lines with a total capacity of 3,000,000 tons per annum are located in Kaeng Khoi, Saraburi Province. The Company purchased mortar machinery from Krupp Polysius AG and PFT Putz—Und Fordertechnik GmbH. of the Republic of Germany, a company also renowned for mortar machinery.

(3) Lighted Weight Concrete plant with a production capacity of 300,000 cubic meters per annum, located in Kaeng Khoi, Saraburi province, with modern machinery from abroad. The plant can use more than 90 percent of the raw materials produced by the Company itself, including the use of electricity and steam surplus from existing power plants for use in the lighted weight concrete production processes, leading to a competitive advantage in terms of low production costs.

(4) Concrete roof tile plant and fiber cement plant are located in Chaloem Phra Kiat, Saraburi province, which consists of:

(4.1) Concrete roof tile plants: manufacturing of concrete roof tiles and covers, including concrete slabs, with a production capacity of approximately 45 million sheets per annum.

(4.2) The Company has four production lines of fiber cement. The production capacity is approximately 380,000 tons per annum, which consists of:

- Board products and wood replacement materials with Autoclave System
- Product group wooden and digital board replacement materials with Autoclave System includes air cured tiles and Air cure covers.

(5) **Ready mixed concrete:** 67 batching plants with a total production capacity of approximately 3.88 million cubic meters per annum.

3.2 Procurement of main raw materials

The main raw materials used in the production process of clinker are limestone and Alumina Shale. The calculation of the components of raw materials in the production of cement depends on the quality and use of each type of cement.

The Company operates its own mining business and its own trucks, including equipment and conveyor systems, limestone crushers and CDE Plants used in mining operations. The Company has its own limestone and shale quarry in the area adjacent to the Company's cement plant for providing main raw materials from third parties used to produce cement and other construction materials as follows:

Raw material	Sources	No. of suppliers	Proportion of raw material purchases (%)	
			Domestic	International
Cement Production				
limestone	Limestone from the quarry under limestone concession	-	-	-
shale	Shale from the quarry under shale concession	-	-	-
Iron Ore (copper slag)	Imported from Japan	1	-	100
Gypsum	Purchased under 1 year contract	1	100	0
Bituminous	own processing plant / Purchase under contracts from time to time	2	100	0
Coal	Mostly imported from Indonesia under long-term contracts and spot price.	6	70	30
Waste-based fuel	Purchased from TPIPP.	1	100	0
Ready-mixed concrete production				
Cement	TPI Polene Plc	1	100	0
Aggregate	TPI Polene and 10 aggregate crusher companies	11	100	0
Sand	Tha SaiContractor, Kanchanaburi Province,Chonburi, Rayong, Nakorn Ratchasima,Udon Thani, Ubon Ratchathani, Lamphun, Chiang Mai and Ang Thong Province	22	100	0
water	Water Metropolitan Waterworks Commission	1	100	0
catalyste	Local suppliers	2	100	0

Raw material	Sources	No. of suppliers	Proportion of raw material purchases (%)	
			Domestic	International
Fiber Cement Group				
Cement	TPI Polene Plc	1	100	0
Sand	Tha Sai Contractor, Kanchanaburi, Chonburi and Ang Thong Province	11	100	0
Cellulose fibers	Imported from New Zealand Chile, Sweden and the United States of America	6	0	100
Synthetic Fiber (PVA)	Imported from China and Japan	3	0	100
Micro silica	Local suppliers	2	100	0
color water	TPI Polene Plc / overseas suppliers	2	30	70
Concrete Roof Tile				
Cement	TPI Polene Plc	1	100	0
Crushed Stone	TPI Polene Plc	1	100	0
Sand	Local suppliers	6	100	0
Coated Paint	Local / overseas suppliers	4	30	70

In addition, the cement business operation requires a reserve of limestone and shale and long-term concessions must be permitted by governmental authorities. Details of the Company's concession are as follows:

Location	Types of mineral substance	Number of limestone concession (issue)	Remaining lifetime of concession	Expiry date
Saraburi province	Limestone, shale and cement soil	28	1-30 years	2023 - 2057

Note : The Company's card license has been renewed in total.

3.3 Raw material problems

As the Company has operated its cement business for a long time, we have long term relationships with raw material suppliers and always exchanged information with each other. we are able to manage raw materials procurement quite well, under short and long-term contracts with many vendors in the local and international markets, and have no policy of relying mainly on any particular supplier to ensure adequate raw material procurement. Thus, it can sustainably increase its competitive advantage.

II. Petrochemical and Chemical Industry

1. Product characteristics, production capacity and strengths

Products	Production Capacity, Strength, Technology development and innovation
(1) Specialty polymer	
Production capacity	158,000 TPA
Market share	Market share of LDPE and EVA plastic resins account for approximately 10% and 60% of the total domestic consumption, respectively.
Proportion of domestic sales	Proportion of LDPE and EVA plastic resin sales in the domestic market to overseas sales are 100 : 0 and 15 : 85 respectively
Brand	Polene®

Products	Production Capacity, Strength, Technology development and innovation
Strengths	<ul style="list-style-type: none"> • One of the top leading manufacturer of high quality LDPE (Low Density Polyethylene) resin in the domestic market. • The only manufacturer in the country that can develop EVA (Ethylene Vinyl Acetate) resin production technology for all types of applications. • Use tubular production technology, a continuous process that is twice as efficient as the autoclave system of its competitors in the market, resulting in lower production costs per ton. • Consistently developing machine efficiency and production technology until high-cost special grade EVA can be produced and sold in the Niche Market continuously and efficiently. • Efficient production system and flexibility, which can quickly adjust production plan according to market situation and reduce inventory management risks. • Has continuous research and development of products and production technology and is the only manufacturer in Asia that has research and development capabilities to produce new product samples and actually test the product to meet the needs of customers in all forms. • Certified to all three industry standards: Quality Management System (ISO 9001:2015), Occupational Health and Safety Management System Standard (ISO 45001:2018) and Environmental Management System Standard (ISO 14001:2015). • Participated in the Green Industry Project of the Department of Industrial Works, Ministry of Industry to be the 3rd level green system factory with systematic environmental management with a follow-up and review for sustainable development. • The product received MiT certificate (Made in Thailand) from the Federation of Thai Industries.

(2) EVA Solar Sheets Business

Production capacity	• 20,100 TPA
Brand	• Polene Solar®, Vistasolar®, VistaSafe™
Strength	<ul style="list-style-type: none"> • Manufactured and distributed by TPI All Seasons Co., Ltd. (99.99% owned- subsidiary Company) • Certified quality management system in accordance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 • The main product is EVA Encapsulate film used in the production of solar panels. • New products are invented and developed into the tempered glass market. (Safety Glass) developed into the safety glass market to replace the traditional plastic used in the aforementioned industry, which has a high price.

(3) EVA Emulsion and EVA Powder

Production capacity	• 25,000 TPA
Market share	• Market share of EVA Emulsion and EVA Powder account for approximately 60% and 40% of the total domestic consumption, respectively.
Proportion of domestic sales	• Proportion of EVA Emulsion and EVA Powder sales in the domestic market to export sales are approximately 30 : 70, respectively.
Brand	• Polene®

Products	Production Capacity, Strength, Technology development and innovation
Strengths	<ul style="list-style-type: none"> The first and only company in the country to have the propriately technology to produce and sell EVA Emulsion and EVA Powder to market. Utilize the infrastructure and core raw materials of the plastic resins plant, reduce construction costs, management and higher quantity of raw materials, also increase the negotiating power of imported raw materials from importers. Ethylene gas and Vinyl Acetate must be disposed of from the process of producing plastic resins to be used as raw materials, enable to reduce production costs and reducing emissions to communities and the environment. It has been transferred from Japan on water-based glue production technology and has continued research and development with the development of water-based glue and pilot spray dry to produce samples of new grades of glue powder. Certified quality management system (ISO 9001:2015), occupational health and safety management system standard (ISO45001:2018) and Environmental Management System Standard (ISO 14001:2015) The product received MiT certificate (Made in Thailand) from the Federation of Thai Industries.

(4) Ammonium nitrate and nitric acid

Production capacity	Annual production capacity of 92,700 tons of ammonium nitrate and 21,750 tons of nitric acid.
Strengths	<ul style="list-style-type: none"> Operated by Nitrate Thai Co., Ltd. (99.99% owned subsidiary Company) A manufacturer of ammonium nitrate. Largest in Thailand Received industry standard (TIS) and international standards for quality management systems including ISO9001:2015, ISO14001:2015, ISO45001:2018, ISO5001:2018, ISO17025-2017 and HALAL. Received MiT certificate (Made in Thailand) from the Federation of Thai Industries. Certified as Green Industrial Level 3 Green System from Department of Industrial Works, Ministry of Industry.

Details of each product type and properties of the products are as follows :

Products	Properties of the products
(1) Specialty Polymer	
(1.1) LDPE (Low Density Polyethylene)	<p>(1) Film work such as plastic bags containing general merchandise, market bags. Clothing Bags Industrial Bags Food bags, films used to make shockproof materials, shrinking films, pond foundation films, nursery films, etc.</p> <p>(2) Blowing work such as blowing, making salt water bottles, drinking water bottles, foam tubes, face washes, etc.</p> <p>(3) Injection molding such as water stopper spray, vegetable oil bottle, canned cap, snack cans, and home appliances such as baskets and food containers, as well as toys that need soft workpiece characteristics.</p> <p>(4) Coating or splicing, such as film coating on paper sheets. Snack bags, coffee sachets and aluminum foil surfaces such as dry food packs, shampoo packets, etc.</p>
(1.2) EVA (Ethylene Vinyl Acetate)	<p>(1) Foam and tread of shoes such as foam, soles, healthcare slippers, foam for children's toys, etc.</p> <p>(2) Film coating, paper or splicing, such as multi-layer flexible packaging, plastic coated paper bag, plastic coated paper, etc.</p> <p>(3) Electrical and communication cable cladding to prevent electromagnetic waves from interfering and not releasing toxins when combustion occurs, such as medium-voltage power lines, subway power lines or in enclosed tunnels. Fiber Optics, Coaxial Cables, etc.</p> <p>(4) Hot melt is used to connect materials such as hot glue to book ridges, edge glue and furniture surfaces. Hot Glue To Product Box Labeling waterproof products, etc.</p> <p>(5) Glass films such as EVA Encapsulate are used in the production industry of solar panels, safety glass lamination films, etc.</p> <p>(6) Printing inks such as Gravure Ink Binder, silkscreen ink on shirts and sports equipment, etc.</p>

Products	Properties of the products
(2) EVA Solar Sheets	
(2.1) Polene Solar® and Vistasolar®	<p>It is a component in the production of photovoltaic modules, which act as adhesives to attach all components of solar panels. It has significant properties to protect the lifespan of solar panels in accordance with IEC61215 standards, consisting of 2 brands as follows:</p> <p>(1) Polene Solar® Film</p> <p>(2) Vistasolar® Film, the most famous and the longest-running plastic film in Europe, established in 1982®TPI All Seasons Co., Ltd. acquired Vistasolar® Films in 1984 and relocated to Thailand.</p>
(2.2) EVA Interlayer under the brand VistaSafe™	For laminated and tempered glass, as well as building and automotive glass.
(2.3) Blown Film	It is a plastic film that uses the technology to blow the film in forming, divided into wrap film, top sheet and masking film.
(2.4) EVA solar sheets	It is a versatile plastic film and anti-slip pad for use in preventing slippage or scratch-out in the house, such as in the kitchen, in the living room or in the bathroom.
3. EVA Emulsion and EVA powder	
(3.1) EVA Emulsion	<p>(1) Packaging adhesives, especially for smooth surface materials or glossy paper, such as waterproof coated box adhesives, premium box adhesives, waterproof labeling adhesives, etc.</p> <p>(2) Wood, furniture and carpet adhesives such as PVC lamination, plywood adhesive, carpet floor adhesive, etc.</p> <p>(3) Mixed-site construction to increase adhesion and flexibility, such as smooth surface adhesive mortar. Thin skin plastering road preparation work to reduce dust, etc.</p> <p>(4) Non-woven fabric work</p> <p>(5) Building coatings free of volatile organics and odors such as indoor paints, etc.</p> <p>(6) Prevention of PM 2.5 dust in construction sites.</p>
(3.2) EVA Powder	<p>EVA Powder is a soluble product that has adhesive properties using water glue, commonly used to mix in finished mortar products and construction materials in the form of powder.</p> <p>(1) Adhesion enhancement work such as adhesive mortar and high adhesion cement to help adhere to oily concrete surfaces and original tiles that do not absorb water well.</p> <p>(2) Flexible and waterproof work such as Plastering and Skim Coat for finish coat plaster on ultra-smooth and oily surfaces and protect against water.</p>
(4) Ammonium nitrate and Nitric acid	
(4.1) Ammonium nitrate	Used in cement manufacturing industry, coal mine, construction industry and production of Nitrous Oxides used in the medical field
(4.2) Nitric acid	It is used to clean metal surfaces in industries such as stainless steel, electronic industry, automobile industry, rubber glove industry, solar panel manufacturing industry, and used in the production of nitrocellulose for coating applications.

2. Marketing & Competition and Trends of the Industry

2.1 Marketing Policy

2.1.1 Competitive strategy

The Company has advanced production technology and production flexibility with machinery and equipments that can support multi-grade production for all customers' purposes, so the Company has the advantage of producing products in grades that suit market demand situations and competitive prices. Furthermore, the Company also focuses on product quality control to consistently obtain high qualified and stable properties. The Company has a skilled technical team to serve customers before and after the sale, monitoring product quality, as well as providing advice on the variety of plastic resin products thorough machine customization and the development of production formulations according to customer needs thoroughly, which helps to increase confidence and reliance. As a result, the Company can consistently and sustainably price products above the market price but also satisfy the demand of customers in the domestic market and international markets.

Price and cost :

The Company has developed production efficiency with its own R&D team, focusing on developing product type production that requires advanced technology. There are few competitors and a high proportion of profits, and with the use of high-efficiency production technologies as well as regular development and improvement of machinery. The Company can increase productivity, enabling the Company to have the advantage of the cost of raw materials per ton in these specialty grades products. This reduces routine expenses and increases the profit margins of goods, thus gaining an advantage over competitors in terms of production costs.

In addition, the Company continues to improve machine efficiency by developing in-house technologies and its personnel with more than 40 years of manufacturing experience, together with the use of ERP: Enterprise Resources Planning technology and artificial intelligence data analysis. has planned to increase production rates by using a small investment to purchase all new machinery. Additionally, an Enterprise Asset Management (EAM) system is being introduced to enhance efficiency and reduce costs for the systematic maintenance of machinery, including minimizing the risk of production halts due to damaged equipment. This is an important step that will significantly boost the overall plastic pellet production rate of the Company.



Quality Management System and Products Quality :

The Company has the policy to focus on producing quality products as the market situation is dynamic. The Company has adopted information management software and quality assurance systems to help plan, control, and operate to facilitate the organization's operations to be functioning efficiently. This ensures that the quality needs are met according to the Company's goals and with a management system that focuses on product quality and the quality of work safety of the organization. As a result, the Company has achieved various important ISO standards such as ISO 9001, quality system standards, which govern both the design and development of production, installation, and service; ISO 14001, environmental management system standards, focusing on the organization's continuous improvement of the environment; ISO 45001:2018, occupational health and safety system standards; and CSR-DIW, social responsibility standards.

To develop into a market that is more technology-driven :

with the transformation of the surrounding technology, the Company has increased production efficiency by using advanced production technology, being able to produce special grade products that cater to a more promising and environmentally-friendly market, such as solar panel production. The Company does not focus solely on the quantity in normal grade production but on technology, which is used in various processes with the linkage from starting

to finishing process to increase growth and profitability. The Company also aims to create a green society for the future and research for the methods to reduce waste emissions, such as reusing ethylene released from EVA plastic resin production processes to benefit the production of EVA emulsion. This reduces costs and reduces pollution to the surrounding communities and the environment. The Company also improved machines that can reduce the use of various types of energy, including some waste from production that occurs, such as waste from the production of water glue. The Company has also improved and delivered waste from production to be used as fuel for power generation in our Saraburi plant, and the Company continues to monitor and look for ways to deploy technologies to support the technology market that will change in the future.

Service :

The Company continuously emphasizes effective relationship management with customers in the long run, even as it increases the production potential of special-grade products aligned with high value and future growth trends. Furthermore, the Company consistently produces standard-grade products and occasionally premium-grade items to maintain strong, enduring relationships with existing customers.

Additionally, the Company has implemented Customer Relationship Management (CRM) software. This software facilitates the management of relationships between the Company and its customers, enabling the systematic creation of workflows and the development of new products tailored to customer needs. It also streamlines the collection of complaints, ensuring that every issue is promptly addressed and resolved. This approach enables swift responses to customer needs and enhances overall work efficiency across various departments within the Company.

Reputation :

The Company, renowned for its “Polene” trademark, upholds a policy committed to crafting top-tier products, ensuring excellence in both quality and service. This entails providing stellar sales support, including punctual and precise delivery, fostering strong ties with distributors, and offering competitive pricing. Firmly believing in the paramount importance of product reputation, the Company diligently maintains and enhances quality standards, constantly refining production machinery to align with cutting-edge technology and bolster efficiency. Such unwavering dedication instills confidence in customers,

assuring them of consistently superior product quality and fostering lasting satisfaction.

In terms of short-term and medium-term competition strategy, the Company has consistently been boosting its production capacity, focusing particularly on high-value products. This effort addresses limitations arising from production process intricacies and machine constraints. The aim is to enhance the production capacity of these specialized products to reach the Nameplate Capacity, thereby achieving an overall capacity increase of at least 10% within a 2-year timeframe. This initiative includes the development of additional special grade EVA products to diversify offerings in a market with few providers, thus reducing reliance on commodity products in a high volatile market scenario.

To enhance its long-term competitive strategy, the Company implements a policy of transitioning products to Specialty Polymer alongside LDPE and EVA plastic pellets, characterized by a more intricate chemical composition and structure. Concurrently, upgrades are made to production technology and machinery for increased flexibility. This product boasts superior features, commands higher prices, and is exclusively manufactured by a limited number of European and American companies. However, none of these companies offer to sell their production technologies, unlike manufacturers of other basic petrochemical products. To facilitate this, the Company must conduct research and development utilizing a specialized pilot reactor capable of operating under pressures up to 3,000 bar. This reactor will enable the production of product samples essential for testing and exploring new markets before introducing such technology into production for future sale. In 2023, the Company started sending produced testing samples to interested customers both domestically and internationally. These customers wished to study the properties of the product samples, while the Company also evaluated the marketing potential of such products. In addition, the Company has prepared to improve machinery in the existing production line to support the production of these new products. The Company expects to be able to start producing this special product from the main production line by the end of 2025 to enhance flexibility in marketing former plastic pellet products, thereby better supporting the fluctuations in demand and supply of petrochemical products as a whole.

2.1.2 Types of Customers and Target Group

(1) Specialty Polymer

LDPE plastic resin is sold only in the domestic market for customers who particularly need high premium products from the Company - these are all customers who have a long-standing relationship with the Company. The remaining 90% of EVA plastic resin products sold in both domestic and international markets is approximately 15:85, respectively, exported through Polene Plastic Co., Ltd. to various countries such as China, India, South Asian countries, and Southeast Asian countries. Target customers are divided by business, covering a wide range of industries, such as solar, foam business, construction businesses, packaging businesses, printing materials business, consumer goods, and group industrial materials.

(2) EVA Solar Sheets

TPI All Seasons Co., Ltd. manufactures and sells various types of EVA products, mainly producing solar films for sale to solar panel manufacturers. It also produces and sells EVA Interlayer films to laminated glass manufacturers, tempered glass and decoration glass, as well as producing and selling multi-purpose films to general users.

This constitutes 92% of solar film products sales and 8% of other EVA products, with approximately domestic solar film products sales to export sales at approximately 7: 93 percent, with most customers being customers in European countries.

(3) EVA Emulsion and EVA Powder

Customers of EVA Emulsion and EVA Powder are mainly manufacturers in the packaging box industry, furniture industry, the printing industry, and the construction industry, which needs a combination of added adhesion to materials, especially smooth surface materials, where there are no models that general adhesives cannot be attached to and require flexible adhesives that can be used in a variety of temperatures. EVA Emulsion and EVA Powder account for about 60:30 percent of domestic and export sales respectively, the remaining 10% are mainly overseas customers in China. In 2023, the company has developed a new grade of water-based adhesive products that help coat the surface and reduce PM 2.5 dust in the construction field, and production is expected to commence commercial operation in 2024.

(4) Ammonium Nitrate and Nitric Acid

Thai Nitrate Co., Ltd. sells products to customers in

the cement business, mining, construction industry, medical industry, and customers in stainless steel, electronics businesses, automobiles, rubber gloves, and solar panel manufacturing industries.

The Company sells ammonium nitrate, representing 75% in domestic market and 25% to international markets, and sells nitric acid in the domestic market, representing 95% and 5% to international market customers, exporting to Myanmar, Laos, Srilanka, Cambodia, Vietnam, Malaysia, Pakistan and Singapore.

2.1.3 Sales and distribution channels

(1) Specialty Polymer

The Company sells plastic resin products both in domestic and international markets, mostly through agents to dispatch plastic resin products to both large and retail customers. These agents, in addition to servicing existing customers and finding new customers, also help coordinate sales and customer service through the Company's technical team, enabling thorough and efficient customer service. The number of agents depends on the suitability of the country and the customers' market conditions. The proportion of direct sales per agents accounts for 10%: 90% respectively.

The Company sets an average collection period for regular customers as follows:

- 1) For domestic LDPE/EVA sales, for the period of 7 days.
- 2) For LDPE/EVA sales, overseas export, export L/C, for the period of 60 days.

(2) EVA Film Group Products

TPI All Seasons Co., Ltd. sells products to manufacturers that use them directly with a direct-to-sale ratio of 90%:10% respectively.

(3) EVA Emulsion and EVA Powder

TPI All Seasons Co., Ltd. sells EVA Emulsion and EVA Powder both domestically and exports to international markets. Most of them are sold through agents based in different regions of these target countries and they are responsible for coordinating sales and customer service, with a direct-to-dealer sales ratio of 40%:60% respectively.

(4) Ammonium nitrate and nitric acid products

Thai Nitrate Co., Ltd. sells such products through 14 sales agents with a direct sales ratio through sales agents of 60% : 40% respectively.

2.2 Marketing and Competition, and Trend of Industry

2.2.1 Marketing and Competition

(1) LDPE and EVA Plastic resins Business Marketing and Competition

The petrochemicals landscape in 2023 presented formidable challenges, marked by substantial supply pressure stemming from emerging competitors in Northeast Asia and dwindling global demand amid a contracting world economy. Compounded by rising interest rates and widespread geopolitical tensions, prices for plastic pellets and numerous petrochemical products witnessed significant declines. Particularly, when compared to the year 2022, petrochemical product prices rose to the highest level in a decade. The Commodity Petrochemical and Plastic Group is the most affected.

In previous year, the Company concentrated on elevating the percentage of specialty polymer pellets tailored to specific usage demands, emphasizing high-profit, high-price ratio products like EVA for signal cable and specialized industrial hot glue, along with EVA for solar panels, which collectively comprised 80% of total product sales. Furthermore, despite the Company's successful marketing efforts in bolstering EVA's market share for special industrial hot glue in Northeast Asia - a niche and high-value market - by over 30%, it remains susceptible to the aforementioned negative factors, an unavoidable circumstance. Consequently, the profit proportion of these products has declined from its peak in 2022.

However, despite the ongoing energy crisis, it has had a positive effect on the growth of the solar panel production and installation industry, which still maintains a growth rate of 20-30% per year. This growth is particularly notable in China and India, where the demand for hot glue in specialized industries and product and food packaging industry continues to have steady growth rate. Regarding the supply side of EVA plastic resin in 2023-2024, although there has been an increase in production capacity, it is relatively small compared to the surge observed during 2021-2022. Consequently, the overall business and profit ratio remains high compared to the average of the past decade.

Future Trends

Over the next 1-2 years, the EVA plastic resin market is poised to experience heightened demand, fueled predominantly by the growing adoption of solar cell panels.

This surge is further propelled by escalating energy and fuel costs, as well as the burgeoning demand for electrical energy due to the increasing prevalence of electric vehicles (EVs) or governmental policy promoting alternative energy to combat carbon dioxide emissions and mitigate global warming (climate change). Furthermore, the substantially reduced cost of solar cell panels renders electricity production an economically viable pursuit. In addition, demand for the use of EVA plastic resin in electrical wires and signal cables continues to rise as automobile production expands following the subsiding of the COVID-19 situation and the exponential growth in demand for electric cars. Additionally, shifting consumer preferences towards online shopping, particularly for products necessitating durable, waterproof packaging, along with the need for swift production, has spurred increased demand for EVA plastic pellets used in hot glue applications, facilitating rapid adhesion on challenging surfaces and driving growth at an ongoing favorable pace. However, negative factors such as rising interest rates in many countries, which affect overall economic growth, and conflicts in many important regions, may cause the growth rate mentioned above to not meet expectations.

In terms of the supply of new manufacturers in the region, they are expected to gradually begin operating machines by the end of 2024, leading to an anticipated increase in the overall production volume in 2025. This projection is based on the historical trend where the profit proportion of EVA plastic pellets has consistently been significantly higher than that of other basic petrochemical products. The new project, slated for launch, commenced construction in 2022-2023. It is expected to significantly increase the supply of EVA plastic pellets, particularly in the Northeast Asian market. Consequently, this development should inevitably impact the price fluctuations of EVA plastic resin over the next 1-2 years. The balanced adjustment of demand and supply during this period is expected to mitigate the influx of new projects in the future. Evidence for this can be observed in the postponement or cancellation of numerous projects post-2025, which is anticipated to restore stability to the EVA plastic resins market within the next 1-2 years following a base readjustment.

Factors Affecting Opportunities or Limitations in Business Operations

In the LDPE and EVA plastic pellet business, most manufacturers choose to purchase basic technology or grades for specialized industries, primarily due to the high

cost in purchasing technology and complexity of production. In addition, newly built factories tend to use large machines with high production capacity. While these factories have an advantage in Economy of Scale, they lack the flexibility to adjust their production for different grades of plastic pellets in response to rapidly changing situations. Moreover, while obtaining favorable prices, producing plastic resin tailored for specific markets is not economically viable due to limited demand. Enhancing product quality and catering to these niche customer segments necessitate specialized expertise within the company. Consequently, there's a need to innovate machinery and technology that align with the requirements of these distinct products.

Due to the factors outlined above, LDPE and EVA plants can be categorized into two main groups: general manufacturers, typically comprising large facilities or newcomers, and specialized manufacturers, often smaller or medium-sized establishments with extensive experience and a commitment to continuous technological advancement. They leverage their understanding of production capacity limitations and the advantages of machinery, technology, and production experience to invent, research, and develop products until they succeed in becoming specialized manufacturers.

(2) Solar Film Business

Marketing and Competition

The surge in global awareness towards lowering greenhouse gas emissions as per the Paris Agreement has brought about a notable positive influence on the clean energy sector, specifically in solar energy generation. As a result, there's a burgeoning demand for solar panels worldwide that surpasses the existing production capacity of solar film. This surge has led to a rise in the price of solar film, a trend expected to persist due to the limited number of manufacturers and the specialized technology required for production, along with the necessity for products to undergo testing in accordance with the IEC61215 standard.

In 2023, TPI All Seasons Company Limited increased the production and sales volume of solar film products for the domestic market. This was due to the government's policy to support the solar cell production business. Additionally, the international market has shown a continuous improvement trend. The Company's products have garnered heightened interest among solar panel manufacturers across Europe, East Asia, and Southeast Asia due to the rising demand for solar panels. In 2023, the Company expanded its market reach by selling solar films to new customers in the United States and acquiring new retail clients in Europe.

Future Trends

Given the expected expansion of demand for solar panels in the global market in 2024, TPI All Seasons Company Limited anticipates the opportunity to broaden its reach in the United States and ASEAN countries by tapping into the solar film market, as well as boosting sales of its EVA Interlayer products in foreign markets.

All Seasons Company Limited has a project to develop solar film for producing solar cell panels with quality that has been accepted by leading solar cell manufacturers, for use in producing electricity from solar energy to reduce

CO2 emissions instead of producing electricity using fossil fuels. Additionally, the Company has a project to develop film for safety glass, which requires advanced technology in production and takes a long time to develop, with a high profit ratio and few manufacturers.

The Company establishes a standard 30-day debt collection period for regular customers who provide collateral deposits. However, for foreign export sales, payment for products is required via a letter of credit or Telegraphic Transfer (T/T).

Factors Affecting Opportunities or Limitations in Business Operations

Many nations are showing growing interest in solar energy as a clean alternative, actively bolstering investment to diminish reliance on fossil fuels such as oil and coal for electricity generation. This shift not only aids in mitigating greenhouse gas emissions but also addresses the pressing issue of climate change. Hence, investing in the solar panel manufacturing sector presents a promising solution to global energy challenges. Yet, various determinants impacting business prospects encompass governmental and international policies supporting renewable energy, fluctuations in oil and coal prices, and advancements in technology aimed at enhancing solar energy efficiency to drive down production expenses.

(3) EVA emulsion and EVA powder Business

In 2023, the EVA emulsion and EVA powder business in Thailand still tends to be stable compared to 2022 due to the lack of clear positive factors. In addition, the slow global economic recovery, exchange rate fluctuations, and conflicts in many areas have affected the product demand of most end customers who use EVA emulsion in the packaging industry and EVA powder in the construction industry. The Company has the advantage of having access to domestic customers because it is the sole manufacturer in Thailand. In 2023, the Company was able to boost the market share of domestic water-based adhesive products to 60% of the domestic demand, up from the original proportion of less than 50%. This growth can be attributed to the resurgence of the tourism economy in the country and various government initiatives. Consequently, there has been a surge in demand from the industrial sector. Additionally, the domestic market has witnessed a rising demand for EVA powder, driven by the substantial volume of construction projects in both the public and private sectors.

Despite facing heightened price competition in the international market, the Company manages to retain its customer base across Southeast Asia, East Asia, South Asia, and the Middle East. In response to this challenge, the Company strategically decreases the proportion of exports with lower gross profit margins. Instead, it redirects its efforts towards bolstering sales in the domestic market, where more favorable prices can be attained. However, the overall market for EVA emulsion and EVA powder has become more stable, with no significant increase in new manufacturers anticipated after 2023. This trend should lead to an improvement in the profit ratio from the current situation. Additionally, the Company has installed new EVA powder production machinery with a production capacity of 6,000 tons per year. This product boasts a higher profit margin than EVA emulsion. By adjusting the production volume of EVA powder and adhesive liquid, the Company can explore another avenue for sales, thereby alleviating pressure on the price of EVA emulsion in the market.

(4) Ammonium Nitrate and Nitric Acid Business

In 2023, the Company's sales of ammonium nitrate increased in international markets due to a shortage, resulting in higher prices caused by the effects of the Russian-Ukrainian war. In the ammonium nitrate market in Thailand, sales increased specifically from the industrial group producing Bulk Emulsion for export. The nitric acid market serving the rubber glove industry and the electronics sector has experienced a decline in proportion, attributable to Chinese manufacturers resuming nitric acid production at full capacity following the COVID-19 outbreak. As a result, the market has become highly competitive in terms of pricing compared to products from China. In 2024, the tendency for both domestic and international ammonium nitrate markets is expected to grow. This growth is anticipated as the quarry group, cement manufacturers, and construction stone mills are set to expand their production capacities, supporting economic recovery and the expansion of investments in government construction projects in both Thailand and neighboring countries.

3. Sourcing of products or services

3.1 Production Facilities

(1) LDPE/ EVA Plants

The Company has two LDPE plastic resins manufacturing plants located on an area of 42.5 rai in the IRPC petrochemical work center area in Rayong province. LDPE plant 1 has a production capacity of 78,000 tons per annum and the second plant has a capacity of 80,000 tons

per annum, totaling approximately 158,000 tons of plastic resins per annum, In 2023, IRPC Industrial Estate planned to stop special repair and maintenance in the first quarter of the year 2023 and was unable to supply ethylene raw materials to the company for about 1 month in addition to the previous one that must be done every 5 years to stop production for annual inspections and maintenance for about 2 weeks, and a special repair and maintenance plan of approximately 2 weeks every 5 years to enable the machines to work at full capacity, maintaining the quality level of the goods and ensuring safety.

(2) EVA Solar Sheets Plant

TPI All Seasons Co., Ltd. has EVA Solar Sheets plant, located in Saraburi province with a total of 11 production lines with a total production capacity of approximately 20,100 tons per annum.

(3) EVA Emulsion and EVA Powder plants

The Company has a water and powder adhesive factory, located in IRPC's petrochemical work center area in Rayong, with a total production capacity of 25,000 tons per annum. The Company is the only manufacturer in Thailand and one of only two in the world capable of producing EVA in both powder and emulsion forms.



(4) Ammonium nitrate and nitric acid Plants

Ammonium nitrate and nitric acid plants are located in Rayong province with an ammonium nitrate capacity of 92,700 tons per annum and 21,750 tons of nitric acid per annum.

3.2 Main Raw Material Procurement

The main raw materials used in the production of LDPE and EVA plastic resin, including EVA emulsion and EVA powder, are as follows:

(1) Ethylene Ethylene is purchased primarily from IRPC Public Company Limited ("IRPC") with a long-term contract based on market prices in the region. In addition, the Company can purchase ethylene from other manufacturers, with the Company having pipes to receive raw materials from deep seaports in industrial zones.

(2) VAM (Vinyl Acetate Monomer) is purchased from more than 3 overseas vendors and the Company is Thailand's largest importer of VAM and the largest in the region, giving the Company high bargaining power compared with other buyers.

Raw materials for EVA film products are EVA plastic resins from all the Company's factories, and the main raw materials used in the production of ammonium nitrate and nitric acid are ammonia. The Company purchases ammonia from overseas, such as Malaysia, Indonesia, Saudi Arabia, and Australia., etc.

3.3 Raw material problems

The Company has been in the LDPE and EVA plastic resins business since 1995, purchasing raw materials from manufacturers or distributors for a long period of time

and having an established long term relationship with manufacturers or distributors. The Company also has systematic management, so there are no management problems with raw materials.

For the business of producing ammonium nitrate and nitric acid, there is currently a shortage of raw materials in the world, but the Company has contracted partners to supply raw materials. As a result, the Company does not suffer from any shortages of raw materials.

III. Energy & Utilities Industry

1. Product Characteristics, Production Capacity and Strengths

TPI Polene Power Public Company Limited, a power plant operator, (a 70.24% owned-subsiary of the Company), has eight power plants in operation, with total installed power generation capacity of 440 MW, divided into quality-improved waste - fuel power plants with a total installed capacity of 250 MW, with the remaining installed capacity of 150 MW. Currently, the Company is in the process of converting to renewable fuels from municipal waste and other renewable fuels to replace all coal fuel by 2025, which can be concluded as follows:

Products	Production Capacity, Strength, Technology development and Innovation
1. Waste-fuel power plant consists of: <ul style="list-style-type: none"> Waste Fuel Power Plant - 20MW (TG3) Waste Fuel Power Plant - 60MW (TG5) Waste Fuel Power Plant 70MW (TG6) and Waste Heat Recovery Power Plant 30 MW (TG4) total 100 MW 	<ol style="list-style-type: none"> The largest operator of quality-improved waste-fuel power plants in Thailand and the only manufacturer that sells waste energy in SPP. Total quality-improved waste-fuel plant capacity is 180MW with a total contract to sell electricity to the EGAT totaling 163MW (non-firm contract) (49.5% market share). TPI Polene Power receives monthly tariffs as follows: <ol style="list-style-type: none"> Energy Payment Receive adder from the EGAT at the rate of Baht 3.50 per kilowatt-hour for a period of 7 years from the start of power plant power trading. After that, the electricity bill will be charged at the Energy Payment. Have the advantage of being a pioneer with knowledge, expertise and being able to effectively meet the challenges of the waste power industry. The management team has long experience in the waste power plant business and has a tangible successful performance. Therefore, it has the advantage of other competitors, including capital, experience, technology, reliability, and the ability to achieve the project.
2. Waste Heat Recovery Power Plant TG1&TG 2 - 40MW	<ol style="list-style-type: none"> With installation capacity of 40 MW Waste Heat Recovery from the Company's cement plant to generate electricity and sell it back to the Company. A contract to sell electricity to the Company (undefined) by charging the same rate as electricity trading purchased directly from the provincial electricity authority without Demand Charge.
3. TG7 - 70MW Coal-fired Power Plant (has switched from coal Coal-fired Power Plant to waste fuel power plant in 2023)	<ol style="list-style-type: none"> Total installed capacity of 70MW with approved capacity of 40 MW A contract to sell electricity to the Company (undefined) by charging the same rate as electricity trading that the Company buys directly from the provincial electricity authority without the maximum energy bill (Demand Charge). The above power plant can use the turbine generator of the plant as a back up TG 5 or 6 in case of stoppage for repair and maintenance so that the electricity authority is not affected, or can generate additional electricity in case the demand for electricity in the cement plant is higher than the production capacity of TG 8.
4. Coal-fired Power Plant TG8 - 150 MW (Under renovation to be a waste fuel power plant)	<ol style="list-style-type: none"> Total installed capacity 150 MW A contract to sell electricity to the Company (determining the amount of electricity sold at least 30% of the amount of electricity generated) by charging electricity at the same rate as the electricity trade that the Company buys directly from the provincial electricity authority without the maximum energy bill (Demand Charge).
5. Quality-Improved Waste-Fuel power plant	<ol style="list-style-type: none"> Classified as a community waste disposal plant or municipal waste, located in the largest same area in the world. An installed capacity to receive totaling 15,000 tons of community waste into the production process per day to produce 7,200 tons of quality-improved waste per day. There is a storage warehouse for storing up to 100,000 tons of renewable waste fuel, which is sufficient for the operation of the waste-based fuel power plant.
6. Petro & NGV Service Station Business	TPIPP also operates 12 oil service stations and NGV gas stations in Bangkok and metropolitan areas, under the logo "TPIPL".
7. Industrial wastes disposal Business	The Company operates industrial waste disposal services from various factories within the country, under the factory license to operate the quality of total waste and has been granted permission from the Department of Industrial Works. In addition to helping to get rid of industrial waste, it also reduces the use of raw materials and fuel. This can save the use of natural resources and help maintain environmental quality.

In addition, TPI Polene Power won the bidding for two community power plant projects, which are under construction as follows:

(1) Community Waste Power Plant Project, Songkhla Provincial Administrative Organization, has a project period of 20 years and receives a return in the form of solid waste disposal fee of Baht 400 per ton (increased by 10% every 3 years) and receive income from electricity sales from waste disposal according to the power purchase agreement of 7.92 MW for a period of 20 years at the rate of Baht 5.78/unit for the first 8 years and Baht 5.08/unit for the next 12 years.

(2) Community Waste Power Plant Project, Nakhon Ratchasima Municipality, has a project duration of 20 years and receives a return in the form of solid waste disposal fees of about Baht 400 per ton (increased by 3% every 3 years) and receive income from the sale of electricity from waste disposal according to the power purchase agreement of 9.9 MW for a period of 20 years at the rate of Baht 5.78/unit for the first 8 years and Baht 5.08/unit for the next 12 years.

In addition, municipal waste fuel power plants. Mukdahan Municipality, Mukdahan Province by TPI Polene Power was announced as the shortlist. For municipal solid waste management and management projects, it is an environmentally friendly closed-loop electrical system. Mukdahan Municipality, Mukdahan Province. The installed capacity is 9.9 MW. Power sales capacity 8 MW.

2. Marketing and Competition, and Industry Trends

2.1 Power Plant Business

The current power plant business is a business in which the purchaser of electricity is specified in the power purchase agreement, which specifies both the quantity and the fixed price structure. Business operations therefore compete with their own performance in that they are able to produce more electricity for sale according to the contract and manage the cost of electricity generation as low as possible. Competition in the market will lead to an increase in the availability of power purchase agreements, which can take the form of contracts for direct sales of electricity to private customers near power plants that can distribute electricity without relying on the transmission line of the Electricity Generating Authority or contracts for announcements of government purchases of electricity by the Energy Regulatory Commission.

Competition in procuring Power Purchase Agreement of the government will be based on criteria for considering readiness in terms of prices, qualifications, and techniques, with the following consideration framework:

1. Price considerations : The Ministry of Energy will determine the purchase rate of electricity suit able for the future power generation technology of each type of fuel and at a price that will not create a burden on the country's long-term electricity production costs. All bidders must accept and comply with the specified electricity tariffs.

2. Qualification : Qualifications will be evaluated in accordance with the requirements, which include that the tenderer be a legally recognized person in Thailand, be exempt from government control or ownership, have a minimum registered capital, and provide a guarantee for the proposed sale of electricity at the required price. The government will take into account calculating the value of each project under the condition that it is a brand-new project and does not have any prohibited characteristics, for example, a project that has not yet received other forms of support or does not have a binding contract with the government sector, or if the bidder is an organization previously considered and found by the government to have problems, will not be considered. If, in past rounds of power purchases, it was found that the power bidder was unable to develop the project until completion, it will not be considered. Only those meeting the minimum qualifications will receive further technical consideration.

3. Technical : The readiness will be reviewed and graded based on factors such as space readiness, technology readiness, fuel readiness, financial readiness, appropriateness of the operational plan, etc.

If there is a bidding process for a waste disposal project or a waste incinerator for the purpose of producing electricity, it will directly go to the local government that owns the project. When determining waste disposal, qualifications, and methodologies, the same criteria are applied to take pricing into account, including the experience and performance of the bidding companies.

The quantity and types of power plants for the government's power purchases will align with Thailand's Power Development Plan 2018-2037, specifically the first revision (PDP2018 Rev.1), or any future versions of this Plan.

In the case of direct sales of electricity to current customers, it is electricity produced for direct distribution to customers without going through the transmission line of the Electricity Generating Authority of Thailand. The majority of them will involve the production and sale of power in one location or in an industrial region. The government will permit electricity trading in the future through the transmission network of the Electricity Generating Authority of Thailand, which will give power plant operators more opportunities to produce and distribute electricity to a wider range of customers by compelling them to compete on price with the Electricity Generating Authority of Thailand (EGAT). Customers can choose to buy electricity from electricity producers that produce renewable energy in order to reduce the Company's greenhouse gas emissions.

TPI Polene Power operates the country's highest-capacity waste-to-energy power plant and is the only producer that sells electricity generated from waste fuel energy to EGAT in the form of SPP under a power purchase agreement totaling 163 megawatts (Non-firm). Additionally, the Company sells electricity generated from coal-fired power plants to TPI Polene Public Company Limited with a total capacity of 260 megawatts. It is currently in the process of converting from coal fuel to waste fuel.

TPI Polene Power is regarded as a big operator, a pioneer, and a market leader in the waste fuel power plant business. It has extensive experience running waste fuel power plants and has had demonstrable success. As a result, it has an edge over rivals in all areas, including finances, expertise, technology, and credibility, which can be always seen from the successful projects.

In addition, TPI Polene Power has expanded its electricity generation business to include various types of renewable energy and clean energy, such as wind power, ground-mounted solar power, and ground-mounted solar energy combined with energy storage systems. These facilities are all located in Kaeng Khoi District, Saraburi Province, in close proximity to the cement plant of TPI Polene Public Company Limited. TPI Polene Power has demonstrated potential as an entrepreneur through its operational experience and the receipt of numerous awards for business operations, both domestically and internationally. This strength positions TPI Polene Power competitively in the electricity business market.

Industry Trends

1) Trend of Energy Usage in 2024

The Energy Policy and Planning Office (EPPO) forecasted the trend of energy usage in 2024, projecting a 3.1% increase in the country's primary energy demand to 2,063 thousand barrels of oil equivalent per day. With the recovery of global trade, expansion of exports, private sector investment, as well as the continuous recovery of tourism due to government tourism promotion. Consequently, the utilization of oil is anticipated to surge by 3.1%, with natural gas consumption expected to experience an uptick of 2.5%. Additionally, coal/lignite usage is projected to rise by 2.4%, while the utilization of hydropower and imported electricity is forecasted to increase by 5.4%.

Nevertheless, it remains imperative to closely monitor risk factors, such as the impact of El Niño phenomenon, which could lead to drought-related agricultural production problems, risks from the volatility of the global economy, and conflicts in the Middle East that may affect global production and energy price fluctuations.

The National Energy Plan aims to aid Thailand in reaching carbon neutrality by 2050 while prioritizing energy sector security and fostering a broader array of energy production and utilization methods in the years ahead. Key policy directives include boosting renewable energy's share in electricity generation to over 50% through new capacity and advancing the transition of the transportation sector to utilize green electricity.

The revised draft of the Alternative Energy Development Plan (AEDP 2022), one of the five plans within the NEP, is currently undergoing revisions. Anticipated adjustments include a heightened emphasis on renewable and clean energy sources compared to the original plan. Specifically, there's a focus on increasing the share of solar and wind energy. The initial target for electricity production from renewable sources stands at 29,411 megawatts,



allocated as follows: solar energy at 12,139 megawatts, floating solar energy at 2,725 megawatts, biomass at 5,790 megawatts, wind energy at 2,989 megawatts, biomass gas (derived from wastewater/waste/energy plants) at 1,565 megawatts, municipal solid waste at 900 megawatts, industrial waste at 75 megawatts, large hydropower plants at 2,920 megawatts, and small hydropower plants at 308 megawatts.

The ongoing drafting and revision of the Power Development Plan (PDP 2024) align with government policy, aiming to augment electricity production capacity from renewable energy sources.

2) Trend of Municipal Waste to Energy Project

The government has prioritized a crucial policy aimed at effectively managing municipal waste by converting it into fuel for electricity generation, thus averting the looming threat of widespread future issues. By establishing “waste management” as a national agenda, the government seeks to address the challenges posed by solid and hazardous waste generated from diverse community activities, including residential house, commercial place, store, service place, fresh-food market, office, etc. The escalating severity of this issue day by day underscores the urgent need to mitigate its impacts, including the resultant air pollution.

The primary cause for the proliferation of overflowing garbage issues in urban areas stems from a confluence of factors: population growth, economic expansion, and everyday behavioral patterns that contribute to littering, exacerbated by lack of correct waste management practices. In response, certain regions have adopted waste disposal guidelines that involve converting waste into fuel for electricity generation, recognized as the most efficient global method. Developed nations, in particular, favor waste incineration, converting the majority of waste into energy, with minimal residue left as ashes, thereby conserving space compared to landfills, which pose environmental risks such as groundwater and waterway pollution, necessitating continuous expansion.

The government sector aims to address the issue by elevating “garbage” to a national agenda, establishing a comprehensive roadmap for managing solid and hazardous waste. The approved version, endorsed by the National Council for Peace and Order (NCPO) on 26 August 2014, encompasses short-term, medium-term, and long-term plans, along with legislation. This includes exemptions

from enforcing ministerial regulations and city planning for factory operations, as well as the implementation of the Act on the Maintenance of the Cleanliness and Orderliness of the Country, B.E. 2535 (1992) and its amendments (No. 2) B.E. 2560 (2017) by the Ministry of Interior, etc.

Another crucial initiative, assigned to the Ministry of Energy, involves utilizing waste to generate fuel for electricity production, as outlined in the Alternative Energy Development Plan 2018–2037 (AEDP 2018) for an additional 400 megawatts of community waste electricity, while the AEDP 2015 plan aims to procure 500 megawatts, totaling 900 megawatts by 2037.

The Energy Regulatory Commission (ERC) has announced the procurement of electricity for the 2022 Municipal Solid Waste-to-Energy Power Plant Project. Purchases will be accepted from the time EGAT issues the announcement until 29 December 2023. The electricity is slated to be sold into the system between 2025 and 2026, under a Non-Firm Agreement in the FiT format. Projects must be approved by the Ministry of Interior. Initially, there are 34 projects with a total power purchase volume of 282.98 megawatts. EGAT will disclose the names of qualified entities ready to sign the Power Purchase Agreement within 60 days of document completion. The Scheduled Commercial Operation of this power supply is expected within 2025–2026.

The conditions of this Municipal Solid Waste to Energy Project entail a Non-Firm Power Purchase Agreement with financial support under the Feed-in Tariff (FiT) scheme, as per the project list proposed by the Ministry of Interior and approved by the National Energy Policy Council (NEPC). Producers seeking to generate electricity must sell a maximum amount within the capacity limit of EGAT’s purchasing capabilities.

On 5 November 2021, the NEPC approved the principle of purchasing electricity from community waste under the Feed-in Tariff (FiT) scheme for 2022. Very Small Power Producers (VSPPs) with an installed capacity not exceeding 10 megawatts are eligible for support based on a maximum tariff of Baht 5.08 per unit (FiT Premium of Baht 0.70 per unit over 8 years). Small Power Producers (SPPs) with an installed capacity between 10 and 50 megawatts are subject to a maximum tariff of Baht 3.66 per unit, with support provided for a 20-year period. Additionally, the country’s Power Development Plan (PDP2018), 1st revised

edition, mandates the integration of a 400-megawatt municipal waste power plant into the system.

As of now, Thailand boasts 42 waste-to-energy power plants across the nation, collectively capable of generating 388.31 megawatts of power and handling approximately 6.4 million tons of waste.

3) Trend of Municipal Solid Waste Amount

The amount of municipal solid waste increased between 2017 and 2019, and the reuse of municipal solid waste also increased, incorrect disposal tendencies decreased. However, with the spread of COVID-19, beginning in March 2020 and continuing until the new outbreak wave in late 2020 and early 2021, it was observed that some local administrative organizations and districts in Bangkok experienced a decrease in the amount of municipal solid waste during this period. This decrease can be attributed to travel restrictions for tourists entering Thailand and measures requiring employees to work from home. However, upon considering the rate of solid waste generation within the country, it is observed that the rate of waste production tends to increase from 0.8 kilograms per person per day to 1.0 kilograms per person per day, compared to the amount of municipal solid waste in 2019. In 2020, there were approximately 25.37 million tons of municipal solid waste, of which 8.36 million tons (33%) were sorted out at the source and reused, while 9.13 million tons (36%)

were properly disposed of. Therefore, approximately 7.88 million tons (16%) of municipal solid waste were improperly disposed of.

In 2020, there were 2,305 active municipal solid waste disposal sites, along with 28 municipal solid waste transfer stations. Upon evaluation of these sites, it was observed that a total of 357 sites were operating correctly, employing various methods including landfilling, semi-aerobic landfilling, energy production furnaces, incinerators equipped with air pollution treatment systems, composting, and producing Refuse-derived fuel (RDF). Conversely, a total of 1,948 sites were improperly managing waste disposal, such as dumping, outdoor burning, and operating incinerators lacking air pollution treatment systems.

TPI Polene Power is strategically aligning its business trajectory towards becoming a leading producer of eco-friendly electricity sourced from renewable, clean, and alternative energy. This direction not only encompasses robust expansion and growth strategies but also resonates with the outlined objectives in the Power Development Plan. Moreover, it presents promising opportunities for augmenting electricity transactions with the government sector and engaging in direct trade of renewable energy electricity with various buyers via the Electricity Generating Authority of Thailand's transmission network system.



2.2 Petro Service Stations and NGV Gas Stations

TPI Polene Power operates a total of twelve petro service stations and NGV gas station stations in Bangkok and provincial areas. Most of the customers are customers who transport cement to companies and general retail customers of TPI.

Industry Trends

In 2023, the decline in domestic NGV sales volume by 15% from 2022 stemmed from escalated NGV sales prices and a rise in NGV vehicle adoption. This downward trend persisted, leading to a decrease in NGV gas sales volume compared to 2022. Conversely, the overall market scenario for gas stations in 2023 saw adjustments in oil prices, which steadily climbed, resulting in a slight increase in oil sales volume compared to the preceding year, 2022.

Yet, should the country's economy take a positive turn in 2024, TPI Polene Power anticipates a corresponding enhancement in its oil and NGV sales volume. Moreover, TPI Polene Power persists in conducting promotional campaigns, enabling customers to redeem discount vouchers obtained from diesel refueling for purchases at marts within TPI Polene Power service stations, thereby advertising products of the TPI Polene Group.

Currently, TPI Polene Power is in the process of studying the transformation of its petro and natural gas service business model into an electric charging station for EV vehicles. In addition to offering battery charging services for general electric vehicles, the Company aims to develop land within the Group to accommodate charging stations for trucks and buses. This is because constructing such charging stations requires significant space and power. The selected area must be situated along the main transportation route. Fortunately, the Company possesses an area in a location with the potential for future development of such projects.

TPI Polene Power is currently conducting a study for the development of the area adjacent to the natural gas service station on Mittraphap Road. Spanning approximately 20 rai, this prime location boasts significant potential, situated along a major transportation route with a heavy flow of vehicles. The envisioned project aims to establish a convenient rest area for cars and buses, complete with commercial facilities and charging stations catering to Electric Vehicle (EV). Our services will encompass battery charging for electric cars, buses, and trucks, offering a comprehensive solution for sustainable transportation needs.

3. Product or Service Provision

3.1 Production Facilities

(1) Power Plant

TPI Polene Power operates eight power plants with a combined installed production capacity of 440 megawatts, situated within the Company's cement plant premises in Saraburi Province. These include five waste-fired power plants generating 250 megawatts (with 163 megawatts under Power Purchase Agreement to the Electricity Authority of Thailand and the remainder supplied to TPI Polene Public Company Limited). Additionally, there are two waste heat power plants with a combined installed capacity of 40 megawatts and one coal-fired power plant with an installed capacity of totally 150 megawatts, (currently undergoing a transition from coal to waste fuel). The electricity generated from these facilities is primarily earmarked for sale to TPI Polene Public Company Limited.

(2) Petro Service Stations and NGV Gas Stations

TIIPP operates a total of eight petro service stations, one NGV gas station, and three petro and NGV service stations under the logo "TIIPP" in Bangkok and provincial areas, including six service stations in Saraburi province, one service station in Ubon Ratchathani province, one service station in Nakhon Sawan province, and one service station in Samut Prakan province.

3.2 Raw Material Procurement

(1) Power Plant

Waste-fuel power plants rely mainly on the supply of landfill waste and community waste. In addition, the heating value of RDF quality-improved waste produced by the quality-improved waste-fuel power plant affects the efficiency of electricity generation, with quality-improved waste having a high fuel heating value, allowing TIIPP to generate a lot of electricity.

TIIPP purchased both community waste (and municipal waste), landfill waste, and waste sorted from operators who are partners around the plant and operators in neighboring provinces. It does not rely mainly on a source of purchase from any particular entrepreneur.

TIIPP has also diversified the risk of supplying waste by investing in setting up Waste-fuel plants in areas where old waste accumulates and community waste with high daily waste content ensure the supply of raw materials and reduce production costs by purchasing RDF fuel (sorted waste must have a heating value of at least 2,500 KCAL/ton)

from private companies. In the case of waste heat recovery power plants, TPIPP purchases waste heat recovery from the cement production process from TPIPL at a fair price as agreed.

TPIPP purchases coal from TPIPL at a market price to be used in coal-fired power plant. However, TPIPP can independently buy coal from external vendors.

(2) Petro Service Stations and NGV Gas Stations

TPIPP supplies fuel for fuel stations from oil companies such as Bangchak Corporation Public Company Limited, Esso (Thailand) Public Company Limited, IRPC Public Company Limited and Shell of Thailand Limited at the market price on a spot basis.

In addition, TPI Polene Power supplies natural gas (NGV) for natural gas (NGV) stations from PTT Public Company Limited (“PTT”) under a long-term natural gas trading contract (NGV).

Procurement of Waste and Production of Fuel from Waste

The Company operates a waste fuel production plant where municipal waste is accepted and transformed into fuel. This fuel is used to power TPI Polene Power’s electricity generation plants and is also supplied to cement factories, replacing coal in their operations. TPI Polene Power currently operates two sets of fuel production facilities: one at the Saraburi factory and another spread across various

provinces such as Samut Sakhon, Ayutthaya, Rayong, Chonburi, and Pathum Thani, among others, utilizing waste from local communities.

In 2023, the Company bolstered its production capacity by erecting Factory 3, a fuel separation plant, thereby augmenting the fuel output from waste by an additional 3,000 tons per day, alongside the original capacity of 9,000 tons per day, enabling a total intake of 12,000 tons of municipal waste daily. Furthermore, the Company invested in and established separation plants across various provinces to manage community waste sources. Collaborating with operators under contracts with the Company beyond Saraburi Province, such as Rayong, Chonburi, Ayutthaya, Pathum Thani, Ratchaburi, and Samut Sakhon, they collectively possess a waste disposal capacity ranging from 3,000 to 5,000 tons per day, facilitating the Company’s acceptance of community waste disposal. This effort results in the production of 15,000 tons of fuel per day or 4,500,000 tons annually.

3.3 Maintenance

TPI Polene Power has designed the steam pipes in the power plant. Materials have been changed to make them more resistant to physical and chemical wear and tear. In addition, the fuel feeding system has been improved. To solve the problem of accuracy of fuel feeding.



IV. Agricultural industry, healthcare products and others

1. Product characteristics, capacity and strength

Products	Production Capacity, Strength, Technology development and Innovation
1. Healthcare products	<ol style="list-style-type: none"> 1. Operated by TPI Healthcare Co., Ltd. (99.99% owned- subsidiary company) 2. Manufacture and sale of consumer products, using natural substances and environmentally friendly. 3. Research from Mahidol University (Siriraj Hospital) and Chulalongkorn Hospital that some products such as Bio Knox, mouthwash can combat the virus. 4. Have their own research and development team with clean, modern and safe production procedures for consumers. 5. Certified probiotic microbial strains according to the announcement of the Ministry of Public Health 2011 by the research team of TPI Company together with Thailand Institute of Scientific and Technological Research (TISTR).
2. Organic fertilizer and Organic Matter for Plants *	<ol style="list-style-type: none"> 1. Operated by TPI Polene Bio Organics Co., Ltd. (99.99% owned- subsidiary company)* 2. Obtained quality products in compliance with the standards of IFOAM for liquid fertilizer 3. Certified quality management system (ISO 9001:2015) for organic fertilizer plants. 4. Halal certified with an emphasis on non-toxic organic farming that is not harmful to humans and the environment, allowing vegetables to be grown without pesticides. 5. Certified as Made in Thailand (MiT)
3. Probiotic Products for Livestock, / Fishery *	<ol style="list-style-type: none"> 1. Operated by TPI Bio Pharmaceuticals Co., Ltd (99.99% owned- subsidiary company) * 2. Bio-enhancing products have been registered for innovation. 3. GMP certified for animal feed products 4. Livestock, fishery and pets products using prophylactic natural substances (non antibiotics) to keep meat consumers free of harmful substances. 5. Certified as Made in Thailand (MiT)

Note : * In 2023, TPI Polene Group has restructured its business by allowing TPI Bio Organic Co., Ltd. to be a manufacturer and distributor of both plant and animal products. As for TPI Bio Pharmaceuticals Co., Ltd., has a project to invest in the construction of a pharmaceutical plant for the production of modern medicines for people (in the form of powder and tablets) with the purpose of treating minor ailments that may occur in everyday life, thus reducing the importation of expensive medicines from abroad. TPI Bio Pharmaceuticals Co., Ltd. will proceed to apply for a modern drug registration for people with the Food and Drug Administration and request for a GMP certification license.

Details of product category and applications are as follows:

Product	Application
1. Healthcare Products	
1.1 Bio Knox *	It is a combination of calcium and high-quality natural vitamin C dietary supplements designed to create a concentrated alkaline water solution that helps reduce the presence of pathogens from bacteria and viruses in the throat and respiratory tract. Simply mix it with water at room temperature, and it's ready to be consumed immediately. (*See notes below)
1.2 Light alcohol Mouthwash *	The mouthwash features an alkaline formula infused with antibacterial agents, boasting a pH as high as 10.5, which effectively combats bacterial plaque buildup. It also acts as a mouth odor suppressant, incorporating gentle natural extracts and a non-stinging formula that is alcohol-free. (*See notes below)
1.3 Microme Knox Solution *	The application of this product is to spray residential spaces, aiming to decrease the presence of pathogens such as bacteria and viruses within buildings, including general office or household settings (*See notes below).
1.4 Pro Vita	A refreshing probiotic beverage infused with immune-boosting vitamins C, B3, B5, and B6, offering numerous benefits for the body. Formulated with probiotic microorganisms, it aids in enhancing the digestive and excretory systems' functionality. Certified probiotic strains ensure its stability, allowing for storage of up to 4 months without refrigeration, as validated by the Company's research team in collaboration with the Thailand Institute of Scientific and Technological Research (TISTR), as per the Notification of Ministry of Public Health in 2011.
1.5 Bio-San	Bio San, a microorganism evaluated by the Chula Unisearch, proves effective in treating wastewater laden with organic substances, fats, and oils. Its application results in decreased levels of COD and BOD, offering benefits for both livestock farms and household wastewater management. Additionally, Bio San contributes to odor reduction and prevents clogging in sewer pipes.

Product	Application
1.6 Body Wash (Liquid)	This bathing product is formulated with moisturizing ingredients and premium perfume, designed to nourish the body while imparting a luxurious scent. It comes in two distinct collections: the Blossom Collection, boasting a pH of 5.5 and infused with a variety of floral aromas for a refreshing experience, offering a selection of 5 delightful scents; and the Gold Collection, featuring high-quality perfumes for an opulent bathing ritual. Exclusive to the TPI Tower Branch.
1.7 Hand Wash (Liquid)	This hand wash, designed to cleanse, also boasts moisturizing and preserving ingredients alongside select premium perfumes. Its enduring fragrance comes in two collections: the Blossom Collection, offering various floral scents for a refreshing experience, with five options to choose from, and the Gold Collection, featuring luxurious perfumes. Exclusively stocked at the TPI Tower Branch.
1.8 Oil Removal (Eesy Clean)	It is a product designed for removing oil stains resulting from cooking, as well as engine oil and grease stains, and stains on floors or walls.
1.9 Dishwashing Liquid (Eesy Clean)	This dishwashing product effectively removes oil stains and leaves dishes clean without any residue. It comes in two formulas: Natural and Standard. The Natural formula incorporates natural essential oils, such as mandarin orange and lemon, to promote relaxation and elevate the dishwashing experience with their refreshing aroma.
1.10 Fruit & Vegetable Cleanser Green Alkaline Wash*	It is an alkaline-formula vegetable and fruit cleaning product, the first of its kind in Thailand. Designed to effectively cleanse contaminants, preserve freshness, and even add moisture to vegetables and fruits, this solution helps maintain the natural vitality of fruits and vegetables, which can be stored longer in the refrigerator without worrying about any impact on color or smell. Additionally, this product reduces the accumulation of microorganisms on the surface of fruits and vegetables.
1.11 Alcohol Gel and Spray	It aids in diminishing the buildup of different germs, viruses, and bacteria, featuring aloe vera and moisturizing agents to combat dryness, even with repeated application. The alcohol spray is infused with Faburous perfume, imparting a refreshing aroma during application.
1.12 TPI Drinking Water	This product has obtained certification in accordance with ISO9001:2015, GMP, HACCP, and Halal standards.
1.13 Energy Drink Pro-150	This energy drink contains vitamins B3, B6, and B12.
2. Fertilizer and Plant Nutrients: natural products of TPI, free from residues under the Global Warming reduction program	
2.1 Organic purple fertilizer	It is a liquid organic fertilizer, rich in primary, secondary, and supplementary nutrients, along with essential plant hormones, which facilitate absorption through the leaves for enhanced growth and vitality.
2.2 Organic green fertilizer	This formulation includes primary, secondary, and supplementary nutrients essential for enhancing soil quality. By balancing the soil composition, it aids in restoring friability, moisture retention, and fostering beneficial microorganisms, thereby mitigating burning and environmental concerns associated with stubble decomposition.
2.3 Organic bat cave fertilizer	Crafted from premium organic materials, this product harbors potent microorganisms that enhance soil health, fostering robust plant growth and maximizing yields. Endorsed by the Department of Agriculture for its quality and efficacy.
2.4 Wood Venigar	This product serves to prevent and eradicate agricultural pests without leaving behind any residue or harmful chemical ingredients.
2.5 Bio-Hydroponis	This product facilitates the cultivation of hydroponic vegetables, providing a comprehensive array of nutrients in a single bottle for convenient application.
2.6 PH 11 Plus (Soil Conditioner)	The soil conditioner effectively adjusts soil pH to an optimal level for crop cultivation, reducing toxicity and fungal growth while aiding in disease prevention. Its application notably mitigates and prevents the risk of root rot, promoting healthier plant growth.
2.7 Silicon Acid	Enhancing degraded soil, this product not only restores but also corrects soil structure, thereby fostering increased agricultural production.
3. Livestock/ Fisheries Products	
TPI-Probiotics and Synbiotic supplement	This enriched biological supplement, safe and advantageous for animals, contains beneficial microorganisms. Tailored for all types of poultry, livestock, and aquatic species including pigs, shrimp, fish, chickens, and ducks, it enhances digestion, nutrient absorption, and immunity. Its use fosters robust animal health, promoting improved growth and weight management, consequently reducing antibiotic dependency. Notably, it has garnered official recognition as an innovative solution.
Microme Knox*	It is a natural product with the ability to inhibit and regulate germs that cause diseases in animals.

Notes : * The above products have been tested and certified by the Faculty of Medicine, Siriraj Hospital and the Chula Unisearch of Chulalongkorn University, and are effective in the destruction of viruses including SARS-CoV2, PRRS, PDCoV, PCV2 and RVA, etc.

2. Marketing and Competition, and Industry Trends

2.1 Healthcare Product

The increasing integration of healthcare into our daily lives and consumers' heightened attention to hygiene practices owing to the Covid-19 outbreak have prompted changes in consumer behavior. Individuals are prioritizing cleanliness by regularly sanitizing their hands and frequently touched surfaces. Additionally, there has been a rise in the consumption of nutritional supplements to support overall health. Consequently, health and cleaning products have experienced high demand, leading to continued growth in sales volumes.

Over the past year, the Company has expanded its product promotions across both online and offline channels. In the realm of online marketing, the Company has developed fresh content aimed at fostering broad awareness and has utilized advertising on diverse websites to target health-conscious and new generation customers. Furthermore, an increased focus has been placed on producing informative content, including short video clips and influencer product reviews, to align with evolving consumer preferences. Regarding offline marketing efforts, the Company has showcased its products at trade shows and diverse venues, while also adorning its transportation vehicles with public relations stickers. Moreover, advertising has been extended to platforms such as the Suvarnabhumi TV channel, and other TV channels bridging both online and offline advertising strategies. Consequently, a fresh cohort of customers is now placing orders for the Company's health-conscious products, alongside a returning customer segment expressing sustained interest in this product category.

Throughout 2023, the Company has consistently enhanced and refined its product line, significant strides were made; for instance, extending the shelf life of Provita Product from 2 months to an impressive 4 months without requiring refrigeration (while competitors' products in the market typically have a maximum shelf life of 1 month, requiring refrigeration.) Additionally, enhancements were made to the Blossom Collection liquid soap products, intensifying their moisturizing properties for enhanced skin nourishment post-use.

TPI Polene Group aims to thoroughly reach consumers by enhancing its distribution channels beyond advertising

and public relations efforts. Notably, it has expanded into various Modern Trade stores such as Foodland, Villa Market, Tops Super Market, Big C, Rimping Supermarket, Tang Hua Seng, Gourmet Market (The Mall Group), Home Pro, Mega Home, Thai Watsadu, Global House, and Do Home, as well as TPI Polene Power's oil and gas NGV service stations. This strategic move anticipates the increasing popularity of health products in 2024, with plans underway to further broaden the distribution network for these products.

General customers typically have an average collection period of 30-60 days, during which they are required to furnish collateral.

2.2 Fertilizers and Plant Nutrients

In 2024, the agricultural economy is projected to grow between 1.5% to 2.5% compared to 2023. However, insufficient rainfall and lower water levels in reservoirs and natural sources at the outset of 2023 led to delayed planting by farmers. Consequently, fertilizer usage across the country decreased in 2023 compared to the previous year. Despite this, the Company experienced continued sales growth due to the expansion of organic farming and increased farmer awareness regarding TPI fertilizer, contrasting with the declining chemical fertilizer market.

In 2023, Thailand must grapple with the El Niño crisis, resulting in a reduction in overall rainfall by less than 5%, which is below the normal value. This situation is expected to persist until early 2024, influencing farmers' planting decisions due to the scarcity of water. However, with agricultural product prices showing improvement in both export and domestic markets, farmers are inclined to cultivate in regions equipped with robust irrigation systems. Government policies supporting collaborative production and incentivizing standardized organic farming aim to enhance the value of agricultural products. Additionally, there's a concerted effort to transition cultivation methods towards eco-friendly practices, reducing reliance on chemicals. Given the imperative under World Trade Organization regulations to promote organic farming, the government is urged to expedite these initiatives, presenting an opportune moment for the Company to expand its market presence.

The average collection period for fertilizers and plant nutrients typically spans 120 days for general customers, who are required to furnish collateral.

2.3 Probiotic Products for Animal Farming/Fishery

The agricultural economy in livestock and fisheries in 2023 grew in the range of 3.2-5.7 percent from 2022, respectively. This is because farmers expect that the end of the Covid pandemic will bring back the demand consumption for meat coupled with the good management of the animal farm system. The survival rate of animals in the farm system is higher and the yield increases. As the demand for meat consumption is increasing, it is expected that this will affect the use of the Company's products to be in line with market conditions as the Company's products respond to higher average daily gain and help improve feed conversion rate. In addition, the Company's products are in line with animal husbandry in the Bio Security system promoted by government authority.

The average collection period are 120 days for general customers, with customers having to provide collateral.

2.4 TPIPL Drinking Water Business

TPIPL has operated a drinking water business under the brand name "TPIPL" since 2011. It has good quality products and it is safe for consumers as it uses high quality reverse osmosis technology filtration systems (RO). This process requires that high pressure be exerted on the high concentration side of the membrane and by applying ultra violet treatment to eliminate biological contamination and the ozone treatment process in the water-bottling stage of the production of drinking water. These major benefits have made TPIPL drinking water possess quality characteristics of water; thus, we obtained a certificate approved from the Food and Drug Administration (FDA) in compliance with the standards from natural resources. TPIPL drinking water is consumed at the plants and head office and is also distributed to consumers. The drinking water production process is certified ISO9001:2015 GMP and HACCP.

The average collection period for general customers is 30 days and customers have to provide collateral.

3. Sourcing of products or services

As for the organic fertilizer product, the Company has a process of fermenting vegetables and fruits from the community using a modern, safe sorting process, allowing organic matter that can be used as raw material for the production of organic fertilizers.

In addition, the Company has invested in other businesses through its subsidiaries, associated companies, covering the entire life insurance business, real estate development, retail products of the group, and manufacturing and selling of bags.

4. Assets used in business operations include:

4.1 Fixed assets of the Company and its subsidiaries

The total assets of the Company and its subsidiaries can be classified according to the main business groups as follows:

	31 December 2023 (Baht Million)	31 December 2022 (Baht Million)
1. Construction Materials	94,628.31	84,542.43
2. Petrochemical & Chemicals	10,374.97	10,452.90
3. Energy & Utilities	54,545.71	46,571.29
4. Agriculture	2,104.17	2,108.93
5. Others	460.44	587.75
Total	162,113.60	144,263.30
Unallocated assets	5,280.80	4,286.80
Total	167,394.40	148,550.10
Elimination of inter-company assets	(3,979.72)	(4,050.67)
Total assets	163,414.68	144,499.43

Fixed assets of the Company and its subsidiaries can be summarized as follows:

(Unit : Million Baht)

Asset category/characteristics	Proprietary Characteristics	Net Asset Value		Encumbrance value *
		2023	2022	2023
1. Land and land improvement	Ownership	15,858	15,475	0.89
2. Buildings and components	Ownership	10,485	10,599	1,096.09
3. Machinery and equipment in production	Ownership	62,060	59,312	4,361.70
4. Tools, appliances and factory equipment and furnishings and office equipment	Ownership	3,551	3,283	-
5. Vehicles and key sparepart	Ownership	882	784	-
6. Assets under construction	Ownership	16,321	11,020	-
Total (net)		109,157	100,473	5,458.68

Remark : * The Company's land and buildings, including cement machinery production line 3, were pledged financial institutions to finance revolving loans for business operations.

4.2 Intangible assets of the Company and its subsidiaries

(Unit : Million Baht)

Intangible assets	2023	2022
1. Raw material sourcing cost and concessions cost	4,137	559
2. Intellectual property	8	7
3. Assets development cost	121	109
4. Others	13	39
Total	4,279	714

4.3 The Board of Investment privilege from the Office of the Board of Investment

Obtained investment promotion certificates from the Board of Investment (BOI) by receiving privileges and tax benefits for businesses as follows:

1. Construction Business

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Transportation railway business	12 March 2024	29 March 2024

The above project is exempt from import duties on machinery and equipment imported from abroad. and juristic person income tax exemption for net profit for 8 years, 100% of the investment is excluded from the start of income.

2. Petrochemical and Chemical Industry

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
EVA Liquid and EVA Resin	26 Oct 2009	2 Jul 2030
Master batch, Compound Plastic and Compound Rubber	25 Jan 2012	12 Sept 2026

The above project is exempt from import duties on machinery and equipment imported from abroad and the exemption of corporate income tax for net profit for 8 years, representing 100% of the investment value, excluding land and working capital, from commercial operation date. After that, the corporate income tax deduction will be deducted at 50% for another 5 years.

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Ethylene Vinyl Acetate Emulsion and Ethylene Vinyl Acetate Powder	3 June 2016	3 January 2030

The above project is exempt from import duties for half machinery imported from abroad and exemption of corporate income tax for net profit for 8 years, representing 100% of the investment, excluding land and working capital from commercial operation date.

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Manufacturing of High Performance Ethylene Vinyl Acetate Copolymer (High Performance EVA)	12 Feb 2019	8 May 2029

The above project is exempt from import duties for half machinery imported from abroad and exemption of corporate income tax for net profit for 6 years, representing 100% of the investment, excluding land and working capital from commercial operation date.

Project	the date on which the BOI privilege was received	Expiry date of income tax benefits
Manufacturing of Ethylene vinyl acetate emulsion/ethylene vinyl acetate powder	16 Oct 2023	Not yet exercise corporate income tax exemption

The above project is exempt from import duties for half machinery imported from abroad and exemption of corporate income tax for net profit for 6 years, representing 100% of the investment, excluding land and working capital from commercial operation date.

3. Energy & Utilities Industry

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Waste-to-energy power plant operations with capacity of 30 MW	16 Jul 2013	30 Jan 2024
Waste-based fired power generation capacity of 70 MW	3 Mar 2015	4 Apr 2026
A coal-fired power plant with an installed power generation capacity of 150 MW	21 Dec 2016	Not yet exercise corporate income tax exemption

The above project is exempt from import duties for machinery and equipment imported from abroad and the exemption of corporate income tax for net profit for 8 years, representing 100% of the investment value, excluding land and working capital, from commercial operation date.

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Waste- based fuel power generation	13 Sep 2010	30 Jun 2024
Waste-to-energy power plant operations with capacity of 60 MW	14 Jun 2013	13 Sep 2023

The above project is exempt from import duties for half machinery imported from abroad and exemption of corporate income tax for net profit for 8 years, representing 100% of the investment, excluding land and working capital from commercial operation date. After that, the corporate income tax deduction will be deducted at 50% for another 5 years.

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Manufacturing of pyrolysis oil	2 Mar 2010	2 Jan 2027
Waste-to-energy power plant operations and steam from waste or fuel from waste.	25 July 2023	Not yet exercise corporate income tax exemption

The above project is exempt from import duties for half machinery imported from abroad and exemption of corporate income tax for net profit for 8 years from commercial operation date. After that, the corporate income tax deduction will be deducted at 50% for another 5 years.

4. Agriculture Business

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
Manufacturing of organic fertilizers or soil enhancer	12 Apr 2011	30 Jun 2024

The above project is exempt from import duties for machinery and equipment imported from abroad and the exemption of corporate income tax for net profit for 8 years, representing 100% of the investment value, excluding land and working capital, from commercial operation date. After that, the corporate income tax deduction will be deducted at 50% for another 5 years.

5. Pharmaceutical Business (by TPI Bio Pharmaceuticals Co., Ltd.)

Project	The date on which the BOI privilege was received	Expiry date of income tax benefits
manufacturing of modern pharmaceutical business	19 October 2023	Not yet exercise corporate income tax exemption

The above project is exempt from import duties for machinery and equipment imported from abroad and the exemption of corporate income tax for net profit for 5 years, representing 100% of the investment value, excluding land and working capital, from commercial operation date.

4.4 Investment policy in subsidiaries and associated companies

The Company has an investment policy in subsidiaries and/or associated companies to be in line with the Group's vision and growth plan, which will enable the Group to increase its performance or profitability to support the Company's core business operations, to create practicality, mobility, and efficiency in business operations and increased competitiveness based on factors such as legal regulation, financial structure, taxation and risk management.

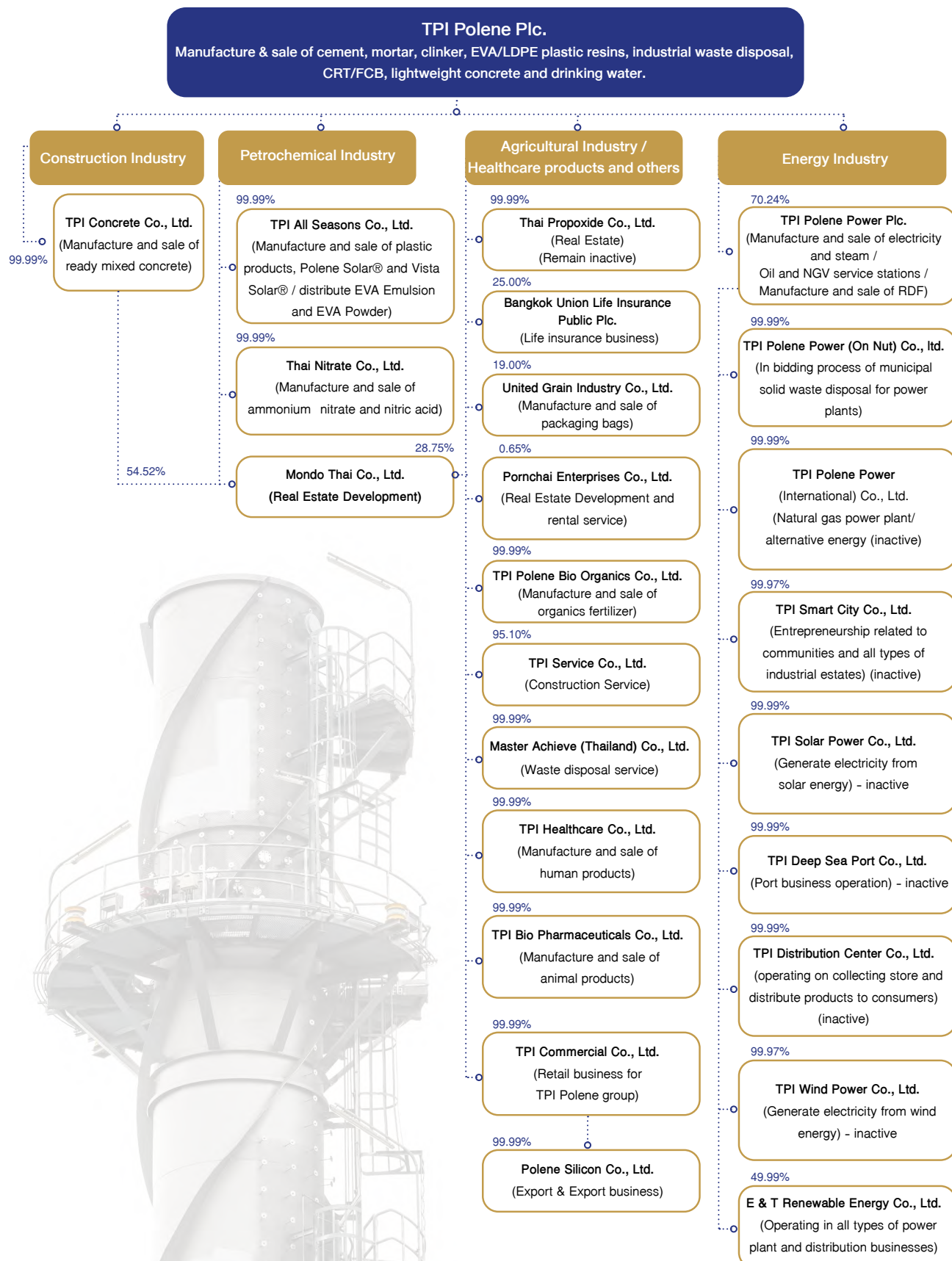
However, the Company has a policy of managing TPI Polene Group by requiring the subsidiary to conduct its business in accordance with the Company's core policy in order to have systematic management and supervision in the same direction. As for management of associated companies and other subsidiaries, the Company has assigned the representatives to join the Executive Committee to make decisions about policies and operational plans based on good corporate governance principles and ethical business operations to ensure efficient, transparent, fair operation and achieve the goals set forth.

5. Work-in-Process

- None -

1.3 Business Structure

1.3.1 Structure of the Group. As of 31 December 2023



Affiliated Companies as of 31 December 2023

Company's name	Head Office Address	Business	Registered Capital (Baht)	Paid- up Capital (Baht)	Shareholding (%)
Subsidiaries					
1. TPI Concrete Co., Ltd.	26/56, 5 th Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5350-74 Fax: (02) 678-5375-6	Manufacture and sale of ready-mixed concrete	3,700,000,000	3,700,000,000	99.99
2. TPI Polene Power Plc.	26/56, 8 th Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Manufacture and sale of electricity and steam, fuel from municipal waste and landfill waste, Operate oil and NGV service stations	8,400,000,000	8,400,000,000	70.24
3. Thai Nitrate Co., Ltd.	26/56, 21 st Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5450-2 Fax: (02) 678-5484	Manufacture and sale of ammonium nitrate and nitric acid	468,750,000	468,750,000	99.99
4. TPI All Seasons Co., Ltd.	26/56, 8 th Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Manufacture and sale of plastic product, Polene Solar®, Vista Solar® / distribute EVA Emulsion and EVA Powder	770,000,000	770,000,000	99.99
5. Thai Propoxide Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5000, 678-5050 Fax: (02) 678-5001-5	Real Estate (Remain inactive)	1,000,000	250,000	99.99
6. Mondo Thai Co., Ltd.	26/56, 19 th Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5470 Fax: (02) 678-6511	Property Developing	36,000,000	36,000,000	83.27*
7. TPI Commercial Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5470 Fax: (02) 678-6511	Retailing business for TPI Polene Group	100,000,000	100,000,000	99.99
8. Polene Silicon Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Exporting and Importing business	10,000,000	10,000,000	99.98**
9. TPI Polene Bio Organics Co., Ltd.	26/56, G Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Manufacture and sale of organic fertilizer	3,500,000,000	3,500,000,000	99.99
10. TPI Service Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Construction service	10,000,000	4,600,000	95.10
11. TPI Healthcare Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Manufacture and sale of healthcare products	60,000,000	60,000,000	99.99

Remarks : * Held by TPI Polene Plc. and TPI Concrete Co., Ltd. , which accounted for 28.75% and 54.52% respectively, totaling 83.27% .

** Held by TPI Commercial Co., Ltd. 99.99%.

Company's name	Head Office Address	Business	Registered Capital (Baht)	Paid - up Capital (Baht)	Shareholding (%)
12. TPI Bio Pharmaceuticals Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Manufacture and distribute animal products and is currently undergoing a project to construct a modern pharmaceutical plant (in 2023, the sale of animal products will be transferred to TPI Polene Bio Organic Co., Ltd.).	210,000,000	210,000,000	99.99
13. Master Achieve (Thailand) Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Waste disposal service	180,000,000	180,000,000	99.99
14. TPI Biomass Energy Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	In bidding process of municipal solid waste disposal for power plants (inactive)	750,000,000	187,500,000	70.23**
15. TPI Polene Power (International) Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Natural gas power plant/ alternative energy (inactive)	100,000,000	100,000,000	70.23**
16. TPI Deep Sea Port Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Port business operation (inactive)	100,000,000	25,000,000	70.23**
17. TPI Smart City Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Generate electricity from refuse derived fuel and biomass (inactive)	1,000,000	1,000,000	70.22**
18. TPI Solar Power Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Generate electricity from solar energy (inactive)	100,000,000	100,000,000	70.23**
19. TPI Wind Power Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Generate electricity from wind energy (inactive)	1,000,000	1,000,000	70.22**
20. TPI Distribution Center Co., Ltd. (Former name: TPI Olefins Co., Ltd.)	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Engage in the business of collecting, storing and distributing products to consumers. (inactive)	1,000,000	1,000,000	70.23**

Remarks : *, **, *** Held by TPI Polene Power Plc., which accounted for 99.97% , 99.99% and 49.99% respectively.

Company's name	Head Office Address	Business	Registered Capital (Baht)	Paid - up Capital (Baht)	Shareholding (%)
Joint Venture Company					
1. E&T Renewable Energy Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Operating a power plant and selling all types of electric power	2,000,000,000	250,000,000	35.12*

Remarks : Held by TPI Polene Power Plc., which accounted for 49.99%

Company's name	Head Office Address	Business	Registered Capital (Baht)	Paid - up Capital (Baht)	Shareholding (%)
Associated Companies					
1. Bangkok Union Life Insurance Plc.	175-177, 8 th Floor, Bangkok Insurance Tower, Surawongse, Bangrak, Bangkok 10500 Tel: (02) 634-7323-30 Fax: (02) 634-7331	Life Insurance	500,000,000	500,000,000	25.00
2. United Grain Industry Co., Ltd.	26/56, 27 th Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-6988-97 Fax: (02) 678-698899	Manufacture and sale of Packaging bags	550,000,000	550,000,000	19.00
Other					
1. Pornchai Enterprise Co., Ltd.	26/56, 22 th Floor, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-54903 Fax: (02) 678-5494	Real estate business and Office building rental service	4,599,919,600	4,599,919,600	0.65

1.3.2 Persons who may have conflicts of interest

- None -

1.3.3 Shareholders

Top 10 major shareholders as at 30 December 2023 (latest closing date):

Shareholders	Number of Shares	Shareholding (%)
1. Leophairatana Enterprises Co., Ltd	4,794,734,490.00	25.322
2. Thai Petrochemical Industry Co., Ltd.	4,779,396,070.00	25.241
3. Mrs. Orapin Leophairatana	975,646,240.00	5.153
4. Mr. Nares Ngamapichon	864,000,000.00	4.563
5. Mr. Prayad Liewphaitana	603,122,740.00	3.185
6. Mr. Prateep Leopairut	596,651,800.00	3.151
7. Mr. Pramuan Leophairatana	544,900,000.00	2.878
8. Thai NVDR Co., Ltd	332,897,638.00	1.758
9. Mr. Prateep Tangmatitham ED	297,234,400.00	1.570
10. SOUTH EAST ASIA UK (TYPE C) NOMINESS LIMIT	273,645,603.00	1.445

Remarks : 1/ Majority shares held by the Leophairatana family

- (1) Major shareholders of TPI Polene Public Company Limited are Leophairatana Enterprise Co., Ltd. and Thai Petrochemical Industry Co., Ltd.
- (2) As of December 28, 2023, a group of major shareholders who, by circumstance, materially influenced the determination of the Company's management or operational policies are Leophairatana Enterprise Co., Ltd. and Thai Petrochemical Industry Co., Ltd. holding 25.322% and 25.241% shares in the Company respectively.
- (3) The number of minority shareholders (Free Float) is 20,369 persons, representing 34.15% as of March 9, 2023.

1.4 The registered capital and paid-up capital

1.4.1 Ordinary Share

As of 31 December 2023, the registered capital of the Company is Baht 23,560.235 million consisting of 23,560,235,000 ordinary shares, at the par value of Baht 1 each. Paid-up capital is Baht 18,935.235 million consisting of 18,935,235,000 ordinary shares, at the par value of Baht 1 each.

1.4.2 Other types of shares with different rights or conditions differ from ordinary shares

- None -

1.4.3 Shares or convertible securities of the Company to underlying securities in issuing investment units Thai Trust Fund

- None -

1.5 Issuance of other Securities

1.5.1 Convertible Securities

- None -

1.5.2 Debt Securities

(A) Debentures

As of 29 February 2024, the Company issued unsubordinated/unsecured onshore debentures, in registered form with debenture holders' representatives. Details of debentures are summarized as follows:

Debenture Series	Amount (Baht)	Interest Rate (p.a.)	Tenor and Redemption Period	Credit Rating	Outlook
TPIPL251A	2,888,000,000	4.90 % p.a.	5 years 6 months due A.D. 2025	A-	Stable
TPIPL244A	4,127,000,000	4.25 % p.a.	3 years 9 months due A.D. 2024	A-	Stable
TPIPL24NA	3,515,300,000	4.25 % p.a.	4 years due A.D. 2024	A-	Stable
TPIPL25NA	3,410,700,000	4.50 % p.a.	5 years due A.D. 2025	A-	Stable
TPIPL256A	4,000,000,000	4.15 % p.a.	4 years 3 months due A.D. 2025	A-	Stable
TPIPL264A	3,581,200,000	3.55 % p.a.	4 years 6 months due A.D. 2026	A-	Stable
TPIPL269A	4,000,000,000	3.70 % p.a.	4 years 11 months due A.D. 2026	A-	Stable
TPIPL276A	3,745,000,000	4.10 % p.a.	5 years due A.D. 2027	A-	Stable
TPIPL26NA	2,532,800,000	4.25 % p.a.	4 years due A.D. 2026	A-	Stable
TPIPL272A	2,042,200,000	4.32 % p.a.	4 years 3 months due A.D. 2027	A-	Stable
TPIPL27NA	2,994,000,000	4.50 % p.a.	5 years due A.D. 2027	A-	Stable
TPIPL283A	5,000,000,000	3.90 % p.a.	5 years due A.D. 2028	A-	Stable
TPIPL274A	3,215,800,000	4.10 % p.a.	3 years 4 months due A.D. 2027	A-	Stable
TPIPL286A	4,719,400,000	4.40 % p.a.	4 years 6 months due A.D. 2028	A-	Stable
Sub-total	49,771,400,000				Stable

Debt Series	Amount (Baht)	Interest Rate (p.a.)	Tenor and Redemption Period	Credit Rating	Outlook
TIIPP247A	3,789,600,000	3.90% p.a.	3 years 11 months due A.D 2028	A-	Stable
TIIPP262A	4,523,600,000	3.55% p.a.	4 years 3 months due A.D 2026	A-	Stable
TIIPP278A	4,593,000,000	4.10% p.a.	5 years due A.D 2027	A-	Stable
TIIPP267A	2,860,000,000	4.15% p.a.	3 years 6 months due A.D 2026	A-	Stable
TIIPP281A	2,860,000,000	4.60% p.a.	5 years due A.D 2028	A-	Stable
TIIPP288A	3,000,000,000	4.10% p.a.	4 years 9 months due A.D 2028	A-	Stable
Sub total	21,626,200,000				
Grand total	71,397,600,000				

Debt Registrar and debt holders' representatives to be issued and offered

Debt Series	Debt Registrar	Debt Holders' Representatives
TIIP228A, TIIP224A	CIMB Thai Public Company Limited 44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330 Phone +66 (0) 2626-7507-8, +66 (0) 2626-7591 Fax +66 (0) 2657-3390	CIMB Thai Public Company Limited 44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330 Phone +66 (0) 2626-7507-8, +66 (0) 2626-7591 Fax +66 (0) 2657-3390
TIIP256A, TIIP264A, TIIP269A, TIIP262A, TIIP267A, TIIP281A, TIIP283A, TIIP288A, TIIP274A, TIIP286A	Bank of Ayudhya Public Company Limited 1222 Rama 3 Road, Bangpongpan, Yannawa, Bangkok 10120 Phone +66 (0) 2296-2000, +66 (0) 2296-5696 Fax +66 (0) 2683-1302	Bank of Ayudhya Public Company Limited 1222 Rama 3 Road, Bangpongpan, Yannawa, Bangkok 10120 Phone +66 (0) 2296-2000, +66 (0) 2296-5696 Fax +66 (0) 2683-1302
TIIP251A, TIIP244A, TIIP222NA, TIIP247A, TIIP276A, TIIP26NA, TIIP272A, TIIP27NA, TIIP278A	CIMB Thai Public Company Limited 44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330 Phone +66 (0) 2626-7507-8, +66 (0) 2626-7591 Fax +66 (0) 2657-3390	Bank of Ayudhya Public Company Limited 1222 Rama 3 Road, Bangpongpan, Yannawa, Bangkok 10120 Phone +66 (0) 2296-2000, +66 (0) 2296-569 Fax +66 (0) 2683-1302
TIIP24NA, TIIP25NA	CIMB Thai Public Company Limited 44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330 Phone +66 (0) 2626-7507-8, +66 (0) 2626-7591 Fax +66 (0) 2657-3390	Asia Plus Securities Co., Ltd. 175, 11th Floor, Sathorn City Tower, South Sathorn Road, Tungmahamek, Sathorn, Bangkok 10120 Phone +66 (0) 2680-1362 Fax +66 (0) 2285-1900-1
Legal Advisor for Issuing and Offering for sale of debentures	Weerawong, Shinnawat and Partners Co., Ltd. 22nd Floor, Mercury Tower, 540 Ploenchit Road, Lumpini, Pathumwan, Bangkok 10330	

(B) Short term loans in form of Bill of Exchange

As 31 January 2024, the Company's outstanding debt in the form of bill of exchange was Baht 10,000 million.

1.6 Dividend Payment Policy

1.6.1 Dividend Payment Policy of the Company

The Company's dividend payment policy will be considered from the operational results of single financial statements of the Company. Dividend payments will be paid to shareholders by also taking into consideration other factors such as liquidity, cash flow, and the financial status of the Company. The annual dividend payments shall be subject to the annual shareholders meeting's approval.

In addition, the Board of Directors of the Company may from time to time approve the payment of interim dividends to shareholders, where it is justified by the profits of the Company. After the payment of such interim dividends, the transaction shall be reported to shareholders at the next meeting.

Separate Financial Statement	2023	2022	2021
Net Profit per share (Baht)	0.17	0.370	0.297
Dividend per share (Baht)	0.10	0.10*	0.09
Par Value per Share (Baht)	1.00	1.00	1.00
Dividend Payout Ratio (%)	58.82	27.03	30.30

Remarks : * The dividend payment for the Company's 2023 operating results was divided into an interim dividend payment for the first half of 2023 at the rate of Baht 0.03 per share, which was already paid to shareholders, and the payment for the second half of 2023 at Baht 0.07 per share, which has been approved by the Board of Directors in the Company's Board of Directors' meeting no.2/2567 and is required to be approved in the 2024 Annual General Shareholder's Meeting.

1.6.2 Dividend Policy of subsidiaries

The Board of Directors of the Subsidiary shall consider and propose to the shareholders' meeting of the Company for approval each year, considering the dividend payment from the investment plan as necessary and appropriate by considering the net cash flow of subsidiaries.

2. Risk Management



2.1 Risk Management Policies and Plans

TPI Polene Group has implemented a systematic risk management policy across the organization in compliance with international standards in order to effectively identify hazards or business opportunities promptly and be able to manage the risk to an acceptable level.

TPI Polene Group is convinced that effective risk management across the whole business and a robust risk management system are crucial to the Company's ability to meet its objectives. Additionally, it helps to show that risk management standards are developed and refined in an integrated, systematic, and ongoing manner across the Company, enabling the firm to effectively handle issues amid significant impacts on the economy, society, and environment. Furthermore, it lessens the likelihood and harm that risks could cause, which boosts competition and produces long-term economic value.

The responsibilities of the Risk Management Committee in 2023 can be summarized as follows:

1. To evaluate both the risks and opportunities presented by climate change, a risk mitigation plan within the risk management system and process, monitor performance,

operational plans, and climate change indicators and targets. Further details can be found in the Task Force on Climate-related Financial Disclosures Report at the Company's website <https://www.tpipolene.co.th/th/sustainable/tcfd-report> or accessible via scanning the provided QR code



2. To systematically supervise risk management in all aspects to ensure that risk management is in accordance with the established plan.

3. To consider and review risk management information, risks are classified into 8 types, consisting of:

- 3.1 Strategic Risk
- 3.2 Operational Risk
- 3.3 Financial Risk
- 3.4 Compliance Risk
- 3.5 Sustainability Risk
- 3.6 Environment Risk
- 3.7 Social Risk
- 3.8 Governance Risk

The Company has integrated ESG risk management, covering Environmental, Social, and Governance (ESG) risks, as detailed earlier, into its mission and corporate strategies. The risks and sustainability concerns are analyzed, aimed at managing risks across various levels and fostering stakeholder confidence.

Information regarding this matter is elaborated upon in the Form 56-1 One Report 2023, specifically within the Risk Management Committee's Report Section, found on page.

Risk Management Structure

The Company has established a risk management committee chaired by the Chief Executive Officer and committees from related departments responsible for considering structure, policy, risk management framework, risk management plan, risk review, and risk management monitoring. The Risk Management Department is responsible for preparing risk management reports, implementing, and supporting risk management throughout the organization. The Company has continuously monitored the changing environment through the Risk Management Committee and all organizational departments, and has taken into account significant risks that could have an impact on the Company's operations by taking measures to respond to risks that are determined at an acceptable level from the executive meeting and are detailed in the annual work plan.

The authority, duties, and responsibilities of the Risk Management Committee are delineated in greater detail within the Form 56-1 One Report, found on page 170 - 171

Corporate Culture in Risk Management

TPI Polene Group focuses on promoting a risk management culture throughout the organization, aiming to establish the foundation for short-term and long-term systematic risk management, cultivate awareness of risk management for all employees, as well as create an atmosphere and culture in risk management, assuming risk management as an important component of every business process and having to be connected at all levels. This is done by integrating into key work processes to promote effective risk management.

2.2 Risk Factors on the Company's Business Operations

Overview of the key risk factors affecting the operation of TPI Polene Group can be summarized as follows:

2.2.1 Risk on the Group's Business Operations

Strategic Risk

(1) Risks from Investment and Business Expansion

TPI Polene Group aims to enhance the advancement of waste energy and alternative energy sources through its investment and business expansion initiatives. This involves harnessing technology and innovation to foster sustainable growth within its current operations. For instance, the Company has adopted waste fuel over coal in its cement plant, reducing production costs, it is implementing electric vehicle (EV) Dump Trucks and modifying other vehicles such as drilling trucks, Wheel Loaders, and Back Hoe to transition from oil-fueled combustion engines to EV systems, with the goal of cutting transportation expenses. The Company's initiatives have transformed its operations into an environmentally friendly, green business, enhancing its potential for business growth while simultaneously mitigating greenhouse gas emissions responsible for climate change. Regarding new business expansion, TPI Polene Group will explore collaborative ventures with partners possessing expertise in the target businesses. However, expanding investments entail the risk of falling short of the targeted return on investment, compounded by slower project implementation and exceeding the budget allocation.

TPI Polene Group entrusts its Board of Directors and top executives with the responsibility of scrutinizing investment decisions. Prior to presenting proposals to the Board of Directors, diverse opinions are solicited to ensure thorough consideration. Upon making investments, project outcomes undergo vigilant monitoring and reporting to the Executive Committee and top executives, aiming for optimal benefit and efficiency. Continuous analysis and periodic follow-ups on investment projects are carried out to enhance operational results, evaluate investment plans, and mitigate project risks to manageable levels. Projects are executed within the predetermined budget and in compliance with pertinent laws and regulations.

(2) Risks from Changes in Laws, Rules and Regulations

The provisions of the government's rules, legal regulations and policies are an important factor in the strategy of business operations and the expenses of TPI Polene Group and TPI Polene Group has functioned as follows:

- A dedicated team is in place to monitor and report updates in government policies, laws, rules, and regulations pertinent to TPI Polene Group's business operations, ensuring adherence and compliance.
- A team of legal advisors and tax advisors to give advice to TPI Polene Group to comply with relevant regulations.
- There is a procedure to support legal risks in advance by monitoring new legal issues and new regulations, to analyze the issue and problems, and prepare discussions on the clarity of the guidelines in order for the ongoing business operation of TPI Polene Group to comply with legal regulations and new rules that will be enforced in the future, as well as to be factored in the consideration of investment in projects.
- There is a regulatory process to comply with rules and legal regulations to comply with good corporate governance guidelines, in accordance with good governance principles and adequate internal affairs control and all-round risk considerations are considered to reduce the risk of operations that do not comply with applicable rules and legal regulations.
- Embed values for employees to comply with the Group's business ethics and Employee Manual in accordance with TPI Polene Group's commitment to be a responsible manufacturer for the community, environmental surroundings, as well as stakeholders in all sectors.

(3) Risks associated with Personnel Development to Support Business Growth

According to TPI Polene Group's business growth plan, the personnel and organizational structure must be organized. TPI Polene Group attaches importance to the development of personnel at all levels to support business growth of TPI Polene Group. Related educational institutions have been coordinated under proper management. TPI

Polene Group has hired qualified personnel to appropriately meet the needs of the business unit. The workforce plan has been established and remuneration is provided in compliance with the industry to ensure that TPI Polene Group has sufficient and qualified executives and employees to effectively support future business growth.

Following the onset of the COVID-19 pandemic, the landscape of digital technology has swiftly evolved, impacting both producers' and consumers' behaviors, as well as business operations and distribution channels. In response, TPI Polene Group recognizes the imperative to equip its employees with comprehensive knowledge, understanding, and essential skills through on-the-job training. This approach aims to align with the organization's strategy, direction, and external risk factors. Consequently, TPI Polene Group has instituted a policy to foster employee development in acquiring knowledge and understanding of Digital Trend technology, Digital Marketing, and innovative development, empowering them to navigate and spearhead transformative changes across diverse domains.

(4) Competitiveness Risk

Amidst dynamic economic and social shifts, the TPI Polene Group has witnessed significant transformations, including the rise of new competitors, intensified competition, demographic shifts towards an aging society, evolving consumer behaviors, and the emergence of a "New Normal" trend alongside disruptive industries. In response, the Company has fortified its competitive edge, enhanced operational resilience, and cultivated flexibility in tackling challenges and adapting to varying circumstances. This entails leveraging strategic advantages to navigate external fluctuations and sustainably foster business growth.

TPI Polene Group reduces the risk of losing opportunities to maintain sustainable growth (Sustainability Risk) by considering investments in order not to lose the opportunity and thus being able to maintain sustainable income. This is achieved by raising the level of innovation, including new technology, continuously modernization and innovation for its factories, and developing the production process into a Smart Plant to increase efficiency and reduce production costs. This includes developing personnel to have knowledge in technology, digital trends, and digital marketing, as well as acquiring new knowledge, in order to keep up with the digital disruption that has significantly changed the business.

(5) Product Liability Risk

TPI Polene Group has plans to develop products for the market to meet the diverse needs of customers who have high expectations for the quality of the Group's products. This necessitates the Company to give importance to product quality control, which adheres to standards and product certification from reliable agencies. Therefore, the Company must manage risks of legal regulations and product standards, along with product development and the expansion of marketing channels.

TPI Polene Group attaches importance to product development in accordance with standards, regulations, and market expectations with risk management measures by monitoring the market and customer needs, setting product inspection procedures. There is a Quality Assurance, Quality Control process for manufacturing process and products to apply for obtaining product certification quickly, including setting clear and concise quality according to the specified standards.

(6) Risk of Sustainable Water Management

Capability in sustainably managing water, both in terms of quantity and cost, is essential to the business operations of TPI Polene Group. This capability helps prevent production disruptions, maintain competitiveness, and increase confidence in future investment plans. Therefore, the Company has established sustainable water management measures at the national level, provided alternative water sources, and applied technology to reduce water usage. These efforts ensure there is sufficient water for current production processes and future projects.

TPI Polene Group has established a business continuity plan in case of drought. There is an increase in the efficiency of water use in the production process, reuse of water (Renewable Water), improving the production process, providing a reserve water source, studying new water production technology, and integrated water management.

(7) Climate Change Risk

From the globally focused climate change issue, it has led to the goal of reducing greenhouse gas emissions, which may direct future greenhouse gas emissions guidelines to mitigate the risk of catastrophic climate change and severe natural disasters caused by greenhouse gas emissions.

The Board of Directors, along with the Risk Management Committee and top executives, have evaluated

risks and supportive measures, and considered the opportunities stemming from climate change. Their objective is to attain carbon neutrality by 2043, surpassing Thailand's official target of achieving the same by 2050.

The Company has assessed climate change risks concerning factors of law or regulation regulating greenhouse gas emissions. This includes implementing mechanisms to regulate responses to arising issues, such as the collection of carbon taxes, employing carbon taxation as trade barrier tools through the Carbon Border Adjustment Mechanism (CBAM), and advocating for the adoption of electric vehicles and clean energy electricity production, etc. All of these factors pose risks to TPI Polene Group's cement and energy production businesses. The Company has assessed such risks, resulting in the need for the Company to allocate capital to improve production efficiency and technology to be environmentally friendly. This includes processing waste into fuel instead of coal in the cement production process, reducing dependency on fossil fuels, using electricity from renewable energy sources, and employing electrical vehicles and heavy machinery (such as EV Dump Trucks) instead of engines that use fossil fuels (such as diesel). The Company employs a combination of short-term and long-term low carbon strategies to mitigate climate change risks, thereby enabling the attainment of the goal to decrease greenhouse gas emissions as outlined.

Details are available in the Task Force on Climate-related Financial Disclosures 2025, accessible via scanning the provided QR code by code



(8) Drought Risk

As a result of climate change, rainfall becomes irregular, while demand for water increases. The Group has implemented a water management policy to regulate water usage, undertaking the following relevant actions:

1. To construct rainwater ponds to substitute water from natural sources.
2. To enhance the quality of cooling tower wastewater through recycling, and subsequently utilize it rather than disposing of it.
3. To engage in social and environmental activities aimed at rejuvenating the vicinity surrounding the factory.
4. To replant forest.

Operational Risks

(9) Risk associated with potential coal price fluctuations

Coal is a primary source of fuel in the manufacture of cement. Coal price fluctuation depends on a supply from major exporters in Australia and Indonesia. In case demand for coal from major importers of coal in China increases, coal prices will be adjusted upward. Therefore, the Company's fundamental approach to managing coal price fluctuation risk is to identify extensive supply sources for coal, and establish import sales contracts throughout the entire year, with an appropriate allocation of short-term and long-term contracts, in order to efficiently manage cement production costs.

Coal price (including shipping cost to the plant) in the last 3 years :

	Unit	2023	2022	2021
Coal price	Baht/ton	3,084	3,257	1,952

In addition, the Group has a policy of using renewable waste to replace coal fuels in both cement plants and coal-fired power plants, which can mitigate risks associated with fluctuations in coal prices. In particular, production costs will be reduced while also decreasing carbon dioxide emissions which cause global warming, which is a sustainable integrated solution.

(10) Risk associated with Product Price fluctuation

The Company's plastic resin price fluctuation has a direct impact on the business profitability of the Group. However, fluctuation depends on the sale price of products on the market. Production costs of plastic resin, which are ethylene price based on the sale price as well. The Company has a policy to maintain the difference in sales price and production costs (spread) to a level that the Company is satisfied with. With a wide range of business operations of the Group, revenue from the cement business, classified as a basic commodity, may fluctuate slightly in line with the nation's economy. In the event that global commodity prices rise and result in higher coal prices, the price of coal will increase. This will cause the cost of cement production to be adjusted upward. Nonetheless, all these factors will also impact a plastic resin price hike, leading to an increase in plastic resins prices and higher revenues. These measures will partly protect the Company against price fluctuations, by balancing revenue structure and net revenue generated by TPIPL Group.

Products	Unit	2023	2022	2021
Cement	Baht/ton	1,443 – 2,032	1,441 – 2,011	1,072 – 1,474
LDPE / EVA Plastic resins	Baht/ton	47,243 – 72,555	59,986 – 132,478	44,158 – 110,793
Ready - mixed concrete	Baht/cubic meter	1,641 – 1,730	1,424 – 1,637	1,333 – 1,398

In addition, the Group has also focused on developing value-added products. Some products are launched and penetrated on niche markets to increase sales volume and profitability, such as water glue and powder adhesives, as well as expand into the "New Normal" market, focusing on producing products for new lifestyles that differ from the past, such as Bio Knox, Microme Knox and other healthcare products.

(11) Risk associated with safety, occupational health and environment

It is the control of safety, occupational health, and environmental risks that may lead to loss of life, injury, illness due to the work of employees and contractors that cause disruption and continuity in business operations and may affect communities, society, and the environment.

Therefore, TPI Polene group has a policy of guidelines for compliance with quality policy frameworks, Quality, Security, Safety, and Health and Environmental Policy to create safe attitudes for all parties involved. Each plant has appointed an Occupational Safety and Health and Working Environment Committee to drive safety and environmental work in accordance with occupational health policy as well as developing, improving and promoting occupational health and safety work for employees, contractors and stakeholders entering the factory area to work safely.

Risk associated with COVID-19 pandemic and various viruses.

During the Covid-19 and various viruses pandemic, the Company has taken measures to prevent potential risks, focusing on the safety of its employees. TPI Polene Group provides RT-PCR Swab tests and COVID-19 testing kits to give all employees chances to get COVID-19 testing. The Company also provided vaccines to all employees, and provided TPI Polene healthcare products to both employees and their families to keep employees and families healthy and immune to COVID-19. In addition, all employees are required to pass temperature measurements and spray alcohol gel at the exits and entrances, wearing masks at all times, reduce congestion in the workplace and refrain from contacting work during the working class and use online contacts instead in the workplace etc.

(12) Risk associated with threat to cybersecurity

Amidst today's high competition, TPI Polene increase production efficiency by relying more on the use of digital technology in both production systems and support lines, where connecting to the internet, which could lead to TPI Polene Group facing potential cybersecurity threats.

In order to prepare the Group for the cybersecurity of the computer systems used in business operations

(Information Technology) and in operation technology, the Group has implemented as follows :

- The task force is responsible for overseeing and developing such matters in the short and long term.
- Conduct system tests and practice plans to prevent potential cybersecurity threats.
- Educate employees about potential threat patterns to prevent and deal with information technology threats.
- Invite a team of cyber threat prevention experts to obtain knowledge and advice on how to implement the development and improvement of cybersecurity defense systems by conducting a Cyber Security Assessment Test and a Cyber Security Penetration Test to assess how effective the security system is to protect against threats. After the results are known, ways to improve the security system will be sought in phase I to prevent extremely serious threats. Phase II, to protect against moderate threats and Phase III, to protect against minor threats.

Emerging Risk

(13) Risk associated with abrupt change in consumer demand due to trends in environmental preservation and climate

Nowadays, society pays attention to the environment and climate change which is increasing in intensity both nationally and internationally. Plastic bag bans and the usage of recycled materials are supported by people all around the world as ways to lessen our environmental effect. Entrepreneurs are now concentrating on the effects on the environment, the expectations of stakeholders on the Company's contribution to sustainable environmental management, and modifications to business operations for sustainability as a result of changing consumer behavior.

TPI Polene Group attaches importance to changing consumer behavior. The Group has increased efficiency in every production process to reduce the use of resources and energy by implementing new innovations and technologies, such as installing a Solar Rooftop system in the factory, concentrating on producing products with higher added value, emphasizing the production of low-carbon products in various forms, including the production of biological

products, as well as concentrating on the Zero Waste production process, etc.

(14) Risk associated with rapid changes and use of advanced technology

Presently, technology and digital technology are developing quickly and continuously, impacting market changes, product development, business models, business opportunities and challenges, and the exponential growth of Automatic Machinery, artificial intelligence and robotics that improve business efficiency. At the same time, it poses a challenge to develop infrastructure and develop human resources in line with the advancement of new technologies, as well as rapid Big Data analytics, which It may pose a risk of human rights violations and is contrary to ethical principles., etc.

TPI Polene Group has increased the level of innovation work because it is aware of the changes in advanced technology. This includes bringing in new technologies to modernize the factory, transforming the factory into a Smart Plant to boost competitiveness by concentrating on business operations that do both, as well as increasing cyber threat management and educating people to be consistent with new technologies.

TPI Polene Group has also taken steps to develop the Company in order to maintain its competitiveness. These steps include revising business plans to create online and offline sales channels so that customers can access goods and services through a variety of channels to fit the lifestyles of the new generation as well as preparing employees to meet the changing needs of customers. Additionally, the product has been enhanced to be effective and meet customer needs by utilizing technology and innovation in product development, including fiber cement and mortar products, which are available in a variety of 43 types according to the purpose of use, as well as health products like Bio Knox, Microme Knox Solution, and mouthwash, in line with the changing way of life, good hygiene, energy saving, cost-effective and diverse, and environmentally friendly.

(15) Risk associated with adaptation to cope with the crisis of natural disasters

Natural disasters resulting from climate change tend to become more severe, such as floods and droughts. If the Company does not adapt adequately, there may be serious damage to the organization.

TPI Polene Group is aware of the threat of natural disasters and has prepared to handle such situations by conducting emergency drills to manage business continuity in various fictitious situations. This is done so that executives and other related staff are aware of their roles, duties, and operational shortcomings so they can prepare various backup measures and improve them before the actual incident.

Financial Risks

(16) Risk associated with funding and interest rates

TPI Polene Group needed funds to improve productivity and working capital for business operations. Therefore, sources of financial support that are difficult to obtain can cause problems for investment projects. The Company has resolved the issue by obtaining approval of long-term credit lines from commercial banks and financial institutions to support the expansion of investments in projects of the Group. In addition, TPI Polene Group has maintained good relations with financial institutions and has sufficient revolving credit limits from financial institutions to serve as working capital in business operations.

In addition, the Company has offered for sale of unsecured-subordinated fixed-rate debentures and bills of exchange offered, which were well received by the investors in the market. As a result, TPI Polene Group has the right funding options with lower financial costs to expand its investment in its core business and utilize the proceeds to pay off debts that have higher exchange rate risks and/or higher financial costs, as well as using it as working capital to operate the business.

As the debt is mostly in form of fixed-rate debentures, the Company is less exposed to interest rates that may fluctuate in the future. Currently, the Company does not use financial derivatives to hedge such risks because the current policies to mitigate such risk are considered appropriate.

However, TPI Polene Group attaches importance to monetary policy by maintaining a level of capital structure comparable to leading companies in the same business by maintaining liquidity in accordance with business operations appropriately.

(17) Risks associated with exchange rate

As at 31 December 2023, the Company's major long-term loans are mainly denominated in Baht currencies, representing 100%. Therefore, the Company has impact from risks associated with the exchange rate fluctuation to some extent.

TPIPL Group also has debt liability in the form of working capital, a significant amount of which is denominated in USD currency while part of it is denominated in Euro currency. However, most of the Company's income is generated in US dollars, which is higher than the payment of expenses in foreign currencies (in both US dollars and Euro based). The Company has a policy to mitigate foreign exchange risk through natural hedging by balancing its foreign currency revenues and expenses. These measures will partly protect the Company against currency fluctuations, by balancing its cash flow in foreign currencies, revenue and expenses structure. The Company can use a number of financial mechanisms against risk caused by fluctuations in currency exchange rates by exporting products for payment in US dollars and maintaining a US dollar deposit account for repayment of the principal and interest to creditors, to mitigate foreign exchange risk through natural hedging.

In addition, the Company has also applied a policy to mitigate risk associated with foreign exchange to use financial instruments, which is apt for hedging to enter into a Forward Contract and/or Cross Currency Swap, as considered appropriate; to hedge its foreign exchange exposure, the Company will closely monitor potential adverse currency movements, by balancing the income generated in US dollars and the payment of expenses in foreign currencies.

However, as of 31 December 2023, the Company and its subsidiaries did not have a balancing amount regarding a forward exchange contract and /or cross currency swap as above.

(Unit : Baht mil.)

The group of company	31 December 2023			31 December 2022			31 December 2021		
	Baht currency	Foreign currency equivalent of Baht	Total	Baht currency	Foreign currency equivalent of Baht	Total	Baht currency	Foreign currency equivalent of Baht	Total
Debt Liabilities	85,144	0	85,144	71,372	0	71,372	68,143	0	68,143
Sales Revenue	31,149	11,659	42,807	29,301	18,832	48,133	27,090	11,830	38,920

(Unit : Baht mil.)

	31 December 2023	31 December 2022	31 December 2021
Exchange Rate Gain / (Loss)	88.28	437.17	390.71

(18) Risk associated with credit provision

To mitigate credit risk stemming from debtors' potential failure to comply with their contracts, the Company has a policy to conduct business transactions with reliable trade partners by selling cement products based on cash and credit terms. Usually, customers are required to provide collateral in the form of a letter of guarantee or Bank Guarantee in return for customer credit lines. A Credit Committee has been appointed to consider proper criteria for offering credit lines to customers and to develop a monitoring process for cash collection from customers.

As at 31 December 2023 and 31 December 2022, allowance for doubtful debt percentage to total account receivable of the Company was 0.62% and 0.61%, respectively.

(19) Risk associated with maintaining financial ratios

TPI Polene Group has issued debentures and must comply with debenture rights requirements to main debt-to-equity ratios. During the period of time, the Company strictly adheres to the conditions for maintaining the Debt to Equity Ratio.

According to the financial statements of the Company and its subsidiaries, ratio of loans from financial institutions to total liabilities in 2023 and 2022 were 0 and 0 respectively, with the ratio decreasing as the Group has a policy of selecting channels through offering for sale of unsecured debentures debt with lower financial costs than loans offered from financial institutions

In addition, TPI Polene Power Public Company Limited, as a subsidiary, is a capital intensive and upfront investment business; TPI Polene Group will closely monitor and manage to minimize the use of clear investments from the defined plan with an appropriate return on investment at manageable levels of risks to create stable future growth in the long run. The Group will be cautious and take into account the funding source and ability to pay the debt in advance, with the policy of properly structuring the finances in order for the financial ratio to be at a manageable level and comparable to companies in the same industry. Close monitoring will give the Group confidence in managing risks in maintaining financial ratios and financial costs appropriately.



(20) Investment Risk

Investing in competitiveness for long-term business growth may pose investment risks. The ability of the Company to obtain investment funds to support growth, along with maintaining the Credit Rating at the level of Investment Grade, must be closely monitored and managed. Additionally, the Company must follow up on progress investing in accordance with the specified time without increasing the investment budget.

The Company has made arrangements to assess, analyze, and prioritize investment projects in line with economic trends and look for investment possibilities that offer reasonable returns with manageable risks. Additionally, there is a careful and concise investment consideration process, risk assessment and risk management measures, adequate funding, liquidity maintenance, financial restraint to maintain Credit Rating, and there is a follow-up to ensure that the project does not delay, and the investment budget is within the investment framework.

Risk associated with investments of securities holders (instrument risks)

(21) Credit Risk

Bondholders are vulnerable that they may not receive interest or principal payments in the event that the business and performance of the issuer are not as expected or the assets of the issuer are insufficient to pay the debt; therefore, before making an investment decision, investors should consider the financial position and ability to repay of the issuer from the information specified in the Offering Circular and draft prospectus for assessing the credit risk of debentures. If the credit rating of the issuer is low, it indicates that the credit risk of the issuer is high. The returns that investors receive should also be high to compensate for the high risk of such debentures. However, credit ratings do not provide advice to buy, sell or hold debentures offered, and credit ratings may be cancelled or changed over the life of debentures. In addition to determining the credit rating of debentures, investors should follow the information of the issuer as well as update the credit rating from the SEC website, credit rating institution, or Thai Bond Market Association.

(22) Risk associated with event of default

History of default on principal or interest of debt instruments or default on loans from commercial banks, capital firms or financial institutions with specific laws established.

- None -

(23) Risk associated with investing in foreign securities (in case the issuer is a foreign company)

- None -

2.2.2 Risks associated with legal disputes

As at 31 December 2023, the Company had the major lawsuits as follows :

1) Due to on 20 February 2017, Tham Phra Phothisat Temple (the "Plaintiff") filed a complaint with the Central Administrative Court (the "Court") being the Black Case No. Sor. 3/2560, and claimed that Plaintiff is authorized by the Fine Arts Department to be the caretaker of the Phothisat cave (Tham Phra Phothisat), but did not have a written power of attorney, and alleged that the Company's mining activity caused damage to the engraved images in Phothisat cave. Later, on 2 June 2017, the Court called the Company to be a party (as an interpleader) in the case where the Plaintiff filed a lawsuit against the Minister of the Ministry of Industry, 1st Defendant, the Director-General of Department of Primary Industries and Mines, 2nd Defendant, Department of Mineral Resources, 3rd Defendant and Saraburi Provincial Industry Office, 4th Defendant (collectively "Defendants"); claiming that the Defendants' issuance of Prathanabat to the Company is done in contradiction to regulation of Ministry of Interior on the Conditions and Means of Prathanabat Issuance, under Section 9 of the Land Code B.E. 2497, which such regulation of Ministry of Interior was issued in B.E. 2535; thus, the Plaintiff requested that such Prathanabat issued by the Defendants to "Petrochemical Industry Company Limited" which such Prathanabat was later assigned to the Company, be revoked. Further, the Plaintiff filed a request for an emergency interim measure demanding that the Court orders the Company to stop the blasting of rocks for mining activity, until the decision of this case is reached.

On 3 August 2017, the Court, together with the parties of this case went to examine the location at Phothisat cave and found the Bas-relief art images of Buddha, Shiva god, Narai god, Hermit, etc. located at the front area of the cave; and during the examination at the location, the officer of Fine Arts Department informed that according to the evidences which are the photographed pictures of the art images which were taken in B.E. 2507, B.E. 2508, B.E. 2534, B.E. 2535, B.E. 2559 and B.E. 2560, there is no traces of any changes to the art images based on comparison with those pictures. Further, the Court, together with the parties of this case, examined the area of the Company (interpleader) which was granted with Prathanabat by witnessing the rock blasting activity of the interpleader around 15.30 o'clock, standing approximately 300-400 metres from the area of blasting activity; which at the time of blasting, it made a slightly loud sound, but no vibration was detected. Later, on 8 September 2017, Court denied the Plaintiff's request for an emergency interim measure for the Company to comply with the order of the 4th Defendant.

The 1st Defendant submitted a written statement dated 8 May 2017 to the Court, which stated that the 1st Defendant is authorized with the power to issue Prathanabat to each applicant in accordance with the Minerals Act, B.E. 2510. The 2nd Defendant submitted a written statement dated 4 May 2017 to the Court, which stated that the 2nd Defendant was assigned with the administration power

from Department of Mineral Resources according to the Reorganization of Ministry, Sub-Ministry, and Department Act, B.E. 2545 and is authorized with the duty to consider the application for Prathanabat which have been submitted to the officials at the local Industry Office, and the 2nd Defendant is authorized with the power to grant Prathanabat in accordance with Section 54 of the Minerals Act, B.E. 2510; and after Prathanabat is granted, the 2nd Defendant has the duty to control, monitor and inspect that the person whom has been granted with Prathanabat, shall comply with the Minerals Act, B.E. 2510 and the conditions set forth in the annex of Prathanabat. The 3rd Defendant submitted a written statement dated 28 March 2017 to the Court, which stated that the presently, the 3rd Defendant is not authorized by the laws related to the issuance of Prathanabat, which is due to the Royal Decree on transfer of administration duty and power of the administrative agencies issued according to the Reorganization of Ministry, Sub-Ministry, and Department Act, B.E. 2545, Section 151 which transferred the said duty, power and asset to Department of Primary Industries and Mines (2nd Defendant). The Fine Arts Department also submitted a written statement dated 5 April 2017 to the Court, which stated that the Phothisat cave is deemed as ancient monument under Section 4 of Act on ancient monuments, antiques, objects of art and national museum, B.E. 2504 and the Fine Arts Department had already announced the registration of Phothisat cave as ancient monuments in the government gazette since 6 April 1965; and the Fine Arts Department authorized the director of Regional Office of the Arts Department, No.3, Ayutthaya, with the authority to file any complaint to the inquiry officer who has authority in the area, against any wrongdoer. The statement further clarified that on 14 December 2016, the Fine Arts Department had inspected the Phothisat cave and there appeared to be no traces of any damage, nor any damage to the Bas-relief art images from Dvaravati era, e.g. images of Buddha, Narai god, Shiva god or other persons; which are in good order and it was found that the conditions of the other areas within the cave are normal without traces of any damage being caused by the mining activity of the Company.

The fact-finding procedure of the case had ended and the Court had set the first trial date to be 9 September 2020 together with submission of summary of facts from the Judge who presided over this case dated 11 August 2020 and scheduled the date of rendering the Court's decision to be on 30 September 2020.

The Court ruled that the Defendants lawfully issued Prathanabat to "Petrochemical Industry Company Limited" and in accordance with the Land Code and Minerals Act, B.E. 2510, which such Prathanabat was later transferred to the Company, which were done lawfully and legitimately; the mining activity of the Company which is the blasting of rocks according to Prathanabat and using the explosives not exceeding the rate of 130 kilograms, further, the result of vibration or compression level inspection are according to the safety standard, when compared with the standard set forth by the Ministry of Natural Resources and Environment. Additional, the Fine Arts Department also stated that

according to the inspection result, there is no additional damage, the Bas-relief art images are in good condition and there is no damage to the area within the cave; thus, the Court has no reason nor cause to issue the order according to the Plaintiff's request and the Court has ruled that the case is dismissed and the Court's order relating to the emergency interim measure dated 8 September 2017 shall be revoked starting from the first day of which the appeal submission period has expired (in case there is no appeal submission) or starting from the date on which the Court has ordered its decision to accept or not accept the appeal (in case there is submission of an appeal), as the case maybe.

The Plaintiff submitted the appeal to the Court on 27 October 2020 and the Court accepted the appeal of the Plaintiff. Therefore, the Court's order dated 8 September 2017 relating to the emergency interim measure ceased to be in effect. The Court allowed the date to submit the answer to the appeal to be within 21 February 2021. The interpleader submitted the answer to the appeal on 5 February 2021.

On 22 March 2023, the Supreme Administrative Court issued a notice advising the parties of the Court's order that 28 April 2023 shall be the date of fact inquiry termination. At the moment, a judge of the Supreme Administrative Court who is the judge rapporteur is in the process of preparing the statement of this case.

2) This case is due to the Company received permit to dig the water-well, from Mittraphap Subdistrict Administration Organization and the Company dig the water-well in the Company's own land, in order to preserve the environment and to be used for prevention of fire (the Black Case No. SorWor.2/2561). Later, on 21 June 2018, the Department of Primary Industry and Mines, Ministry of Industry, by representation of the district attorney, the Office of Attorney General (the "Plaintiff"), filed a lawsuit against the Company (the "Defendant") at the Civil Court (the "Court"), claiming the violation in mining activity with the principal amount of claim of Baht 71,566,889.42. The Plaintiff claimed that the Company conducted its shale mining unlawfully in the area in which Prathanabat for such area has not been granted, totaling 2 locations; thus, requesting that the Court to order the Company to return the shale totaling of 249,159.96 metric tons back to the original area and restore the area into its previous condition or pay the compensation consisting of the value of the shale and royalty fee to the government in the amount of Baht 66,650,289.31 together with interest.

The Company plead in its defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence, the Plaintiff claimed that the Company conducted unlawful mining activity, however, the claim is fault, the Company did not commit any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according

to the complaint and is not liable to any claim. The hearing was finished and the Court ordered the date to render the Court's decision to be on 24 March 2020.

On 24 March 2020, the Court ordered the Company to return the shale totaling 249,159.96 metric tons back to the original area and restore the area to its previous condition or pay the compensation consisting of the value of the shale and royalty fee to the government in the amount of Baht 66,650,289.31 together with interest at the rate of 7.5 percent per annum on the said amount, starting from the date of the violation (28 June 2017) until the date of the complaint filing (359 days) making the interest to be Baht 4,916,600.11. Total amount of combined principal and interest is Baht 71,566,289.31. The Court also ordered that the interest on the principal amount of Baht 66,650,289.31, in the rate of 7.5 percent per annum would be paid calculating from the next day after the date of filing of the complaint until the payment is received in full together with the court fees in behalf of the Plaintiff and attorney fee of Baht 80,000.

The Company filed the appeal together with the request for delay of judgement execution on 19 August 2020.

On 20 October 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 18 February 2022.

On 23 January 2023, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and Mines' filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

3) On 20 June 2019, Tham Phra Phothisat Temple (the "Plaintiff") filed a lawsuit against the Ministry of Industry, as 1st defendant and other related persons as co-defendants, totaling 31 persons, in a Black Case No. Sor. 17/2562, which the Company is the 30th Defendant in the lawsuit and the Plaintiff also filed request for the Court to order an emergency interim measure, until the decision of this case is reached. Later on, the Court also ordered the Committee of Professional on Environmental Impact Assessment Report (the "Committee"), as the 32nd Defendant. The Court has considered and issued the order dated 17 September 2019, to accept the complaint against some of the respondents and denied to accept the complaint against some respondents and some claims (the Court only accept the followings as defendants: Ministry of Industry, as 1st Defendant, Minister of Ministry of Industry, as 2nd Defendant, Department of Primary Industry and Mines, as 3rd Defendant, Director-General of Department of Primary Industry and Mines, as 4th Defendant, the Company, as the 30th Defendant and the Committee, as the 32nd Defendant, respectively). The Court also issued order dated 17 September 2019 which denied the Plaintiff's request for an emergency interim measure. The Plaintiff claimed to be the authorized person from the Fine Arts Department as caretaker of the Phothisat Cave, but did not have a written power of attorney, but requested to the Court to order that the application for Prathanabat of the Company is unlawful, the Plaintiff also claimed that the resolution of the 32nd Defendant which approved the Company's Environmental Impact Assessment Report for the Company's mining activity, concealed the facts, thus, unlawful. The Plaintiff requested the Court to order the revocation of the Company's application for Prathanabat of limestone mining, in which the Company has submitted for approval.

The Defendant submitted written statement of defense which informed the Court that the Plaintiff has no authority to file the complaint and this complaint repeated the complaint filed in Black Case No. Sor.3/2560, and the Company's application for Prathanabat of limestone mining is lawful and in accordance with the rules, procedures and methods as prescribed by the laws, further, the applied area for Prathanabat is not the restricted area under the laws in respect of Mineral and Forest; and there is an Environmental Impact Assessment Report which have been prepared correctly and completely in accordance with the law in relation to Enhancement and Conservation of National Environmental Quality and law related to Mineral, for application for Prathanabat which have been submitted for approval from the authority. The application for Prathanabat is pending the consideration for approval of the authority and the Company's application for Prathanabat did not cause any damage or grievance to the Plaintiff, thus, the Defendant requested the Court to dismiss the complaint.

The Company have made and submitted the additional statement of defense to the Court on 14 January 2021, the case is under the process of the Court's fact finding procedure.

4) On 8 July 2015, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the Saraburi Office of District Attorney (the "Plaintiff") filed a civil lawsuit (the Black Case No. SorWor.4/2559) against the Company (the "Defendant") with the principle amount of claim in total of Baht 4,066,535,823. The Plaintiff later amended the complaint to increase the amount of claim to be the total of Baht 4,338,558,231.54; claiming that the Company engaged its limestone mining activity in the area outside the designated area under the Prathanabat and requested that the Company returned the limestone ore in total of 31,522,374.26 metric tons and restore the area to be in its previous condition or pay the compensation together with the 7.5 per annum interest.

The Company plead in its statement of defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

The case was requested to be transferred to the Environmental Law Division of the Civil Court to be jointly considered with other related cases and the Court granted the said request.

On 13 December 2019, the Civil Court ordered the Company to return the limestone ore in total of 31,522,374.26 metric tons back to the area where the mining activity was done and to restore such area to the previous condition or pay the compensation of Baht 4,047,472,854.98 together with the 7.5 percent per annum interest on the said principle amount, calculating from the discovery date of the unlawful mining activity (24 July 2014) until the date of the filing of complaint (350 days) totaling Baht 291,085,376.56 making it Baht 4,338,558,231.54 in total. The Court also ordered the Defendant to pay 7.5 percent per annum interest on the principal of Baht 4,047,472,854.98 counting from the day after the complaint filing date until the payment is made in full.

The Company filed an appeal with the request for a delay of judgement execution on 8 May 2020.

On 17 November 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate

of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgement of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 17 March 2022.

On 22 November 2022, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and Mines's filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

5) On 24 March 2016, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the Saraburi Office of District Attorney (the "Plaintiff") filed a civil lawsuit (the Black Case No. SorWor.6/2559) against the Company (the "Defendant") claiming that the Company engaged its limestone mining activity in the area outside the designated area under the Prathanabat. The complaint requested the Company to return the limestone ore of 2,447,906.76 metric tons and restore the area into the previous condition or pay the compensation of Baht 327,680,219.25 together with 7.5 percent per annum interest.

The Company plead in its defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under

the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

The case was requested to be jointly considered with other related cases and the Court granted the said request.

On 13 December 2019, the Civil Court ordered the Company to return the limestone ore for cement industry, in total of 2,447,906.76 metric tons back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation of Baht 314,311,227.98 together with the 7.5 percent per annum interest, calculating from the discovery date of the unlawful mining activity (31 August 2015) until the date of the filing of complaint (207 days) totaling Baht 13,368,991.27 making it Baht 327,680,219.25 in total. The Court also ordered the Defendant to pay 7.5 percent per annum interest on the principal of Baht 314,311,227.98 counting from the day after the complaint filing date until the payment is made in full and ordered that the Defendant pay the court fees on the Plaintiff's behalf (court fee shall be calculated from the amount of claim ordered in favour of the Plaintiff) and to pay the attorney fee of Baht 100,000.

The Company filed an appeal with the request for a delay of judgement execution on 8 May 2020.

On 17 November 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgement of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 17 March 2022.

On 22 November 2022, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and

Mines' filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

6) On 24 March 2016, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the Saraburi Office of District Attorney (the "Plaintiff") filed a civil lawsuit (the Black Case No. SorWor.5/2559) against the Company (the "Defendant") in the civil case claiming for compensation totaling Baht 1,671,128,829.14 stating that the Company engaged its limestone mining activity unlawfully (engaged in the mining restricted area) demanding that the ore totaling 12,484,023.50 metric tons be returned and the area be restored into its previous condition or pay the compensation together with the 7.5 percent per annum interest.

The Company plead in its statement of defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

On 2 August 2019, the Court ordered the Company to return the limestone for cement industry totaling 12,484,023.50 metric tons back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation of Baht 1,602,948,617.40 together with the interest of 7.5 percent per annum of such amount calculating from the date of being notified of the land survey result (31 August 2015) until the date of the filing of complaint (207 days) making the interest to be Baht 68,180,211.74, making it Baht 1,671,128,829.14 in total, together with payment of 7.5 percent per annum interest on the principle amount of Baht 1,602,948,617.40 counting from the day after the complaint filing date until the payment is made in full and ordered that the Defendant pay the court fees on the Plaintiff's behalf (court fee shall be calculated from the amount of claim ordered in favour of the Plaintiff) and to pay the attorney fee of Baht 200,000.

The Company does not agree with the decision of the Court of the First Instance and filed the appeal together with the request for a delay of judgement execution on 3 December 2019. The case is pending the consideration of the Court of Appeal. The Court makes an appointment for the hearing of a judgement or order of the Court of Appeal on 10 May 2022.

On 10 May 2022, The Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level. The future court fee on entry of a complaint of Baht 100 baht shall be paid back to the defendant. The defendant shall be required to pay for the appellate fees on behalf of the plaintiff together with an attorney fee imposed at Baht 200,000.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgement of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 12 October 2022.

On 14 September 2023, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

7) On 2 March 2017, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the district attorney of the Office of the Attorney General (the "Plaintiff"), filed a complaint against the Company (the "Defendant") at the Civil Court, Environmental Law Department (the Black Case No. SorWor.1/2560) with the lawsuit amount of Baht 344,882,135.15 claiming that the Company partially engaged its mining activity in the area designated in the Prathanabat unlawfully requesting that the shale totaling 1,220,559.82 metric tons be returned to the area and the area be restored into its previous condition or to pay compensation together with the 7.5 percent per annum interest.

The Company plead in its statement of defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff,

thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

On 13 December 2019, the Civil Court ordered the Company to return the shale for cement production industry totaling 1,220,559.82 metric tons back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation consisting of the value of the shale and royalty fee to the government in the amount totaling Baht 326,499,751.86 together with 7.5 percent per annum interest calculating from the date of the violation (2 June 2016) until the date of the complaint filing (274 days) making the interest to be Baht 18,382,383.29. The total amount from combining the principal and interest, is the amount of Baht 344,882,135.15. The Court also ordered that the interest on the principal amount of Baht 326,499,751.86 in the rate of 7.5 percent per annum be paid counting from the day after the complaint filing date until the payment is made in full together with the court fees in behalf of the Plaintiff and attorney fee of Baht 200,000.

The Company filed the appeal with the request for delay of judgement execution to Court on 5 June 2020. On 24 June 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 9 November 2021.

On 15 November 2022, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and

Mines' filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

Incidentally, the information regarding cases 1) - 7) above are under the consideration of the court, the above cases are not final. The Company and the legal advisors hereby opines that based on the evidence and information the Company possesses, the Company did not commit any wrongful acts against the plaintiff as detailed in the complaints; the plaintiff claimed that the defendant committed wrongful action against the plaintiff, therefore, the plaintiff has the burden of proof to prove that the defendant had committed such act as the plaintiff claimed and since the plaintiff had not presented the evidences which show that in fact, the defendant had committed wrongful act against the plaintiff, the, the court could consider to dismiss the case. However, the judgment depends on the consideration and discretion of the court. As at 30 September 2023, the outcome of lawsuit is not yet final, the Company has not recorded a provision for liability of lawsuit in the financial statements.

8) On 16 December 2019, individuals in total of 222 people sued Energy Regulatory Commission (ERC) et al to the Central Administrative Court which a subsidiary 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 subsidiary 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 due to the lack of reason to believe that the license to operate electricity generating business of the subsidiary is unlawful.

On 31 January 2020, the Court issued an order accepting the compliant and requesting the subsidiary to file the answer. The lawyer submitted the answer to Court on 1 July 2020.

On 7 December 2020, the Court sent the objection to the answer of the 5th Defendant and requested the subsidiary to submit additional answer to the Court within the prescribed period. The subsidiary submitted the additional answer to the Court on 12 March 2021, the case is under the Court consideration.

The subsidiary's legal consultant considered the complaint and its appendixes and hereby opines that the subsidiary lawfully and transparently received the license to operate the electricity generating business and the construction approval from the competent authorities, in accordance with the applicable laws and that the relevant public official have lawfully and honestly performed their duties without any conflict of interest in issuing the said license. The complaint of the Plaintiffs is untrue. As the case is in the preparation for answer, the subsidiary has causes to relieve itself of any liability generated from the complaint depending on the Central Administrative Court Decision. Moreover, the subsidiary 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.

For all above lawsuit, the Group's legal consultant opines that, based on the Company's evidences and information, the Company has a chance to defend itself in the court trial depending on the consideration of each courts.



3. Driving the business towards sustainable growth

Key Sustainable Development Performance of TPI Polene Group in 2023

Economic Dimension	Environmental Dimension	Community and Social Dimension	Corporate Governance Dimension
Gross income Baht 44,963 million	Waste fuel instead of coal in cement production by 2023 cement plants use waste equal to 14% instead of coal.	Community and social contributions Baht 27.92 million	Selling low-carbon products value Baht 28,288.78 million
Employee wages and benefits Baht 7,300 million	Bringing the remaining stone to adjust the condition (Recycle) to reuse 597,564 tons again, accounting for 100%.	Injury Frequency Rate (IFR) of Employees and Contractors TPIPL 0.536 and 0.87 per million hours worked	Biological product sales value Baht 95.21 million
Tax paid Baht 186.91 million	Reduce greenhouse gas emissions TPIPL 0.99 mil.tons of carbon dioxide (Decreased 10% compared to the year 2022)	Number of working hours without an accident TPIPL 22,979,705 hours (Increased 3.34.% compared to the year 2022)	The product has been certified with the label to reduce global warming amount of 20 products
EBITDA Baht 10,055 million	Reduction of external water consumption (From the base year 2022) TPIPL 9,804,527. cubic meters or a 8.69% decrease	Rates of morbidity and occupational diseases that require all records TPIPL 0/1 million hours	No complaints of privacy violations ⁽¹⁾
Net profit Baht 4,305 million	Proportion of recycled water (From the base year 2022) TPIPL 1,362,200 million cubic meters or a 55.52% of total water consumption	Work-related deaths of employees and contractors TPIPL = 0	Business partners acknowledge the code of conduct of business partners TPIPL 96%
Dividend per share Baht 0.10	Recycled waste TPIPL recycled 99.43% of total waste	Average training hours for employees TPIPL 22.49 hour/person/year	Violation of human rights (Discrimination, Child Labor, Illegal Labor) TPIPL =0
	Investment projects for reducing environmental impact TPIPL Baht 1,776 million	Turnover Rate TPIPL 2.67%	ESG Risk assessed partners TPIPL 67.51 % of order value (15 majors)
	Replace 41 60-ton EV Mining diesel trucks and 4 electric wheel loaders to reduce greenhouse gases and PM2.5 dust.	Satisfaction in the work and bond of employees to the organization TPIPL 84.17 %	Overall customer satisfaction/satisfaction with solving problems for customers TPIPL 87.40% and 94.40%
	Prepol SC Project The installation of machinery in the part of the cement kiln reduces the consumption of heat energy. 25% of waste can be used as fuel instead of coal.	Technology Development Project, Innovation, and Service 21 projects	
	Production of Green Products and development of hydraulic mortar production technology to reduce carbon emissions. 0.272 million tons CO ₂ E	Product Research and Development Project 12 projects	



3.1 Sustainability Management Policies and Goals

The Board of Directors, along with the Sustainability Development Committee and top executives, have formulated sustainability policies, viewing them as instrumental in guiding the organization towards realizing its vision of sustainable development. These policies are aligned with the direction and strategies of business operations and are committed to supporting the United Nations' Sustainable Development Goals (SDGs), striving to foster equilibrium among the economy, environment, and society within a framework of sound corporate governance. The framework of sustainability policies and management is as follows:

1. Economic Dimension : With an emphasis on the adoption of technology and innovation in the production process of quality products and services with effective management at every stage with R&D results to further

constantly develop business models and create added value for products and services as well as seeking investment opportunities that offer big returns on investment. Strategies for short-term and long-term business growth with flexibility in adaptability, taking into account all internal and external risk factors, system readiness and production efficiency.

2. Environmental Dimension : The Company is committed to transitioning towards a low-carbon society, with a focus on reducing greenhouse gas emissions and implementing climate risk management practices. Achieving carbon neutrality by 2043 is a key objective, supported by climate management strategy data aligned with the Task Force on Climate-related Financial Disclosures framework for establishing strategies. This involves setting both short-term and long-term goals for reducing greenhouse gas emissions. The achievement of carbon neutrality by 2043 is a key objective, which involves setting both short-term and long-term goals for reducing greenhouse gas emissions,

alongside investment and financial planning initiatives aimed at enhancing sustainability for the organization. Strategies include enhancing production efficiency, adopting environmentally friendly technologies, which includes the utilization of waste as fuel instead of coal in cement production, and reducing reliance on fossil fuels by sourcing electricity from renewable energy, and utilizing biomass energy derived from waste materials generated in the production process. The Company implements electric-powered vehicles and heavy machinery (EV Dump Trucks) in lieu of fossil-powered engines (Diesel). Employing both short-term and long-term low carbon strategies, the Company effectively mitigates climate change risks, facilitating the reduction of greenhouse gas emissions. Furthermore, factories within the TPI Polene Group adhere to both Thai and international standards, ensuring certification of environmental and related standards.

Furthermore, the Company emphasizes its commitment to Bio Circular Green Economy policy, prioritizing clean energy and the production of environmentally friendly products such as hydraulic cement to mitigate greenhouse gas emissions. Efforts include decreasing reliance on fossil fuels, enhancing energy efficiency, and leveraging renewable energy sources while solving garbage and waste issues. Additionally, the Company advocates for the Bio Economy policy, endorsing organic agriculture and biotechnology to minimize chemical usage in farming, thereby preserving soil health and promoting the well-being of both animals and human consumers. Moreover, the Company has embraced Bio Circular Green Economy policy, aiming to optimize resource utilization, minimize waste production, harnessing waste materials, while also prioritizing biodiversity preservation and soil health, implementing water conservation measures, and mitigating operational

impacts across the entire value chain, encompassing employees, suppliers, customers, and local communities, with a commitment to addressing all stakeholders equitably.

3. Social Dimension : The Company conducts business responsibly by prioritizing all stakeholders in a balanced manner, operating with respect for and protection of human rights throughout the value chain. This encompasses employees, suppliers, customers, and social communities, thereby generating favorable returns for shareholders and ensuring occupational health and safety alongside a positive working environment. Continuously managing and developing abilities and skills of personnel, the Company pays attention to customer health and safety, evaluates social partnerships, provides clear product label information, respects personal data, promotes youth education, and collaborates in creating value and enhancing the quality of life for communities and society to foster sustainable growth.

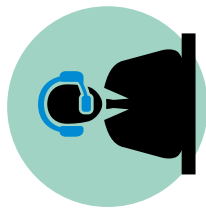
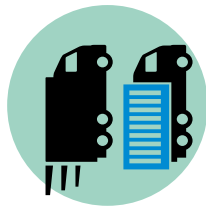
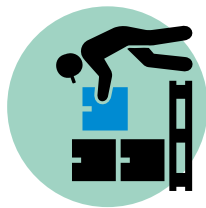
4. Corporate Governance Dimension: A framework based on good corporate governance principles, transparent information and performance disclosure, comprehensive risk management, flexibility in management, anti-corruption, transparent and fair procurement system, not using insider information for gain, and having information and system security information, adhere to the principles of accuracy and compliance with applicable laws and regulations under the Code of Conduct and Business Ethics.

Details, sustainability policies and management goals can be downloaded from the Company's website <https://www.tpipolene.co.th/th/investment/sustainability> or accessible via scanning the provided QR code



3.2 Managing the impact on stakeholders in the business value chain

3.2.1 Value Chain



1 Inbound Logistics

2 Operations

3 Outbound Logistics

4 Marketing & Sales

5 Services

- Cement production from
 - Natural raw materials such as limestone
 - Alternative raw materials, such as copper slag waste from mines through washing recycle plants or inferior materials to produce construction stone
- Production of specialty polymers
- Production of ready-mixed concrete
- Develop ready-mixed concrete products by incorporating fly ash, a waste material from power plants, to replace 50% of the cement.
- Specialty Polymer
- Reuse ethylene gas and vinyl acetate, which must be disposed of from the plastic pellet production process, as raw materials. This helps reduce production costs and emissions to communities and the environment.
- EVA Films
- The raw material for EVA films is EVA plastic pellets produced entirely at the Company's factories. The main raw material used in the production of ammonium nitrate and nitric acid is ammonia, a key ingredient in hygiene products.
- Roof tile and fiber cement board
- Transformation with production processes that use modern machines and technology, including the use of spare part recycling and TPM systems to maintain machines, together with the utilization of technology in resource management software (ERP: Enterprise Resource Planning) and data analysis with Artificial Intelligence.
- Standard production quality control in every step
- Control fuel consumption to reduce pollution and protect the environment
- Pyrolysis oil as a replacement for fuel oil
- Use RDF and Pyrolysis Ash instead of coal
- Use steam from producers using the Combine cycle system
- Community waste fuel
- Safe transportation system, fast, within the specified time and the product is not damaged
- Distribution centers strategically located throughout the country cater to various target groups, including small construction material retailers, modern trade outlets, project customers, and the export market. These centers are spread in key strategic locations nationwide, with a network linking them for efficient inventory management.
- Locomotives are used in cement transportation by rail transport system, which has lower transportation costs than transporting by car and by boat. This modern and safe method helps reduce CO2 emissions and connects all channels for purchasing products and services, both offline and online. It includes a virtual showroom as a platform to increase convenience for customers to view various products and services.
- Products are sold through distributor shops, modern trade stores, and various retail outlets. The Company utilizes digital technology to manage deliveries for maximum efficiency, enabling customers to receive their products within a short time according to schedule.
- Variety of products and eco-friendly
- Quality products certified by international standards
- Comprehensive building materials products
- Satisfaction Survey
- Promotional activities
- Prepare public relations and advertising media for all channels such as Online Media and TV
- Develop digital marketing to create content to reach all target groups via the Internet and other digital media such as YouTube, Line OA, Facebook, Google Ads, Tik Tok, mobile media, Suvarabhumi digital TV media.
- Organize promotions, campaigns, seminars with dealers. Modern Trade Group, an organization of architects and engineers to generate sales.
- The Company provides a virtual showroom as a platform to increase convenience for customers to view various products and services. It presents information online in a 360-degree virtual format. Additionally, the Company offers roof removal and installation services for both projects and general customers, facilitated by a team of expert technicians under the trademark TPI Polene brand.
- After-sales service such as providing advice and knowledge and solving problems about various products
- Fast and convenient claiming of
- The Company utilizes Customer Relationship Management (CRM) software to manage relationships with its customers, streamline work processes, and systematically develop new products according to customer needs. Additionally, the software facilitates the collection of various complaints, ensuring that every issue is tracked and promptly addressed to enable quick responses to customer needs.

Key Activities

1. Inbound Logistics Management

TPI Polene Group manages a sustainable supply chain with a focus on transparency for the utmost benefit of the Company. The management is based on transparency, equality, and fairness throughout supplier selection, procurement, and supplier evaluation processes. Transparency is also encouraged among suppliers to comply with TPI Polene Group's sustainable business practices by preparing a supplier code of conduct for joint business operations. This code covers ethical issues, non-child labor, respect for and protection of human rights, environmental concerns, well-being promotion, work safety, and anti-corruption measures, among others. These efforts reduce operational risks and promote business operations with good governance between the Company and its suppliers, who encompass business alliances, employees, customers, and social communities, who are stakeholders of the business value chain.

2. Production

TPI Polene's cement factory is considered one of the Thai factories employing the most modern machinery and production technology in the country. Regarding the process of transporting raw materials for production, the Company utilizes Process Automation, a type of transport belt system, to reduce energy consumption in transporting limestone raw materials. Additionally, the Company has modified the conveyor system to produce electrical energy, further enabling cost reduction in energy.

The Company places importance on the cement production process at every step, including reduction of impacts on the climate and environment, resulting in the Company's cement products certified by all four international standards for management system: quality management system (ISO 9001:2015), environmental management system standard (ISO 14001:2015), occupational health and safety management system standard (ISO 45001:2018), energy management system standard (ISO50001:2011), and the industrial standard of Thailand, United States (ASTM) and the European Federation (EU). With these standards, the Company gains credibility and can effectively meet the expectations of buyers with vested interests.

The Company employs a cement packing system featuring a Robotic Palletizer, which significantly cuts down on the time required for placing products onto pallets. This agile and flexible system adeptly handles heavy goods in large quantities, ensuring swift and precise operations. Consequently, productivity and safety in packing are enhanced. Moreover, the system ensures consistent quality

of cement in every bag, while the utilization of an automatic robotic arm system enables cost reduction in packaging. Furthermore, it facilitates effective management and control of product quality and shelf life, ensuring appropriate delivery to customers.

3. Outbound Logistics

The Company has continually planned, monitored, and enhanced product delivery to customers, facilitated by a streamlined transportation network. Deliveries are orchestrated to optimize efficiency and minimize costs, all while swiftly addressing customer demands and ensuring satisfaction through timely shipments. Additionally, strategically positioned product distribution centers across the nation efficiently manage inventory, coordinated to mitigate transportation-related impacts on both the community and the environment. The Company not only transports goods via truck but has also established a cement transportation system via rail, which involves utilizing locomotives in its rail transportation system. This shift can significantly reduce transportation costs compared to trucking. Moreover, the Company ensures the delivery of products to customers adhering to safety standards. Furthermore, by leveraging digital technology, the Company efficiently manages deliveries, enabling customers to receive their orders promptly and according to schedule.

4. Marketing and Sales

The Company develops various marketing and sales communication channels, such as visiting customers, organizing partner seminars, and conducting marketing activities, to explore perspectives in marketing and sales, aiming to meet customer needs and foster cooperation within the value chain involving employees, partners, customers, and social communities. This approach focuses on creating shared value in business, building trust, nurturing strong relationships, and enhancing potential and efficiency for long-term business collaboration. Additionally, it involves collaborating to innovate and develop trade models aligned with the evolving era.

The COVID-19 outbreak has spurred the business world's recognition of digital technology's importance, leading to global changes in business operations. With competition, marketing, and sales challenges escalating continuously, businesses worldwide are adapting to operate in this rapidly changing landscape. The Company acknowledges these shifts and has consequently created an Online Platform to market and sell products via online channels. This platform facilitates Two-Way Communication, providing customers with extensive information to better cater to their needs, thereby gaining a marketing advantage. TPI Polene Group

has elevated its organizational development to maintain competitiveness, ensuring responsiveness to consumers of all ages and lifestyles. Additionally, it prepares employees to meet evolving customer demands.

5. Customer Services after Sales

TPI Polene Group prioritizes building strong customer relationships to enhance long-term satisfaction and engagement. They have developed guidelines to streamline customer relations through various processes. Communication between the Company Group and customers is facilitated, allowing for product recommendations and the handling of sales and service complaints. Additionally, suggestions from customers are welcomed through websites, email, online media, telephone, and letters. The Company has continually conducted customer relations activities aimed at consistently maintaining and fostering strong relationships with its customers. These activities include conducting an annual customer satisfaction survey to gather feedback from all channels, analyze the data, and develop management guidelines addressing key customer concerns. Additionally, the Company provides customers with insights into business and sustainability management.

Support Activities

For activities supporting the main objectives, TPI Polene Group has mandated that all departments adhere to the principles of good corporate governance, particularly those engaging with third parties, and assess risks associated with corruption. The Company continuously provides anti-corruption training courses, ensuring that suppliers are acquainted with the organization's anti-corruption policy and the supplier code of conduct on procurement and engagement. Additionally, the Company has an IT Security Policy and continually develops and enhances cyber protection systems. Regarding engagement, the alignment of manpower planning with future business growth includes fostering the potential of employees at all levels. This not only aids in achieving the organization's strategic objectives and facilitating future expansion and projects but also boosts competitiveness. Furthermore, TPI Polene Group motivates employees to stay updated on technological advancements in products and services and to pursue new knowledge and innovations like digital marketing, with the aim of averting disruptions to the original trading model and gaining other advantages.

3.2.2 Management of Impacts on Stakeholders

TPI Polene Group has upheld the principle of collaborative value creation between the Company and stakeholders, alongside ongoing enhancements to communication channels and the transmission of stakeholder feedback to pertinent departments. TPI Polene Group classifies stakeholders into internal and external dimensions as follows:



The communication and engagement patterns of stakeholders are different, which can be summarized as follows:

Stakeholder Groups	Guidelines for engaging with stakeholders	Stakeholder needs/expectations	The Company's response guidelines
1. Shareholders / Investors	<ul style="list-style-type: none"> Annual General Meeting of Shareholders Providing shareholders with opportunities to have equal rights to attend the shareholders' meeting, such as questioning and voting. Presentation of investment information through Investor Relations Activities at least 4 times per year Form 56-1 One Report Facilitate communication via various media channels such as website, letters, emails, phones, or other means. Annual Sustainability Report Task Force on Climate-related Financial Disclosures (TCFD) Financial report: 4 times per year 	<ul style="list-style-type: none"> Achieving strong performance while maintaining securities' prices and dividends at optimal levels. Continuous business expansion Effectively communicating vital Company information to shareholders involves ensuring that it is disclosed accurately, comprehensively, promptly, transparently, and reliably through easily accessible channels. Granting shareholders equal entitlement to participate in AGM. Engaging in constructive initiatives to foster strong relationships with shareholders. Prioritizing environmental, social, and governance (ESG) considerations in business operations, Financial stability Transparency Risk Management System 	<ul style="list-style-type: none"> Having Sustainability Report Appropriate Risk Management All shareholders have equal rights and treatment. Managing the organization in alignment with the Company's vision and corporate governance principles, demonstrating honesty, integrity, diligence, and independence from personal conflicts of interest. Providing comprehensive explanations regarding the shareholder meeting, including all pertinent details and information related to agenda items requiring shareholder decisions, well in advance of the meeting. Having Code of Conduct Having innovation and technology management Having research and development to continuously expand the business Having a policy to maintain strong liquidity and financial stability.
2. Employees	<ul style="list-style-type: none"> Gathering diverse data from multiple sources, encompassing complaints falling within the purview of the Personal Data Protection Act. Internal communication occurs through various channels, including a Line Group where top executives engage with all employees, a Line Group specifically for management matters, and the circulation of documents to employees in each department, as well as posting documents on noticeboards in the workplace. Welfare Committee in the business establishment Occupational Safety, Health, and Working Environment Committee Sustainability Report/Annual Report Weekly meetings between management and employees take place at the factory. Providing clear communication within the organization through various channels such as announcements to various departments within the Company and Application Line. Comment Box on Website, e-mail, Facebook Performance evaluations are provided 3 times a year 	<ul style="list-style-type: none"> Compensation and benefits that are consistent with those offered by other companies in the same industry. The organization offers stability and opportunities for career advancement. Having potential development The organization has a positive reputation and fosters a supportive working environment. Having fair performance evaluation system without discrimination. Work safety and quality of life in the workplace Providing opportunities to express opinions Equal Treatment Show consideration for personal data Uphold human rights 	<ul style="list-style-type: none"> Clear employment regulations are in place and rigorously followed, ensuring career advancement irrespective of gender, age, social origin, class, race, religion, or educational institute. The employment policy and working conditions adhere to standardized criteria. Having a fair performance evaluation system without discrimination. Providing channels for listening to opinions and suggestions. Having an occupational health and safety system at work. Abstaining from hiring illegal immigrant workers or utilizing illegal labor through contractor and subcontractor companies. Respecting and complying with human rights requirements and personal data protection. Organizing trainings to develop potential and advancement in career Having a savings cooperative

Stakeholder Groups	Guidelines for engaging with stakeholders	Stakeholder needs/expectations	The Company's response guidelines
3. Suppliers and Contractors	<ul style="list-style-type: none"> • Providing various complaint channels and communication channels such as website, e-mail, telephone, letters, etc. • Organizing supplier relation activities for engagement at least twice a year to facilitate the exchange of opinions, listen to suggestions, and provide accessible contact channels through • Telephone: 02-285-5090 • Website : www.tpipolene.co.th 	<ul style="list-style-type: none"> • Having transparent, fair, non-discriminatory purchasing system without corruption • Having a good relationship and providing cooperations in solving problems • Fairly complying with established agreements • Having trust and reliability • Respecting and protecting human rights • Respecting personal data • Payments are made on schedule. • Having an occupational health and safety system at work. 	<ul style="list-style-type: none"> • Complying with Supplier Code of Conduct on purchasing, procurement and engagement • Avoid engaging in business with suppliers who engage in illegal behaviors. • Supporting ESG knowledge to enhance the operations of suppliers, reduce operational risk and reputation risk • Establishing measures to support suppliers, such as offering guidance on digital technology and online safety, especially during emergencies or unforeseen challenges • Establishing a purchasing system that is transparent and verifiable, adhering rigorously to trading conditions and contractual obligations with suppliers. • Considering mutual benefits with suppliers and maintaining equality in business operations. • Having clear penalties in cases of corruption. • Prioritizing suppliers who prioritize ESG business practices and demonstrate a commitment to addressing climate concerns.
4. Customers/Distributors	<ul style="list-style-type: none"> • Communicating and handling complaints via various channels such as website, email, online platforms, telephone, letters, and more. • Visiting customers/distributors at the establishment a minimum of 12 times annually. • Customers participate in making suggestions for product usage. • Distributors involve in business suggestions and promotions. 	<ul style="list-style-type: none"> • Products and services are of high quality, safety and meet standards. • Fair prices • Easy and convenient to buy • Having sales promotion • Having a variety of products for selection • Customers are provided with products that meet their needs, are standardized, and are delivered on time. • Products receive quality assurance when a problem arises that is not attributable to the customer's fault. • Satisfactory service is offered both before and after sales • Delivery on schedule • Respecting and having a good personal data protection system • Respecting human rights and equality 	<ul style="list-style-type: none"> • Conducting surveys and maximizing customer satisfaction. • Abstaining from engaging in deceptive practices or actions that mislead consumers about the quality of products and services. Instead, prioritizing the production of safe and non-harmful products, ensuring the well-being of consumers' health. • Building good relationships for Brand Loyalty • Completely containing product information and use methods • Ensuring the systematic and secure storage of customer/distributor data while abstaining from any form of data misuse. • Fairly pricing products and services • Creating a dedicated department tasked with offering recommendations, knowledge, and insights on products and services, along with problem-solving guidance and receptiveness to customer complains, both pre and post-sales. • Regularly organizing seminars to provide knowledge about products to customers/distributors • Respecting human rights and protect personal data according to the Personal Data Protection Act. • Organizing a stucco art contest and social services • Transmitting customer suggestions to pertinent departments for enhancing the quality of the Company's products and services through further development.
5. Creditors/Bond Holders/ Credit Rating Agencies/ Insurance Institutions	<ul style="list-style-type: none"> • Reporting financial statements on a quarterly basis • Annual Report/Sustainability Report • Task Force on Climate-related Financial Disclosures (TCFD) • Suggestions and complaints 	<ul style="list-style-type: none"> • Having a good corporate governance • Managing work with transparency and sustainability • Carefully managing risks • Full and on time payments • Having good performance results and potential to repay debts • Following the loan conditions. • Focusing on solving climate change issues in a concrete way 	<ul style="list-style-type: none"> • Conducting business with transparency and verifiability under good corporate governance • Complete compliance with loan conditions. • Full and on time debt repayment. • Providing complete financial information • Maximizing returns while instilling confidence through efficient management aligned with ESG principles.

Stakeholder Groups	Guidelines for engaging with stakeholders	Stakeholder needs/expectations	The Company's response guidelines
6. Government Agencies	<ul style="list-style-type: none"> Providing government agencies with reports on business results and performance as mandated by specified timeframes set by the government. 1. Reporting the professional performance of security officers every 3 months. 2. Reporting the Company's compliance with EIA measures every 6 months. Allowing interested government agencies to visit and study the Company's business eight times in 2023. Following up on government policies, regulations, and requirements at least once per month. Supporting activities and responding to government policies as appropriate. 	<ul style="list-style-type: none"> Compliance with rules, regulations, laws and policies of regulatory agencies. Social & Environment Responsibility. Sustainable coexistence Maintaining a strong environmental and safety management system. Support and cooperation with government agencies. Reducing climate change problems. Payment of related taxes and fees Enhancement of operational measures to achieve the Sustainable Development Goals (SDGs). 	<ul style="list-style-type: none"> Transforming waste into fuel to substitute coal within the cement production process, thereby aligning with the government's environmental policy to mitigate greenhouse gas emissions. Transparent business operations Preparation of Sustainability Report Social & Environment Responsibility Sustainably living together with communities Compliance with regulations and providing cooperation and support to various projects of government agencies.
7. Community and Society	<ul style="list-style-type: none"> Accepting complaints and communicating through websites, e-mail, online media, telephone, letters. Organizing community relations activities at least 28 times per month. Organizing public relations at least 2 times per month 	<ul style="list-style-type: none"> Developing the surrounding communities Preserving the environment within the community Creating jobs and fostering a robust economy for the community Ensuring that the operation of the business establishment is safe for the environment and life Supporting community activities and continuous participation Providing educational assistance Paying attention to the feedback from the community 	<ul style="list-style-type: none"> Conducting community visits, receiving suggestions and complaints from the community for improvements Supporting public benefit activities within the community Educating and training employees at all levels, as appropriate, emphasizing the importance of environmental issues and the potential impacts that the Company's business may have on the community Conducting survey for community needs and opinions to respond to their needs correctly and appropriately Providing mobile medical units to continuously serve the community for a better quality of life. Establishing a project to replant forests and restore the condition of the project area after mining Promoting community traditions and customs Developing the community, providing employment, improving the community economy Providing budget to support community development including education, job and career creation, income generation for the community.
8. Business Competitors	<ul style="list-style-type: none"> Monitoring changes in the same industry by collecting various information from websites, news, seminars, and others. Becoming a member of the Thai Cement Manufacturers Association (TCMA) and attending meetings at least 4 times per year. 	<ul style="list-style-type: none"> Establishing fair competition conditions together. Maintaining market share 	<ul style="list-style-type: none"> Conducting business under the rules of free and fair competition. Avoiding damaging the reputation of business rivals. Generating business opportunities in markets distinct from those of competitors. Avoid violating the intellectual property rights and copyrighted materials of competitors. Avoid infringing upon the confidential information of competitors. Behaving in compliance with the framework of good trade. Innovation and technology management aimed at creating unique products and services distinct from those offered by competitors.

Stakeholder Groups	Guidelines for engaging with stakeholders	Stakeholder needs/expectations	The Company's response guidelines
9. Mass Media	<ul style="list-style-type: none"> Occasionally engaging in visits and observations of businesses and activities that contribute to the community and society. Supporting media activities that are consistent with the Company's policies and beneficial to the community and society. Consistently disseminating fresh updates and insights about the Company across diverse channels for public consumption. Annual Registration Statement / Annual Report 2023 (Form 56-1 One Report) Sustainability Report Task Force on Climate-related Financial Disclosures (TCFD) Consistently publishing business news and information through various channels, such as hosting events to announce the Company's quarterly performance results, conducting business press conferences, and actively participating in Opportunity Day organized by the Stock Exchange of Thailand. 	As the company that conducts business with a commitment to sustainable ESG practices	<ul style="list-style-type: none"> Conducting business with the BCG Model by giving importance to the community, society, and the environment through appropriate and regular disclosure and dissemination of information that is beneficial to society. Focusing on climate change and reducing greenhouse gas emissions.

The Company has prioritized stakeholders by assessing: (1) the impact of its business operations on stakeholders across economic, social, and environmental realms, (2) the influence of stakeholders over the Company's business operations across economic, social, and environmental realms, (3) the influence of stakeholders over the Company in the future, and (4) stakeholders having risk of human rights violations within the Company's value chain. Through this assessment, it was determined that the top three key stakeholder groups include:



3.3 Sustainability Management in Environmental Dimension

3.3.1 Environmental Policies and Practices

Environmental Operating Standards, both Nationally and Internationally, are in place.

TPI Polene Group operates its business based on the principles of the Bio-Circular-Green Economy (BCG), aiming to minimize environmental impact across resource utilization, product manufacturing, and waste management. It is committed to achieving Low Carbon Production by reducing greenhouse gas emissions, employing renewable energy sources like waste and waste heat instead of coal, and increasing the adoption of clean electricity. The Company also integrates EV electrical systems into its operations, transitioning from combustion engines in Dump Trucks, Concrete Mixers, and heavy machinery to save on fuel costs. Additionally, stringent control over production processes and adherence to international quality standards underscore its commitment to delivering high-quality services.

The Company stands as the pioneer cement producer in the nation, attaining the ISO 9001:2015 international quality standard certification from a reputable institute. Additionally, it has been granted management system certifications conforming to all four crucial international standards, namely the ISO 9001:2015 for quality management systems, ISO 14001:2015 for environmental management systems, ISO 45001:2018 for occupational health and safety management systems, and ISO 50001:2011 for energy management systems. Furthermore, the Company complies with industrial standards from Thailand, the United States (ASTM), and the European Union (EU), alongside cement factory laboratory standards, all officially certified by the Office of Industrial Standards ISO/IEC 17025:2017 and TIS 17025:2561.

The Company's cement production plant, equipped to produce a wide array of ready-made products, boasts around 43 distinct types. It has earned certifications for quality management (ISO 9001:2015), environmental management (ISO 14001:2015), occupational health and safety (ISO 45001:2018), and energy management (ISO 50001:2011) from the reputable international institute AJA Registrars.

The Company stands as the pioneer fiber cement producer in the nation, employing Digital Printing technology to adorn its products with diverse imagery, ranging from natural patterns to bespoke designs tailored to customer

preferences. Notably, it has successfully cleared the rigorous EN12467:2002 + A1:2006 test, obtained the CE Mark, and earned certifications for its quality management system (ISO 9001:2015) and environmental management system (ISO 14001:2015) from the British Standards Institution (BSI). Furthermore, it complies with the industrial product standard TIS 1427-2561, cementing its commitment to excellence across all facets of production.

The Company, the foremost leader and sole manufacturer in the country capable of advancing Ethylene Vinyl Acetate (EVA) plastic production technology across diverse applications, operates the Specialty Polymer LDPE/EVA plants. This facility boasts certification across all three industry standards: the Quality Management System Standard (ISO 9001:2015), the Occupational Health and Safety Management System Standard (ISO 45001:2018), and the Environmental Management System Standard (ISO 14001:2015), duly recognized by the Department of Industrial Works under the Ministry of Industry. Renowned as a Level 3 Green Industry factory, it upholds systematic environmental management practices, with dedicated follow-up and review processes to ensure sustainable development.

Furthermore, Thai Nitrate Company Limited, a subsidiary, stands as Thailand's leading producer of ammonium nitrate. Its products meet both industry standards (TIS) and international standards, boasting quality management systems compliant with ISO9001:2015, ISO14001:2015, ISO45001:2018, ISO5001:2018, ISO/IEC17025-2017, and HALAL requirements.

3.3.2 Environmental Performance

(1) Energy Management

The Company's policy prioritizes various aspects, including product design, resource procurement for production, design and control of production processes, and the utilization of high-efficiency machinery to reduce energy consumption and minimize energy wastage. Additionally, it promotes the adoption of renewable energy sources, such as fuel derived from waste and oil extracted from tires, etc.

The Company implements ISO 50001, an international standard for energy management, as a guiding principle for its operations. A designated individual oversees electrical and thermal energy management at both senior and operational levels. The Focus Improvement Pillar serves as the primary framework for identifying energy loss points and driving collaborative efforts, considered as main pillar



focusing on minimizing “waste”. Furthermore, the Company emphasizes green research and development, designing products with reduced energy consumption and adopting a reuse and recycle approach for all raw materials.

The Company has established targets for energy utilization per ton of clinker and cement production, per ton of special polymers production, and per ton of fiber cement production.

Measurement results showed that in 2023, there was a decrease in the energy consumption per unit for producing special polymers, whereas for cement production, there was an increase in energy consumption per unit. This increase was attributed to the utilization of waste fuel as a partial substitute for coal, aimed at reducing greenhouse gas emissions. However, the lower quality of waste fuel compared to coal resulted in an overall increase in total energy consumption.

For further information, please refer to the Sustainability Report, specifically the energy management section, which is available on the Company’s website at <https://tpipolene.co.th/th/investment/sustainability> or by scanning following QR Code



(2) Used Water and Wastewater Management

The Company has managed water resource across its business operations, including the supervision of used water

and wastewater, aimed at mitigating the impacts stemming from diverse water-intensive activities, in accordance with the BCG strategy for sustainable development.

The Company aims to reduce water resource consumption by implementing strategies like reusing treated surface water and wastewater. Its goal is to regulate river water usage to stay within 12,000,000 cubic meters per year while ensuring wastewater quality meets Department of Industrial Works standards.

In 2023, a total of 5,490,098 cubic meters of water from the Pa Sak River were utilized, while the recycled water amounted to 1,362,200 cubic meters, marking a 40.81 increase from the previous year’s figures.

For further information, please refer to the Sustainability Report, specifically the used water and wastewater management section, which is available on the Company’s website at <https://tpipolene.co.th/th/investment/sustainability> or by scanning QR Code



(3) Waste Management

TPI Polene Group has prioritized waste management within its production process, aiming to repurpose over 95% of industrial waste generated annually. Committed to a Zero Waste to Landfill policy, it eliminates or safely disposes of waste without environmental harm. This is achieved through a process of co-burning waste with primary fuel in a cement

kiln, operating at temperatures exceeding 1,800 degrees Celsius within a closed system. It is considered a modern technology for its minimal impact on community quality of life and its environmentally friendly nature. Moreover, the Company implements the BCG strategy to maximize the efficient utilization of raw material resources. Surplus materials from one factory are repurposed as raw materials in another factory within the Company Group, in accordance with the Notification of Ministry of Industry.

In 2023, industrial waste utilization reached 6,087.14 tons, representing 99.43% of the total industrial waste generated that year, which is higher than the target.

For further information, please refer to the Sustainability Report, specifically the garbage and waste management section, which is available on the Company’s website at <https://tpipolene.co.th/th/investment/sustainability> or by scanning following QR Code



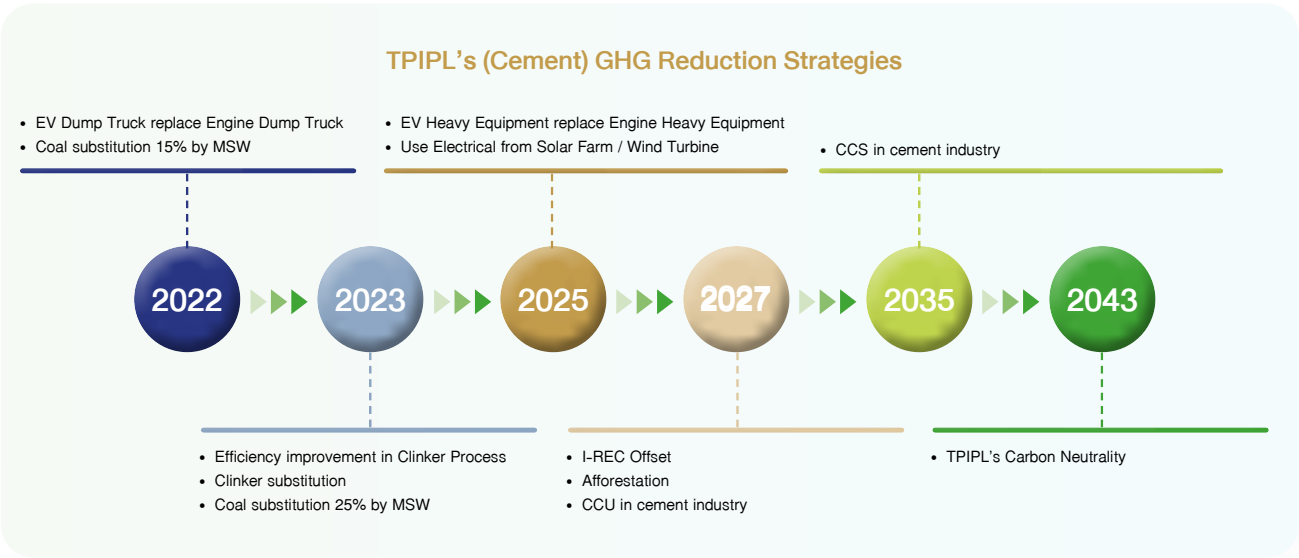
(4) Air Pollution Management

The Company has prioritized the reduction of greenhouse gas emissions, recognizing its significant contribution to global warming. With its policy and vision to become an environmentally friendly cement producer, the Company has emphasized the utilization of energy and renewable fuels over fossil fuels. This commitment includes

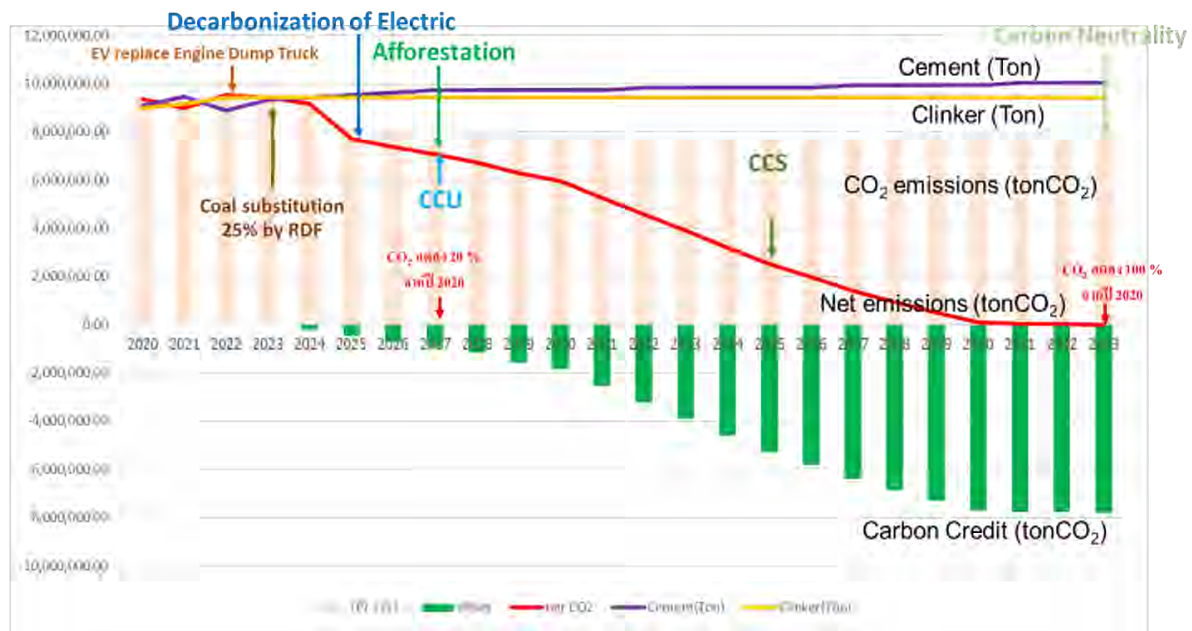
sourcing electricity from renewable sources such as wind and solar power, as well as employing electric vehicles and heavy machinery like EV Dump Trucks, in place of diesel-fueled engines, to further mitigate environmental impact. The conveyor belt system is also used to transport raw materials from the quarry into the factory, reducing transportation costs while simultaneously decreasing greenhouse gas emissions and PM2.5 dust levels.

The Company’s objective is to process waste to substitute for coal fuel, aiming to fulfill up to 25% of the required heat amount. However, in 2023, cement plants managed to utilize waste fuel in place of coal by only 14% of coal. This figure falls short of the 25% target due to the gradual installation of machinery across four production lines within cement plants. The installation of machinery in the final production line was completed in December 2023. Consequently, the average rate of using waste fuel instead of coal in 2023 did not reach the set target of 25%.

TPI Polene Group has identified climate risk management as a crucial sustainability concern and has announced its commitment to achieving carbon neutrality by 2043. This dedication is reinforced by a comprehensive roadmap outlining various initiatives within the organization. Additional information can be found in Form 56-1 One Report 2023, on page 12-15, under the section detailing TPI Polene Group’s determination to achieve carbon neutrality by 2043, adjacent to the TCFD section.



TPIPL's (Cement) 2043 Carbon Neutrality Pathway



For more information, please visit the Sustainability Report on Air Pollution Management on the Company's website at <https://tpipolene.co.th/th/investment/sustainability> or Scan QR Code



(5) Biodiversity

The Company has prioritized business operations that embrace sustainable environmental and social responsibility, ensuring no impact on the ecosystem and biodiversity. Consequently, biodiversity management is a paramount concern for the Company, encompassing the preservation of ecosystems as habitats for diverse species and the integration of values to ensure comprehensive and effective biodiversity conservation.

The Company aims to integrate biodiversity management by enforcing its Quality, Security, Safety, Health, and Environment (QSHE) policy, particularly in sensitive areas, to comply with laws and standards and to prevent and mitigate biodiversity loss. This involves fostering community participation and engaging with key stakeholders to enhance biodiversity management efficiency, as well as communicating related activities to local communities, employees, and the public.

The Company has designated a budget for biodiversity support aimed at facilitating tree planting initiatives to expand forested areas for communities and affiliated organizations. This fund, totaling Baht 786,000, has been accumulating since 2019, with an annual contribution of Baht 300,000 until the conclusion of 2023.

Further details are available on the Company's website at <https://www.tpipolene.co.th/th/investment/biodiversity-th> or by scannign following QR Code



3.4 Sustainability Management in Social Dimension

3.4.1 Social Policies and Practices

TPI Polene Group is fully aware of the activities and business operations of the Company and its subsidiaries, recognizing the sensitive nature of these activities and operations. Therefore, it diligently adheres to policies and practices in accordance with relevant laws, rules, and regulations governing social management. This commitment extends to upholding and safeguarding human rights across the entire business value chain, encompassing employees, suppliers, customers, and the social community. The Company integrates social responsibility into every aspect of its operations, fostering connectivity throughout the TPI Polene Group's business value chain.

3.4.2 Social Performance

Human Resource Management

1. Employment: The Company has established a comprehensive manpower plan and recruitment procedures aimed at attracting high-potential individuals, both internally and externally, whose qualifications align with the Company's culture and objectives, and they will be a part of the driving force for the Company. Adequate manpower is strategically planned to sustain operations, ensuring that employee turnover remains at an optimal level. Welfare arrangements are regularly reviewed to reflect the current cost of living, while proactive recruitment strategies, leveraging technology to target specific groups, are employed. The Company prioritizes equal employment opportunities to promote social sustainability, maintaining a fixed employment rate within the region. Furthermore, initiatives are in place to provide employment opportunities for individuals with disabilities, contributing to societal sustainability. Additionally, key positions undergo competency assessment tests to identify and select candidates with the greatest potential. The Company has prioritized adherence to Thai labor standards and laws, emphasizing the safeguarding of human rights. This commitment is underscored by the TPI Polene's Ethics Policy, which mandates respectful treatment based on human rights principles. Furthermore, the Company has implemented a comprehensive system for inspection, monitoring, evaluation, and review to ensure all employees adhere to and comply with these guidelines. Moreover, the Company unequivocally rejects the employment of child laborers under 18 years old and informal laborers lacking legal protections. These regulations extend to the Company, its subsidiaries, contractors, and subcontractors.

The Company prohibits and condemns the utilization of child labor in hazardous or unsanitary conditions, or in any work prohibited by law. To ensure compliance, top executives conduct monthly visits to engage with both executives and employees in these matters.

2. Labor Management and Labor Relations: The Company prioritizes equitable treatment for all employees, ensuring fairness in pay, training, safety, occupational health, and career advancement. This commitment extends to encouraging employees to share their ideas, engage in events, and participate in satisfaction and engagement surveys, all aimed at fostering their development and enhancing overall satisfaction levels. The Company not only offers measures for addressing complaints but also carries out inspections, implements corrective measures, oversees these actions, and identifies optimal practices. An impartial investigation committee has been established, and employee engagement activities are organized during festivals to foster stronger management-employee rapport. Compliance with legal mandates includes forming a welfare committee with representatives from both employer and employees, duly elected by the latter. Additionally, initiatives are in place to enhance employee readiness for swift succession at the supervisor level and above, particularly for replacing retiring staff.

According to the employee satisfaction and engagement survey conducted at TPI Polene Public Company Limited in 2023, individuals participated out of a total of 5,324 employees, equating to 84.17% of the entire workforce (with an average score of 4.21).



Survey Objectives

To modify and enhance work efficiency and establish a sustainable employee care process, the goal is to ensure that employees attain a satisfaction and engagement level of 3.75 or above, equivalent to 75% or higher on average.

No.	Issues	Results		
		Average Score	%	Satisfaction/ Engagement Level
Issues Related to Job Satisfaction				
1	Management	4.12	82.38	High
2	Supervisor	4.02	80.43	High
3	Work Process or Procedure	4.27	85.36	Highest
4	Working Environment	3.93	78.95	High
5	Personnel Development	4.05	81.10	High
6	Welfare and Compensation	4.11	82.19	High
Job Satisfaction Survey Results in Average		4.08	81.65	High
Issues Related to Employee Engagement				
1	Operations toAchieve the Company's Objectives	4.51	90.19	Highest
2	Pride and Loyalty to the Company	4.63	92.65	Highest
Average Score on Employee Engagement		4.57	91.42	Highest
Total Average Score		4.21	84.17	High

Employee Satisfaction Development Project

According to the employee satisfaction and engagement survey summary, the "Working Environment" issue received a very satisfactory rating, with an average score of 78.95%. However, it still holds the lowest score among all opinion issues. Consequently, the Company will launch a project aimed at enhancing and cultivating a more conducive work environment. This initiative encompasses installing a water cooler and fans for employees, ensuring the surrounding work area is non-slippery to mitigate accidents, and eradicating dust accumulation. Additionally, the project will prioritize restroom cleanliness and expand restroom facilities to meet the employees' needs. Furthermore, it will revamp the employee parking space to ensure both quality and adequacy for the workforce size, among other improvements.

3. Training and Education : The Company focuses on building skills for employees, which is an important strategy for improving the quality of the organization by aiming for personnel to have knowledge, experience, and the ability to work efficiently. With a commitment to the Company Group's development to be a learning organization, build culture and working climate, and promote teamwork, the Company will undertake an annual training necessity survey, an annual

training plan, as well as a satisfaction survey to evaluate the training outcome.

In 2023, TPI Polene Group successfully maintained its manpower by ensuring that the employee turnover rate remained below 3.5%. The hiring rate of personnel in the factory area exceeded 50% each year. According to the survey, employee satisfaction with their work stood at 81.65%, while employee engagement reached 91.42%, reflecting their satisfaction and engagement at a high level of. Additionally, the average number of training hours for all courses was 22.49 hours per person per year, with a training evaluation satisfaction rate of 90%.

To uphold and safeguard human rights among its employees, as mentioned above, the Company also actively encourages suppliers to rigorously adhere to the requirements outlined in the Supplier Code of Conduct concerning human rights practices. This commitment is exemplified by the fact that, as of 2023, 92.04% of the Company's suppliers have formally acknowledged and signed the Supplier Code of Conduct. Efforts are ongoing to ensure all suppliers fully endorse this Supplier Code of Conduct, underscoring its dedication to maintaining concrete human rights operations.

(Update)

The Company implements a policy aimed at regularly nurturing its personnel, fostering their knowledge, abilities, skills, and experiences. This encompasses on-the-job training to harness expertise from actual work, unlocking the potential of employees across all levels. This approach not only bolsters the organization's strategy execution towards its objectives but also underpins future business expansion and projects, ultimately enhancing the organization's competitiveness. The Company thus mandates that supervisors and employees conduct follow-ups and collaboratively assess performance continuously throughout the year. They also review plans for skill, ability, and competency development through annual training needs surveys.

In 2023, the Company remains dedicated to fostering ongoing learning among its employees, promoting upskilling and reskilling initiatives to empower both male and female staff across all levels. This commitment ensures readiness in skills, knowledge, and abilities, fostering mutual benefits for individuals and society alike. Through tailored personnel development plans rooted in employees' potential, the Company aligns job positions with its vision, mission, and direction. In response to the alleviation of the current COVID situation, the Company has expanded its training efforts, incorporating both traditional classroom-style sessions and an additional online format. This dual approach facilitates accessibility and safety, reaching employees in diverse locations. Moreover, it aims to mitigate risks and minimize costs. A target has been established, ensuring each course averages no fewer than 20 hours per person annually.

Safety, Occupational Health, and Working Environment

TPI Polene Group places importance on occupational health and safety management systems, considering them integral to business operations. The Company is committed to improving and preventing all existing hazards, including injuries and illnesses due to work, for employees, suppliers, contractors, and stakeholders involved in operations within the Company's areas and every work area. This commitment aims to prevent and reduce losses that may occur to life and property, including impacts on surrounding communities.

The Company has set goals to become an organization with zero accidents and injuries (Zero Accident), ensuring zero occurrences of injuries and fatalities resulting from work. Additionally, it aims for a zero rate of high-impact work-related injuries and zero instances of illness stemming from work-related diseases.

In 2023, the workplace recorded a mortality rate of zero, alongside a zero injury rate associated with high-impact work and a nil incidence of sickness attributed to work-related diseases.

Corporate Social Responsibility

Corporate social responsibility activities at TPI Group of Companies Poline are structured around two primary domains: Community Relations and Corporate Social Responsibility (Corporate CSR). In 2023, TPI Polene Group allocated a budget of Baht 71.26 million to support all community and societal initiatives, encompassing construction materials and healthcare products. These endeavors were conducted concurrently in both areas, yielding the following summary of efforts.

Community Relations

PI Polene Group has production plants located in various community areas. Therefore, the Company has implemented a proactive policy for every production unit to support hygiene and reduce the impact of the epidemic, without waiting for the community to request it. This is achieved by providing support to surrounding communities and addressing important societal needs as follows:

(1) Strengthening communities for better health by offering mobile medical unit services as part of the Good Health with TPI project. These services include monitoring illnesses, providing health check-ups, and disseminating health knowledge. Additionally, conducting lung examinations brings further benefits to the surrounding communities in Kaeng Khoi District, Muak Lek District, Saraburi Province.

(2) To promote and enhance the quality of life for Thai people, the Company has partnered with the 2nd National Blood Service Sector (Lopburi Province) and the Red Cross Society in Saraburi Province. They organized blood donation activities involving executives, employees of TPI Polene Group, and contractors, resulting in the donation of over 83,700 cc of blood to aid patients in Saraburi and nearby provinces.

(3) Chemical-free Agriculture For Lunch Project for 2023 at Ban Sub Bon School, Saraburi Province. This project aims to provide learning resources on growing vegetables using chemical-free agriculture in community schools. Additionally, it aims to promote good nutrition among students by providing food and to increase income for students at Ban Sub Bon School.

(4) In 2023, the Board of Directors, executives, and employees of TPI Polene Public Company Limited, TPI Polene Power Public Company Limited, and affiliated companies, along with the Environment for Life Foundation, organized a tree planting project aimed at reducing global warming. The project involved planting 2,000 trees to increase green space at TPI Cement Factory in Saraburi Province. The objective was to enhance greenery within the factory area, thereby improving the surrounding ecosystem and aiding in the absorption of carbon dioxide, which accumulates daily in the atmosphere. Additionally, the project aimed to foster positive relationships and attitudes toward environmental protection, encouraging everyone to participate in tree planting to address the issue of global warming more effectively.

Corporate CSR

Community Involvement and Development

Throughout 2023, the TPI Polene Group consistently collaborated to extend support to society and communities, as outlined below:

Social and Community Assistance Activities

The Scholarship Program initiated by TPI Polene Group aims to provide educational opportunities for deserving youth who excel academically and display good behavior but face financial constraints. The program aims to alleviate the financial burden on parents by offering continuous scholarships from kindergarten through bachelor's degree levels. This initiative commenced in 2011, initially focusing on granting scholarships to students residing in the community adjacent to the factory in Saraburi Province (specifically, the 9 houses group, Kaset Samphan Community, Village No. 10, Thap Kwang Sub-district, Saraburi Province). Upon graduation, these scholars are offered employment within the Company, fostering a strong sense of unity akin to a family within the local community. Additionally, scholarships amounting to Baht 295,000 per year are awarded to six schools spanning from kindergarten to lower secondary education levels. This support has been consistently provided for the past 30 years.

The Company donated 809 tons of TPI cement products, TPI dry concrete, Nano Super Armor TPI paint, TPI tiles, lightweight blocks, wood substitute products, and TPI boards, etc., for improvements. These improvements included repairing school buildings, roofs, painting buildings, road surfaces, school entrances, and playground floors at 25 schools nationwide. Examples include: the "TISCO Ruamjai" project that the Company constructed a 2-storey

school building with 8 classrooms to replace the original wooden building at Wat Non Sadao School, Wachirabarami District, Phichit Province; enhancing TPI paints to paint the school building walls at Suankularb Wittayalai School, Saraburi Province; and the "Baan Namjai Project: Returning Happiness to OBEC's Children", the 18th house, Nong Khae District, Saraburi Province, by building a concrete yard to serve as a multi-purpose sports stadium at Ban Phu Din Phatthana School, Ban Sueang Khao School, Ban Nong Bua Thong School, Ban Chan Bua School, and Ban Duea School in Sisaket Province, among others.

The Company supported budgets for various agencies, such as TPI Polene Public Company Limited and TPI Polene Power Public Company Limited. Executives, employees, and relatives joined in donating Baht 21,285,062 to the Mahidol Day Fund in 2023 to assist underprivileged patients at Siriraj Hospital. Additionally, the Company supported the following initiatives: donating Baht 2,100,000 to the Saint Camillo Foundation of Thailand for the procurement of one ambulance van equipped with medical equipment for sick elderly people; contributing Baht 1,200,000 worth of 20 sets of prosthetic arms and legs to the Association of Promotion Development for the Disabled and the Disadvantaged; providing Baht 240,000 in assistance to individuals with mobility disabilities in Uthai Thani Province; supporting the acquisition of a portable ultrasonic internal organ examination machine with two probes, valued at Baht 450,000, for Ang Thong Hospital in Ang Thong Province; and donating 300 sweaters through the Turkish Embassy in Thailand to aid victims affected by the earthquake in Turkey.

- The Company donated 91.75 tons of TPI cement products, 592 cubic feet of TPI dry concrete, fiber cement products, TPI Nano Super Armor paint, and other products to support repair and improvement projects for various government agencies. These projects aim to benefit individuals lacking financial resources, including the construction of new buildings for overnight accommodation for the intellectually disabled at the Northeastern Welfare Center for Mentally Retarded in Udon Thani Province. Additionally, the Company's contributions supported a road construction project for the residents of Ban Pa Phaya Doi Temple in Doi Tao District, Chiang Mai Province, facilitated through the Ingboon Foundation. The Company also participated in the Chaloem Phra Kiat District's housing repair and construction initiative for underprivileged communities in Saraburi Province in 2023.

Furthermore, the Company assisted in renovating old buildings within the Khlong Prem Central Prison premises (Building for inmates' vocational training in entrepreneurship). Lastly, the Company contributed to the enhancement of the tree maintenance training center in the teak forest orchard area of Muak Lek District, Saraburi Province, which serves as a vital venue for forestry training for members of the community forest network.

- The Company participated as the host of Mahachula Kathin at Wat Sri Don Moon in Chiang Mai Province, hosted the Kathin Samakkhi ceremony at Wat Ban Hinlab in Saraburi Province, Tham Sarika Temple in Nakhon Nayok Province, and also donated 1,723 tons of TPI cement products, 300 cubic meters of TPI ready-mixed concrete, fiber cement products, TPI Nano Super Armor paint, and other products to 17 temples nationwide. Examples of its involvement include participating in the construction of Phra Maha Chedi Somdej from the 1st to the 4th floors of Wat Luang Phor Sod Dhammakayaram in Ratchaburi Province, renovating St. Joseph's Church in Saraburi Province, flooring the kitchen area for Tham Nakarat Monastery in Saraburi Province, constructing a multi-purpose restroom at Sap Pradu Temple in Saraburi Province, and providing support with paints for repairing the building of the Romklao Church in the Love the Neighbor Foundation, among other activities.
- The Company supported a total of 13,992 bottles of TPI PL drinking water, each sized at 350 ml, and 31,480 bottles of Provita drinks to temples, schools, and various agencies. Additionally, the Company organized volunteer activities and beneficial events. These included supporting the Buddhist Lent festival by donating to 33 temples in Saraburi Province, arranging activities for the National Children's Day 2023 project within Saraburi Province, and backing the event "the 2nd Cycling Two Dams: Visiting Luang Pu Yai Pa Sak Event" to promote tourism in the area of Wang Muang District, Saraburi Province. The Company also supported and participated in walking-running competitions for charity and health under the 'Cavalry XC Run Mini — Half Marathon 2023' event at Cavalry Center, Adisorn Camp,

Saraburi Province. Furthermore, the Company sponsored the organization of Muak Lek United Friendship Sports, aimed at extending relationships among students in Muak Lek District, supported the organization of the Songkran Festival and New Year Festival 2023 events for the Kaeng Khoi District Safety Center, Kaeng Khoi Highway Section, Muak Lek Sub-district Administrative Organization, Tao Poon Sub-district, Tha Klo, Song Khon, Nong Pla Lai, Lam Phaya Klang, and Mittraphap Sub-district, and the Highway Police Service Unit in Thap Kwang, Saraburi Province, among others.

Products and Service Development with Responsibilities

Researching, developing, and improving the Company's products and services is considered a critical process for researching, developing and improving products and services each time, so the Company must truly understand consumer needs or satisfaction with products. This is done by surveying current consumer demands, budgets used, duration, and implementation of new technologies or innovations in the process of product and service development. Also, the Company's production processes of goods and services must be controlled to meet the Quality Management System Standard (ISO 9001:2015), environmental management system standard (ISO 14001:2015), and management system standard, Occupational Health and Safety (ISO 45001:2018) and Energy Management System Standards (ISO50001:2011), to provide quality, safety, standardized products through modern, environmentally friendly means and that are versatile to meet consumers' needs. <https://www.tpi.polene.co.th/th/aboutus/about-tpi/policy> หรือ Scan QR Code



4. Management Discussion and Analysis : MD&A



4.1 Analysis of Operations and Financial Status

4.1.1 Overall Performance in 2023

Sales Revenue

In 2021, 2022 and 2023, the Company and its subsidiaries had revenue from sales of Baht 38,920 million, Baht 48,133 million, and Baht 42,807 million, respectively. Sales revenue from construction business sector accounted for 43.6%, 47.8%, and 56.3% of total revenue from sales respectively.

Sales revenue from petrochemical and chemical businesses sector accounted for 32.2%, 34.8%, and 24.6% of total sales revenue respectively and sales revenue generated from the energy and utilities businesses sector accounted for 23.8%, 17.1%, and 18.8% of total sales revenue respectively.

In 2023, sales revenue generated from the Construction materials business sector increased by 4.7% over the previous year due to the increase in sales volume and clinker price, together with the increase of average selling price of domestic cement and the average selling price of ready-mixed concrete increased in line with the economic direction recovered after cancellation of measures

to control the spread of COVID- 19 and the situation of COVID-19 disease has subsided, As a result, the demand for construction materials products increased, coupled with the increase in sales prices in line with the increase in production costs stemming from the increase in electricity and fuel prices.

In 2023, revenue from sales of the petrochemical and chemical business sector decreased by 37.1% over the year 2022 as as the average selling price of specialty grade declined due to significant supply pressures from new manufacturers in Northeast Asia and from lower global demand from a shrinking global economy. As a result, the prices of specialty grade and petrochemical products have mostly declined significantly especially compared with 2022, the year that petrochemical product prices rose to the highest level in a decade.

Sales revenues generated from the energy and utilities businesses sector in 2023 decreased by 2.2% over the year 2022 as the units of power sale in 2022 decreased and the adders for the 18-megawatt and 55-megawatt municipal solid waste fuel (MSW) power plants expired in January 2022 and August 2022, respectively, with full-year impacts realized in 2023. Meanwhile, the volume of electricity sold

to the Electricity Generating Authority of Thailand increased due to higher efficient power plant operation. As a result, the sales revenue of the energy and utilities business decreased slightly.

Other income which consists of transportation income, net foreign exchange gain, investment income, and other income in 2021, 2022, and 2023 were Baht 2,359 million, Baht 2,830 million, and Baht 2,155 million respectively. Other income in 2023 consists of transportation revenue, investment income, machinery rental income decreased compared with the same in 2022, including recording the decrease of foreign exchange gain as well.

Total consolidated revenue in 2021, 2022, and 2023 were Baht 41,279 million, Baht 50,963 million, and Baht 44,963 million respectively.

Cost of Goods Sold

Consolidated cost of goods sold in 2021, 2022, and 2023 were Baht 26,391 million, Baht 35,277 million, and Baht 32,900 million respectively, representing 67.8%, 73.4%, and 76.9% of sales revenue, respectively. As a result, gross profit margin in 2023 was 32.2%, 26.6% and 23.1% of sales revenue, respectively mainly due to the decrease of gross profit margin in petrochemicals and chemicals businesses due to lower average selling price of plastic resin products.

Selling and Administrative Expenses

Consolidated selling and administrative expenses in 2021, 2022, and 2023 were Baht 5,394 million, Baht 5,713 million, and Baht 5,416 million respectively, which accounted for 13.9%, 11.9%, and 12.7% of total revenues from sales respectively. Selling and administrative expenses as a percentage of revenues in 2023 increased because in 2023 sales revenue decreased by Baht 5,326 million or decreased by 11.1% from the same in 2022 while selling and administrative expenses decreased by Baht 296 million or a decrease of 5.2% from the year 2022 whilst selling and administrative expenses increased in a smaller proportion than the increase in sales revenue.

Interest Expenses (Cost of financial debt)

In 2021, 2022, and 2023, the Company and its subsidiaries recorded interest expenses of Baht 2,062 million, Baht 1,935 million, and Baht 2,076 million respectively. In 2023, the Company's interest expense increased compared with the same in 2022 due to increased interest-bearing

liabilities from the issuance of short-term bills of exchange and the issue and offering for sale of additional debentures during the period with the objective of utilizing the proceed for repayment of maturing debentures and support investment in machinery to develop and improve the production efficiency of cement plants, LDPE/EVA plant, Pharmaceutical Plants, investment in machinery and equipment to improve power plants to switch to use waste fuel instead of coal in line with the Group's goal aiming to reduce coal consumption to zero, expansion of additional power generation capacity, including the efficiency enhancement of waste-to-fuel power plants and use as working capital for business operations.

Net Profit

In 2021, 2022, and 2023, the Company and its subsidiaries registered normal operating profit for the year (excluding gain (loss) from foreign exchange and tax expense) of Baht 7,067 million, Baht 7,573 million, and Baht 4,509 million in 2021, 2022, and 2023, respectively.

In 2021, 2022, and 2023, the Company and its subsidiaries registered profit for the year of Baht 6,918 million, Baht 7,845 million, and Baht 4,305 million, (Profit attributable to owners of the parent of Baht 5,671 million, Baht 7,008 million, and Baht 3,218 million, respectively, or basic earnings per share (owners of the parent) of Baht 0.297, Baht 0.370, and Baht 0.170, respectively. The profit in 2023 decreased, due to lower profit from petrochemicals and chemicals business and lower sales volume and average selling price of plastic resin products.

Operational Results classified by Business Sector

Construction Materials Business Sector

Sales revenue from the construction materials business in 2023 increased by 4.7% compared with the same in 2022, as a result of an increase in sales volume and average selling price of cement in domestic market, coupled with an increase in the average selling price of ready-mixed concrete.

Gross profit margin from the construction materials business declined from 12.9 % in 2022 to 10.4 % in 2023 due to the increase in electricity cost. Even though coal prices in the second half of 2023 began to decline, the Company expects the cost of fuel used in the production process to decrease in 2024, driven by lower coal prices and the use of waste fuel as an alternative for coal.

Sales revenue from the construction materials

business in 2022 increased by 35.5% compared with the same in 2021 due to an increase in sales volume and export selling price of clinker, while the average selling price of domestic cement and the average selling price of ready-mixed concrete rose due to the increase in production costs due to the increase in coal and fuel prices. Gross profit margin in the construction materials business increased from 12.1% in 2021 to 12.9 percent in 2022.

Petrochemicals and Chemicals Business Sector

In 2023, sales volume of plastic resins decreased compared with the same in 2022 as average selling price of plastic resins decreased declined by 39.3% and sales volume decreased by 5.7%, whereas sales revenue of ammonium nitrate and nitric acid increased by 3.0%. The petrochemicals and chemicals business sector generated majority of revenue from the sale of plastic resin products, accounting for 74% of the sales revenue. As a result, the performance of the petrochemicals and chemicals business sector dropped, with plastic resin products having a lower gross margin from 39.5% in 2022 to 22.5%.

In 2023, due to the lower difference between plastic resin selling price and ethylene cost whereas gross margin of ammonium nitrate and nitric acid products increased from 36.0% in 2022 to 46.7% in 2023.

In 2022, sales revenue from petrochemical and chemical businesses sector increased by 33.6% with the average selling price of plastic resin has risen considerably by 27.3%. In addition, in 2022, sales volume and average selling price of ammonium nitrate increased compared with the same in 2021, resulting in an improved performance of petrochemical and chemical business sector. Gross profit margin of specialty grade products slightly decreased from 42.5% in 2021 to 39.5% in 2022 due to a decrease in the spread between plastic resin prices and ethylene prices during the fourth quarter, while gross profit margin of ammonium nitrate and nitric acid products increased from 32.3% in 2021 to 36.0% in 2022.

Energy and utilities businesses sector

Sales revenues generated from the energy and utilities businesses sector in 2023 decreased by 2.2% over the year 2022 as the units of power sale in 2022 decreased and the adders for the 18-megawatt and 55-megawatt municipal solid waste fuel (MSW) power plants expired in January 2022 and August 2022, respectively, with full-year impacts

realized in 2023 whereas electricity sales volume to the Electricity Generating Authority of Thailand increased due to enhanced operating efficiency. As a result, the sales revenue of the energy and utilities group slightly decreased, with the proportion of revenue in 2023 consisting of 94.3% of revenue from power plants and 5.7% from petrol and gas stations.

In 2023, gross margin from the energy and utilities business sector increased from 29.6% in 2022 to 36.5% in 2023 due to lower fuel costs.

In 2022, revenue from sales decreased by 11.1% compared with the same in 2021, due to the decrease in overall electricity sales due to the expiration of the adder for waste-to-energy power plants 18 MW and 55 MW in January 2022 and August 2022 respectively. The revenue proportion in 2023 consisted of revenue from power plants of 94.3% and revenue from petrol and gas stations of 5.7%. In 2022, gross margin from energy and utilities business sector decreased from 44.1% in 2021 to 29.6% in 2022 due to the expiration of the adders for the 18-megawatt and 55-megawatt municipal solid waste fuel (MSW) power plants expired in January 2022 and August 2022, respectively.

Agricultural Group

In 2023, sales revenue increased by 11.2% compared with the same in 2022 as gross margin in the agricultural business decreased from 42.1% in 2022 to 17.2% in 2023 due to an increase in cost of goods sold.

In 2022, sales revenue decreased slightly by 1.9% compared with the same in 2021. However, the performance in the agricultural sector improved as gross margin improved from 25.4% in 2021 to 42.1% in 2022.

4.1.2 Financial Position and Financial Ratios for the year 2023

Assets

As at 31 December 2021 and 31 December 2022 and 31 December 2023, total consolidated assets were Baht 135,714 million, and Baht 144,499 million, and Baht 163,415 million, respectively. In 2023, the increase in assets value was mainly due to additional investments in various projects in the energy and utilities businesses sector and the development of production efficiency in cement projects, petrochemical plants and modern pharmaceutical plant coupled with recording of intangible assets in respect of raw material costs and limestone concessions, as well as cash and cash equivalents, and other current financial assets increased.

In 2023, current assets increased, mainly due to an increase in cash and cash equivalents and other current financial assets. In 2023, current assets increased due to an increase in cash and cash equivalents and other current financial assets. The proportion of inventories in 2021, 2022 and 2023, which accounted for 44.9%, 49.5% and 39.0% of total current assets, equating to average inventory turnover periods of 183 days, 179 days, and 179 days respectively. Trade accounts receivable (after the provision of doubtful debts) represented 17.0%, 14.2%, and 14.2% of total current assets, which equated to an average collection period of 50 days, 43 days, and 43 days, respectively. The average debt collection period decreased due to the trade receivable turnover ratio increased stemming from increased sales volume.

As at 31 December 2019 and 31 December 2021 and 31 December 2022, the property, plant and equipment of the Company and its subsidiaries were Baht 96,366 million, Baht 100,474 million, and Baht 109,157 million, respectively. The increase in the property, plant and equipment in 2023 was mainly due to additional investments in various projects in the energy and utilities, cement and plastic resin businesses sectors.

Liabilities

Total consolidated liabilities were Baht 78,152 million, and Baht 81,685, and Baht 98,788 million at the end of 2021, 2022, and 2023 respectively. The debt liabilities increased due to the Company's increased short-term loans from the issuance of short-term bills of exchange and the Company and its subsidiaries issued and offered

additional debentures to refinance the matured debentures in 2023 and support the Group's investments. In addition, in 2023, the Company recorded an increase in other non-current liabilities from accrual concessions fee of its cement business.

Trade account payables at year-end 2021, 2022 and 2023 were Baht 3,617 million, Baht 3,792 million, and Baht 2,874 million, equating to an average payment period of 44 days, 38 days, and 36 days respectively.

As at 31 December 2021, 31 December 2022, and 31 December 2023, the Company and its subsidiaries had long-term loans from financial institutions of Baht 1,000 million, Baht 0, and Baht 0 respectively and debenture debts of Baht 63,244 million, Baht 66,586 million, and Baht 75,398 million respectively. In 2023, the Company and its subsidiaries issued and offered for sale of addition debentures to refinance the matured debentures and repay short-term bills of exchange, support investment in machinery to develop and improve the production efficiency of in cement projects, petrochemical plants and modern pharmaceutical plant, investing in machinery and equipment to improve power plants to switch to use waste fuel instead of coal in line with the Group's goal to reduce coal consumption to zero, expansion of additional power generation capacity, including the enhancement of waste-to-fuel power plants and for working capital for business operations.

However, as of December 31, 2021, 2022 and 2023, the Company and its subsidiaries had cash, cash equivalents and other current financial assets of Baht 11,664 million, Baht 11,625 million and Baht 20,699 million, respectively. After deducting from total liabilities, the Company and its subsidiaries had net liabilities of Baht 66,488 million, Baht 70,060 million and Baht 78,090 million, respectively.

Shareholders' Equity

As at 31 December 2021, 31 December 2022, and 31 December 2023, shareholders' equity was Baht 57,562 million, Baht 62,814 million and Baht 64,626 million, respectively. Value of shareholders' equity increased as the Company and its subsidiaries' net profit from operations increased during the period.

Capital Structure

As at 31 December 2021, 31 December 2022, and 31 December 2023, the debts to equity ratios were at 1.36

times, 1.30 times and 1.53 times respectively whereas Interest Bearing Debt to Equity ratio equated 1.18 times, 1.14 times and 1.32 times., respectively and Net Interest Bearing Debt (after deduction of cash, cash equivalents and other current financial assets) to Equity ratio equated 0.98 times, 0.95 times and 1.00 times, as of 31 December 2021, 31 December 2022, and 31 December 2023 respectively.

Financial Liquidity and Sufficiency of Funds

In 2021, 2022, and 2023, consolidated net cash flow from operating activities of the Company and its subsidiaries were Baht 7,271 million, and Baht 9,992 million, and Baht 11,540 million respectively. The increase in consolidated net cash flow from operating activities in 2023 was primarily a result of a decrease in inventories, resulting in cash flow increase.

In 2021, 2022, and 2023, net cash flow from investing activities of the Company and its subsidiaries were Baht (9,618) million, and Baht (2,817) million, and Baht (11,975) million, respectively as the Company consistently invested in plants and machinery and equipment of Power Plants, Waste- Fuel Power Plant, and Fiber Cement Project, and for the development of production efficiency in cement plant, petrochemical plants. In 2023, net cash flow used in investing activities increased due to the Company made investment in land, buildings, machinery and equipment in the aforementioned projects compared with the same in 2022, and the Company increased investment in equities and debt instruments for financial liquidity management.

In 2021, 2022, and 2023, net cash flow from financing activities of the Company and its subsidiaries were Baht 1,377 million, and Baht (2,134) million, and Baht 8,260 million respectively. The Company received the proceeds from the issuance short-term bills of exchange and and sale offering of additional debentures. As a result, by year-end 2021, 2022, and 2023, consolidated cash and cash equivalent (Before the effect from foreign exchange) were Baht (971) million, Baht 5,041 million, and Baht 7,825 million respectively.

In 2021, 2022, and 2023, liquidity ratio equated 1.44 times, 1.54 times and 1.38 times., Quick Ratio equated 0.72 times, 0.68 times and 0.79 times and Interest Coverage Ratio in 2021, 2022 and 2023 was 4.96 times, 5.22 times and 3.45times, respectively. That rate has declined due to lower performance in 2023 from petrochemical and chemicals business sectors.

In addition, the Debt Service Coverage Ratio equated 0.74 times, 0.77 times, and 0.40 times, respectively whereas the Company and its subsidiaries' Interest Bearing Debt to Equity ratio equated 1.18 times, 1.14 times and 1.32 times while Net Interest Bearing Debt (after deduction of cash, cash equivalents and other current financial assets) to Equity Ratio equated 0.98 times, 0.95 times and 1.00 times respectively.

This can be clearly seen that net cash flow from financing activities, Interest Coverage Ratio, Quick Ratio, and Interest Bearing Debt to Equity ratio of the Company and its subsidiaries are at manageable levels. This ensures that the Group has sufficient liquidity for its operations and has the ability to pay off debts, be able to comply with terms and conditions in major loan agreements, and have the ability to seek additional sources of funding, with a revolving credit facility credit limit supported by financial institutions that are sufficient to operate the business.

Maintaining an appropriate financial ratio

The Company and its subsidiaries had sufficient funds for various project investments while the source of funds were from the issuance and sale offering of debentures and Bill of Exchange, loans from financial institutions from both domestic and international institutions, as well as cash flow from business operations of the Company and its subsidiaries and the loans from financial institutions to be used as working capital of the Company.



As at December 31, 2023, financial debts of the Company and its subsidiaries in the amount of Baht 84,805.60 million can be summarized as follows:

1. Outstanding debt of subordinated unsecured debentures of the Company and its subsidiaries were Baht 75,397.6 million. The terms and conditions for debentures agreement are as follows:

- 1.1 TPIPL's debentures amount of Baht 2,888 million, issued under medium term note program B.E 2562 of TPIPL under the condition that it has to maintain Debt to Equity Ratio (Debt means interest bearing debt) at the end of the quarterly accounting period or the end of the fiscal year not exceeding 1.5:1 (for the Company and its subsidiaries) throughout the term of the debentures.
- 1.2 Other kinds of TPIPL's debentures of Baht 50,883.40 million, issued under the condition that it has to maintain Debts to Equity Ratio (Debt means interest bearing debt) at the end of the quarterly accounting period or at the end of the fiscal year not exceeding 2:1 (for TPIPL and its subsidiaries) throughout the term of the debentures.
- 1.3 TPIPP's debentures of Baht 3,789.6 million, issued under medium term note program B.E 2561 of TPIPP under the condition that it has to maintain Debts to Equity Ratio (Debt means interest bearing debt) at the end of the quarterly accounting period or at the end of the fiscal year not exceeding 1.75:1 (for TPIPP and its subsidiaries) throughout the term of the debentures.

- 1.4 TPIPP's debentures of Baht 14,836.60 million, issued under medium term note program B.E 2564 of TPIPP under the condition that it has to maintain Debts to Equity Ratio at (Debt means interest bearing debt, less cash, deposits and short-term investments in excess of Baht 1,500 million, and less lease liabilities and financial debt for investment in power plants with official contracts) at the end of the quarterly accounting period or the end of the fiscal year over the life of the debentures at a ratio not exceeding 3:1
- 1.5 TPIPP's debentures of Baht 3,000 million, issued under medium term note program B.E 2564 of TPIPP under the condition that it has to maintain Debts to Equity Ratio at (Debt means interest bearing debt, less cash, deposits and short-term investments and less lease liabilities and financial debts for investments in power plants under sales purchase agreement with the governmental authorities.) at the end of the quarterly accounting period or the end of the fiscal year over the life of the debentures at a ratio not exceeding 3:1

As at December 31, 2023, the Company and its subsidiaries have an interest bearing debt to equity ratio was 1.32:1 which does not exceed the maintenance ratio of 1.5:1 (which is in accordance with the conditions specified in the terms and conditions for debentures, item 1.1) and has a net interest-bearing debt to equity ratio of 1.02:1 which does not exceed the rate to be maintained 2:1 (in accordance with the conditions specified in the terms and conditions for the debentures, clause 1.2) as above.

As at December 31, 2023, TPI Polene Power Public Company Limited' Net Interest Bearing Debts to Equity Ratio equated 0.71:1, which is not exceeding the required maintenance rate of 1.75:1 times, as per the terms and conditions stipulated in the debentures agreements of TPI Polene in item 1.3 as above. Net Interest Bearing Debts to Equity Ratio (after TPIPP's cash, cash investment and current investments in excess of Baht 1,500 million) equated to 0.57:1, not exceeding the rate required to maintain at 3:1 as stated in item 1.4 as above. Net Interest Bearing Debts to Equity Ratio (after TPIPP's cash, cash investment and current investments) equated to 0.53:1, not exceeding the rate required to maintain at 3:1 as stated in item 1.5 as above.



2. Bill of Exchange Debt

The Company's Bill of Exchange Debt for total of Baht 9,408 million was utilized for working capital for business operations.

Obligations to unrelated persons or businesses

As at 31 December 2023, the Company and its subsidiaries have obligations as follows :

1. Obligations pursuant to construction of machinery and equipment of Baht 7,567 million, using a source of funds generated from business operations.
2. Obligations under the lease agreement and land lease agreement, divided into obligations within 1 year, amounting to Baht 1.63 million, using a source of funds generated from business operations.
3. Obligations in form of Letter of credit (to import raw materials and spare parts) amounting to Baht 235 million, for raw material purchase contract Baht 158 million and letter of guarantee from the banks of Baht 719 million, using a funding source from the working capital facility.

4.1.3 Business operations of the Company under the concept of sustainable business operations (ESG) in 2023

TPI Polene Group has achieved sustainable business operations in 2023. ESG performance (Environmental, Social and Governance aspects) is in line with the targets, with Environmental the being able to reduce greenhouse gases continuously. This includes the introduction of EV power in dump trucks, concrete mixers, and heavy machinery in mines that originally used oil-fired combustion engines. Focus on green products, industrial waste disposal by more than 95%, etc. In support of public interest projects and activities, and human rights operations. It covers the value chain which includes employees, partners, customers, and social communities, as well as conducting business with good corporate governance. As a result, the company has received many awards from trusted institutions. For more information, please visit the company's website <https://www.tpipolene.co.th/en/investment-en/financialinformation-en/md-a>

Credit Term

The Group has a credit management policy that does not have an impact on financial liquidity and establishes credit criteria and processes for each business unit to be competitive and comparable to those of rivals. This policy takes into account the overall average receipt and payment

durations. This also accounts for potential costs and financial risks associated with currency rates.

4.2 Factors that May Affect Future Operations

4.2.1 The Company's Business Operations with ESG Concept

TPI Polene Group has prioritized the impacts of climate change and sustainable business operations, considering them significant risk factors for future business operations. The Company has set a goal of achieving carbon neutrality by 2043. The Company has established both short-term and long-term goals, along with strategies for reducing greenhouse gases to mitigate risks in business operations. These strategies involve advocating for the removal of waste to be used as fuel, replacing coal in the cement production process. Additionally, the company is implementing EV electrical systems in dump trucks, concrete mixers, and heavy machinery in quarry that previously relied on combustion engines fueled by gasoline to further reduce greenhouse gas emissions. The Company is focusing on developing low-carbon products such as hydraulic cement, alongside environmentally friendly business operations. Moreover, the Company prioritizes respect for human rights throughout the value chain, which includes employees, partners, customers, and local communities, and conducts business with a code of conduct and good corporate governance.

4.2.2 Burden of Providing Financial Support to Affiliated Companies

The Company will consider providing financial support to affiliated companies in cases where it is necessary and beneficial to the Company and the Company Group in the long term. The Company believes that such policies and operations will be able to strengthen the companies in the TPI Polene Group. On February 29, 2023, the Board of Directors' Meeting No. 2/2567 resolved to approve the extension of the period for receiving and/or providing assistance between the Company and TPI Polene Power Public Company Limited for another 2 years (March 1, 2023, to February 28, 2026) in the amount not exceeding Baht 700 million (in the case that the Company receives financial assistance) and Baht 1,200 million (in the case that the Company provides financial assistance). This is a short-term revolving loan amount in the form of a promissory note. The said transaction is classified as a connected transaction in the category of giving and/or receiving financial assistance.

4.3 Key Financial Information

4.3.1 Summary of consolidated financial statements of TPI Polene Public Company Limited for 2021, 2022 and 2023

1) Statements of Financial Position (Consolidated)

Statements of Financial Position	Accounting Period ended 31 December					
	2021		2022		2023	
	Thoudsand Baht	%	Thoudsand Baht	%	Thoudsand Baht	%
Total current assets	35,031,528	25.81	39,131,118	27.08	45,850,285	28.06
Property, plant and equipment	96,366,052	71.01	100,473,740	69.53	109,156,852	66.80
Other non-current assets *	4,316,018	3.18	4,894,570	3.39	8,407,541	5.14
Total Assets	135,713,598	100.00	144,499,428	100.00	163,414,678	100.00
Total current liabilities	24,405,864	17.98	25,457,853	17.62	33,290,431	20.37
Other non-current liabilities **	53,745,891	39.60	56,227,338	38.91	65,497,842	40.08
Total Liabilities	78,151,755	57.59	81,685,191	56.53	98,788,273	60.45
Equity						
Authorized share capital	23,751,500	17.50	23,560,235	16.30	23,560,235	14.42
Issued and paid-up share capital	19,126,500	14.09	18,935,235	13.10	18,935,235	11.59
Finance Management Depratment shares	-	-	-	-	-	-
Shares premium on ordinary shares	60,600	0.04	60,600	0.04	60,600	0.04
Shares premium on Finance Management Depratment shares	220,536	0.16	220,536	0.15	220,536	0.13
Other surpluses (deficits)	9,840,436	7.25	9,840,436	6.81	9,840,436	6.02
Retained earnings	19,005,717	14.00	24,244,666	16.78	25,569,005	15.65
Other components of equity	117,470	0.09	109,668	0.08	109,893	0.07
Non-controlling interests	9,190,584	6.77	9,403,096	6.51	9,890,700	6.05
Total Equity	57,561,843	42.41	62,814,237	43.47	64,626,405	39.55
Total Liabilities and Equity	135,713,598	100.00	144,499,428	100.00	163,414,678	100.00

Remarks : * Other non-current assets comprise investments in associates and joint venture, long-term investments in related parties, other long-term investments, investment properties, land leasehold rights, intangible assets, deferred tax assets, advances payment for plant and equipment and other non-current assets.

** Other non-current liabilities comprise debentures, financial lease liabilities, deferred tax liabilities, non-current provisions for employee benefit and other non-current liabilities.

2) Statements of Comprehensive Income (Consolidated)

Statement of Comprehensive Income	Accounting Period ended 31 December					
	2021		2022		2023	
	"000" Baht	%	"000" Baht	%	"000" Baht	%
Income						
Revenue from sales of goods	38,919,785	100.00	48,132,999	100.00	42,807,456	100.00
Cost of sales of goods	(26,391,000)	(67.81)	(35,326,332)	(73.39)	(32,899,895)	(76.86)
Gross profit	12,528,785	32.19	12,806,667	26.61	9,907,561	23.14
Transportation income	1,348,630	3.47	1,453,474	3.02	1,185,595	2.77
Net foreign exchange gain	390,708	1.00	437,171	0.91	88,281	0.21
Investment income	60,416	0.16	70,890	0.15	374,380	0.87
Other income	559,515	1.44	868,466	1.80	506,081	1.18

Statement of Comprehensive Income	Accounting Period ended 31 December					
	2021		2022		2023	
	"000" Baht	%	"000" Baht	%	"000" Baht	%
Profit before expenses	14,888,054	38.25	15,636,668	32.49	12,062,898	28.18
ต้นทุนในการจัดจำหน่ายและขนส่ง	(3,346,691)	(8.60)	(3,749,878)	(7.79)	(3,399,628)	(7.94)
ค่าใช้จ่ายในการบริหาร	(2,047,289)	(5.26)	(1,962,876)	(4.08)	(2,016,735)	(4.71)
Total expenses	(5,393,980)	(13.86)	(5,712,754)	(11.87)	(5,416,363)	12.65
Profit from operating activities	9,494,074	24.39	9,923,914	20.62	6,646,535	15.53
Finance costs	(2,061,541)	(5.30)	(1,934,590)	(4.02)	(2,075,958)	(4.85)
Share of profit of subsidiaries accounted for using equity method	-	-	-	-	-	-
Share of profit (loss) of associates accounted for using equity method	24,703	0.06	21,280	0.04	26,975	0.06
Profit before income tax expense	7,457,236	19.16	8,010,604	16.64	4,597,552	10.74
Tax income	(539,277)	(1.39)	(165,828)	(0.34)	(292,414)	(0.68)
Profit for the year	6,917,959	17.77	7,844,776	16.30	4,305,138	10.06
Other comprehensive income (expense)						
Items that will be reclassified subsequently to profit or loss						
Exchange difference on translating financial statements	353	0.00	(177)	(0.00)	-	-
Gain (loss) on measurement of financial statements	2	0.00	3	0.00	15	0.00
Share of other comprehensive income (expense) of subsidiaries accounted for using equity method	-	-	-	-	-	-
Share of other comprehensive income (expense) of associates accounted for using equity method	12,735	0.03	(7,588)	(0.02)	259	0.00
Share of other comprehensive income (expense) of associates accounted for using equity method	-	-	-	-	-	-
Income tax relating to items that will be reclassified	-	-	-	-	-	-
Total items that will be reclassified subsequently to profit or loss	13,090	0.03	(7,762)	0.03	274	0.00
Items that will not be reclassified to profit or loss						
Gain on investments in equity instruments designated at fair value through other comprehensive income (expense)	7	0.00	(50)	(0.00)	(61)	(0.00)
Share of other comprehensive income (expense) of subsidiaries accounted for using equity method	-	-	-	-	-	-

Statement of Comprehensive Income (Consolidated)

Statement of Comprehensive Income	Accounting Period ended 31 December					
	2021		2022		2023	
	"000" Baht	%	"000" Baht	%	"000" Baht	%
Losses on remeasurements of defined benefit plans	-	-	136,275	0.28	-	-
Income tax relating to items that will not be reclassified	(2)	(0.00)	(26,479)	(0.06)	12	0.00
Total items that will not be reclassified to profit or loss	5	0.00	109,746	0.23	(49)	0.00
Other comprehensive income (expense) for the year, net of tax	13,095	0.03	101,984	0.21	225	0.00
Total comprehensive income for the year	6,931,054	17.81	7,946,760	16.51	4,305,363	10.06
Profit (loss) attributable to:						
• Owners of the parent	5,670,534	14.57	7,007,607	14.56	3,217,863	7.52
• Non-controlling interests	1,247,425	3.21	837,169	1.74	1,087,275	2.54
Profit for the year	6,917,959	17.77	7,844,776	16.30	4,305,138	10.06
Total comprehensive income (expense) attributable to:						
• Owners of the parent	5,683,629	14.60	7,109,591	14.77	3,218,088	7.52
• Non-controlling interests	1,247,425	3.21	837,169	1.74	1,087,275	2.54
Total comprehensive income for the year	6,931,054	17.81	7,946,760	16.51	4,305,363	10.06
Basic earnings per share (in Baht)	0.297		0.370		0.170	

Revenues from sales – Outside customers

	2021 ("000" Baht)	%	2022 ("000" Baht)	%	2023 ("000" Baht)	%
Construction Materials	16,968,829	43.60	22,999,991	47.78	24,092,370	56.28
Petrochemical and Chemicals	12,550,440	32.25	16,766,659	34.83	10,542,023	24.63
Energy and Utilities	9,266,087	23.81	8,234,425	17.11	8,055,942	18.82
Agriculture	134,429	0.35	131,924	0.27	117,121	0.27
Total	38,919,785	100.00	48,132,999	100.00	42,807,456	100.00

3) Statement of cash flow (Consolidated)

	Accounting Period ended 31 December		
	2021 ("000" Baht)	2022 ("000" Baht)	2023 ("000" Baht)
Net cash from operating activities	7,270,922	9,992,389	11,540,372
Net cash used in investing activities	(9,618,405)	(2,817,065)	(11,975,274)
Net cash from financing activities	1,376,824	(2,133,840)	8,260,189
equivalents, before effect of exchange rates and changes in holding of investments in subsidiary	(970,659)	5,041,484	7,825,287
Effect of exchange rate changes on cash and cash equivalents	(18,612)	(38,900)	(183,226)
Net increase (decrease) in cash and cash equivalents	(989,271)	5,002,584	7,642,061
Cash and cash equivalents at 1 January	6,657,879	5,668,608	10,671,192
Cash and cash equivalents at 31 December	5,668,608	10,671,192	18,313,253

4) Key Financial Ratio

Financial Ratio	Accounting Period ended 31 December		
	2021	2022	2023
Liquidity Ratio			
1. Current Ratio (times)	1.44	1.54	1.38
2. Quick Ratio (times)	0.72	0.68	0.79
3. Cash Ratio (times)	0.28	0.40	0.39
4. Receivable Turnover (times)	7.24	8.29	7.73
5. Collection Period (days)	49.75	43.41	46.56
6. Inventory Turnover Period (times)	1.97	2.01	1.77
7. Inventory Turnover (days)	182.98	178.70	203.63
8. Account Payable Turnover (times)	8.13	9.54	9.87
9. Payment Period (days)	44.29	37.75	36.47
10. Cash Cycle (days)	188.43	184.36	213.72
Profitability Ratio			
11. Gross Profit Margin (%)	32.19	26.61	23.14
12. Operating Profit Margin (%)	23.23	19.56	14.45
13. Other Profit Margin (%)	(3.90)	(2.80)	(3.59)
14. Cash to Net Profit Ratio (times)	0.80	1.06	1.87
15. Net Margin (%)	16.76	15.39	9.57
16. Return on Equity (%)	12.61	13.03	6.76
Efficiency Ratio			
17. Return of Assets (%)	5.33	5.60	2.80
18. Return on Fixed Assets (%)	10.58	11.32	7.27
19. Assets Turnover (times)	0.32	0.36	0.29

Financial Ratio	Accounting Period ended 31 December		
	2021	2022	2023
Financial Policy Ratio			
20. Debts to Equity Ratio (times)	1.36	1.30	1.53
21. Net Debts to Equity Ratio (times) ²	1.16	1.12	1.21
22. Interest Bearing Debt to Equity Ratio (times)	1.18	1.14	1.32
23. Net Interest Bearing Debt to Equity Ratio (times) ²	0.98	0.95	1.00
24. Interest Coverage Ratio (times) ³	4.96	5.22	3.45
25. Debt Service Coverage Ratio (times) ³	0.74	0.77	0.40
26. Dividend Payout Ratio (%) ¹	30.30	27.03	58.82
27. Net Debt to EBITDA Ratio (times)	4.47	4.47	6.41
28. BE Size to Interest Bearing Debt Ratio (times)	0.05	0.06	0.11
29. Current Interest Bearing Debt to Interest Bearing Debt Ratio (times)	0.25	0.24	0.29
30. Long Term Borrowings from Financial Institutions to Liabilities Ratio (times)	0.01	0.00	0.00
Shares data (Per share)			
31. Book Value per Share (Baht) ⁴	3.01	3.32	3.41
32. Earnings per Share (Baht)	0.297	0.370	0.170
33. Dividend per Share (Baht)	0.090	0.100	0.100
Growth Ratio			
34. Total Assets (%)	9.53	6.47	13.09
35. Total Liabilities (%)	8.94	4.52	20.94
36. Sales(%)	13.55	23.67	(11.06)
37. Operating Expenses (%)	9.80	5.91	(5.19)
38. Net Profit (%)	143.66	13.40	(45.12)

Remarks :

1. Calculation based on Separate Financial Statements.
2. After Deducting Cash and Cash Equivalents and Other Current Assets.
3. Cash basis Interest coverage ratio = Cash from (used in) operating activities (before change in operating assets and liabilities) divided by finance cost paid from cash flow from financing activities. Debt service coverage ratio is calculated based on formula of Financial Covenants stipulated in Financial Agreements of the Company with commercial bank creditors, which is as follows:
Debt service coverage ratio = Cash from (used in) operating activities (before change in operating assets and liabilities) divided by repayment of long-term loan + finance lease payments + finance cost paid from cash flow from financing activities
4. Number of 5,899,999,300 shares of TPIPP, held by TPIPL not yet marks to market. The above share price was realized at the par value of Baht 1 per share.

5. Other key information

5.1 General information

Based on Section 1.1.5, name, location, head office, business type, company registration number, telephone, fax, company website Total number and type of securities sold

5.2 Other important information

- No -

5.3 Legal disputes

See details in the notes to financial statements for the year 2023, item 31.

5.4 Secondary market

The Company does not have securities listed on other countries' exchanges.

5.5 Regular Contact Financial Institutions only in case of debt instruments

CIMB Thai Bank Plc.	44, Langsuan Road, Lumpini Subdistrict, Pathumwan District, Bangkok 10330
Bank of Ayudhya Plc.	1222, Rama 3 Road, Bang Phongphang Subdistrict, Yan Nawa District, Bangkok 10120
Asia Plus Securities Co., Ltd.	3/1 Fl., Sathorn City Tower, 175 South Sathorn Road, Thungmahamek, Sathorn, Bangkok 10120





Part 2

Corporate Governance

6. Corporate Governance Policy



6.1 Overview of Corporate Governance Policy and Guidelines

The Board of Directors places great importance on and is committed to conducting business by adhering to the policy of good corporate governance and the Code of Conduct of the TPI Polene Group, which have been continuously reviewed and updated. These are disseminated to the Board of Directors, executives, and all employees. Additionally, the corporate governance policy and the Company Group's Code of Conduct are presented on the Company's website to provide guidelines for corporate governance at all levels throughout the organization. This aims to create a corporate culture, enable investors to understand and further utilize it as a guideline in following the business direction of the Company Group.

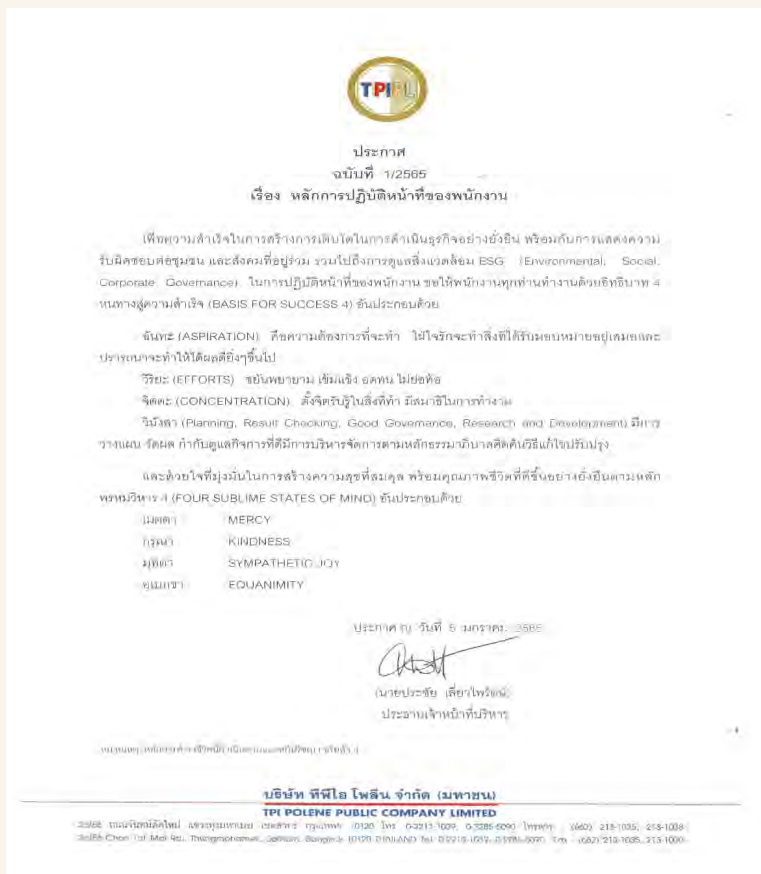
The Company Group conducts business in accordance with the ESG framework, prioritizing responsibility, transparency, and fairness, guided by the enduring principles of its Code of Conduct. With the goal of becoming a benchmark in corporate governance, the Company delineates this aspiration in its Vision, viewing corporate governance principles as integral to a management system that cultivates fairness, transparency, and the capacity to yield returns, thereby enhancing long-term shareholder value. Moreover, the Company cultivates trust among all stakeholders and advocates for and enhances the Company's competitiveness to foster sustainable growth. The Corporate Governance Committee's duties include supervising the Company's corporate governance, establishing policies and guidelines, and ensuring compliance with the principles of good corporate governance, including good corporate governance principles for listed companies of the Securities and Exchange Commission and the Stock Exchange of Thailand (SEC) and of the Stock Exchange of Thailand, and the criteria according to the Corporate Governance Report of Thai Listed Companies (CGR) project of the Thai Institute of Directors Association (IOD).



TPI Polene received a “SET ESG Ratings: AA” for 2023 from the Stock Exchange of Thailand, recognizing its commitment to sustainable business practices that prioritize stakeholders’ interests and address Environmental, Social, and Governance (ESG) considerations.



The Company announced a guidelines policy for employees following the way of Four Noble Truths and Four Sublime State of Mind, with details as follows:

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Brahma-vihara

(FOUR SUBLIME STATES OF MIND)

Metta	(Mercy)	Love, desire for others to be happy.
Karuna	(Kindness)	Desire to get others out of their sufferings.
Mudita	(Sympathetic joy)	Pleasure that comes from delighting in other people's well-being, even if one did not contribute to it.
Upekkha	(Equanimity)	Even-mindedness and serenity, treating everyone impartially.

Iddhipada 4

BASIS FOR SUCCESS 4

Chanda	(Aspiration)	To be content and happy in doing good deeds with enthusiasm and strong intention.
Viriya	(Efforts)	Diligence, patience, commitment, endurance, willingness to work hard and to never give up; having the courage to tackle any obstacle and having the courage to make changes.
Citta	(Concentration)	Consciousness of the senses, Subconscious mind and Intellect, is of immense power.
Vimamsa	(R&D)	Involves conducting an investigation or discrimination, a plan, a measure, an invention of a solution.

Iddhipada 4 principles of success that are used in work are :

Chantha means love for work - being satisfied with the work that is being done

Viriya means diligence in one's work

Citta means being attentive and responsible for one's work

Vimamsa means scrutinizing and using intelligence to check work.

(Catvari Aryasatyani)

FOUR NOBLE TRUTHS

Heart of Buddhism (Ariyatham to the Cessation or Extinction of Suffering)

1. **Dukkha** : Suffering
2. **Samudaya** : The Cause or Origin of Suffering
3. **Nirodha** : The Cessation or Extinction of Suffering can be attained by the renouncement or letting go of Tanha
4. **Marga** : The Path leading to the Cessation or Extinction of Suffering

1. DUKKHA

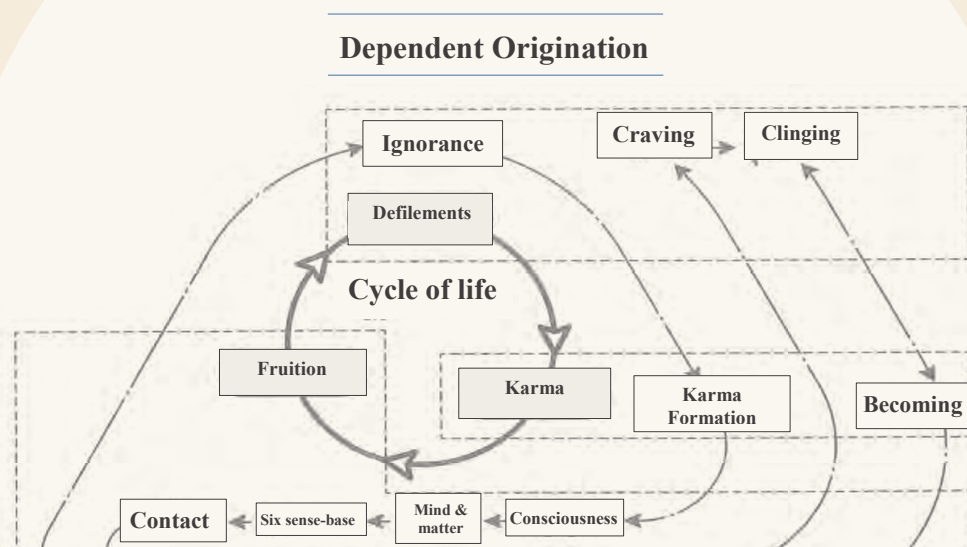
UNSATISFACTION, SUFFERING, PAIN

The word suffering in the heart of Buddhism does not just mean suffering in Thai as it is understood. It also means difficult conditions to endure in the same conditions and clinging to impermanent states and things or stressful conditions.

2. SAMUDAYA

THE ORIGIN OR ARISING OF DUKKHA

Consideration of CAUSE OF SUFFERING



Cause of suffering (or suffering) is defilement or ignorance.

3. Nirodha: The Extinction of Suffering

(EXTINCTION OF SUFFERING)

is the elimination of defilements, i.e. elimination of defilements with the power to proceed according to the NOBLE EIGHTFOLD PATHS

4. Marga

(THE NOBLE EIGHTFOLD PATHS)

The Path leading to the Cessation or Extinction of Suffering

1. Right view
2. Right intention
3. Right speech
4. Right action
5. Right livelihood
6. Right effort
7. Right mindfulness
8. Right concentration

Chants conquering The Evil : Panmare Chino Na Tho

Panmare Chino Natou Patto Sampothimuttaman
Chatur Satjung Pakasti Thammajakang Pawattayi
Etena Sajjavajchena Hotu Me Chayamankalang

Devil 5 (What Kills a Person to Die from Goodness)

THE EVIL ONE, THE TEMPER, THE DESTROYER

1. The MARA of Defilement
2. The MARA of Aggregates²
3. The MARA of Karma Formations³
4. The MARA of Deity
5. The MARA of Death

After conquered the five devils, the Buddha enlightened Four Noble Truths

Note

1. **MARA (The Destroyer)** is something that depletes one from his virtues or noble results or something that consumes virtues or prevents one from attaining good results.
 - 1.1 MARA of Defilement is love, greed, anger, delusion, evil spirit.
 - 1.2 MARA of Aggregates is something that destroys one's Aggregates, makes him pain, sick, crippled, depriving one of the opportunity to do good deeds.
 - 1.3 The MARA of Karma Formations is the thought, emotion, and karma cultivator that prevents one from avoiding the suffering in samsara or rebirth of one in 31 places of existence.
 - 1.4 The MARA of Death is death that deprives one of the opportunity to do good deeds.
 - 1.5 The MARA of Deity is an evil deity who is powerful and inspires one not to do the good deeds.
 2. **Five Khandha (Five Groups of Existence or Five Aggregates)** are the five aggregates of form and abstract that make up the collective units which are ordinarily called animals, persons, beings, he, we, etc. The five components incorporated into life.
 - 2.1 The corporeality group (rūpa-kkhandha) is the aggregate of form which is the mixture of earth, water, air and fire elements such as hair, skin, bone, and blood.
 - 2.2 The feeling group (vedanā-kkhandha) is the aggregate of processing feelings such as happiness, suffering, or indifference.
 - 2.3 The perception group (saññā-kkhandha) is the aggregate that remembers what one received or felt. It is the part that defines or perceives the meaning of what have known (Arrom 6) such as white, green, black, red, etc.
 - 2.4 The mental-formation group (sankhārā-kkhandha) is the aggregate of thought to identify what you feel and remember whether it good or bad or indifference, neither good nor bad. The mind was led by intention to be good or bad or upyakrit (neither good nor bad) such as kaya-sankhara (physical intent), vājee-sankhara (verbal intent), and mano-sakhara (mind intention).
 - 2.5 The consciousness-group (viññāna-kkhandha) is the aggregate of cognition or knowing of things through the six senses including eyes, ears, nose, tongue, body and mind.
- The Five Aggregates are abbreviated into two groups, namely the abstract and the form (Rupa Khandha).
3. **Apisankhara 3** is the thought, emotion, and karma cultivator, comprising of:
 - 3.1 Punyaphisangkhara is a thought that enhances good karma (merit).
 - 3.2 Apunyaphisangkhara is a thought that enhances evil karma (sin).
 - 3.3 Anenchaphisangkhan is a thought that is calm, unable to be upset or excited.
 4. **Fetter** is the defilement that binds the animals to suffering or defilement that binds the mind to the cycle of defilement, karma, and the result of karma. There are 10 fetters, i.e.
 - 4.1 Sakkaya-ditthi : One has the view that the five aggregates are self.
 - 4.2 Wichikitcha : One has doubts about the virtues of the Three Jewels, namely the Buddha, the Dharma, and the Sangha.
 - 4.3 Silappatapramas : One adheres to the sacred things or customs by believing in magic which is not Buddhism or adheres to the wrong practices, which is not the aims of Buddhism.
 - 4.4 Kamaraka: One has contentment in sensual pleasures or lust.
 - 4.5 Vengeance: One adheres with anger.

Udhamphakiasayojana or the Five Higher Fetters are:

- 4.6 Rupa-raka : One has greed for material existence or attachment to realms of form.
- 4.7 Arupa-raka : One has greed for immaterial existence or attachment to formless or abstract realms.
- 4.8 Mana : One had conceit or pride with the feeling of being better, worse, or equal with others.
- 4.9 Uttacca : One is distracted or restless.
- 4.10 Avijja One has ignorance of the Four Noble Truths.

Phra Sodaban is the one who puts an end to all first 3 fetters, namely Sakkaya Ditthi, Vicikiccha, and Silabbat Pramas.

Sakathakami is the one who puts an end to all first 3 fetters, and reduces lust and anger.

Anakami is the one who puts an end to the 5 lower fetters.

Arahant is the one who puts an end to all 10 fetters.

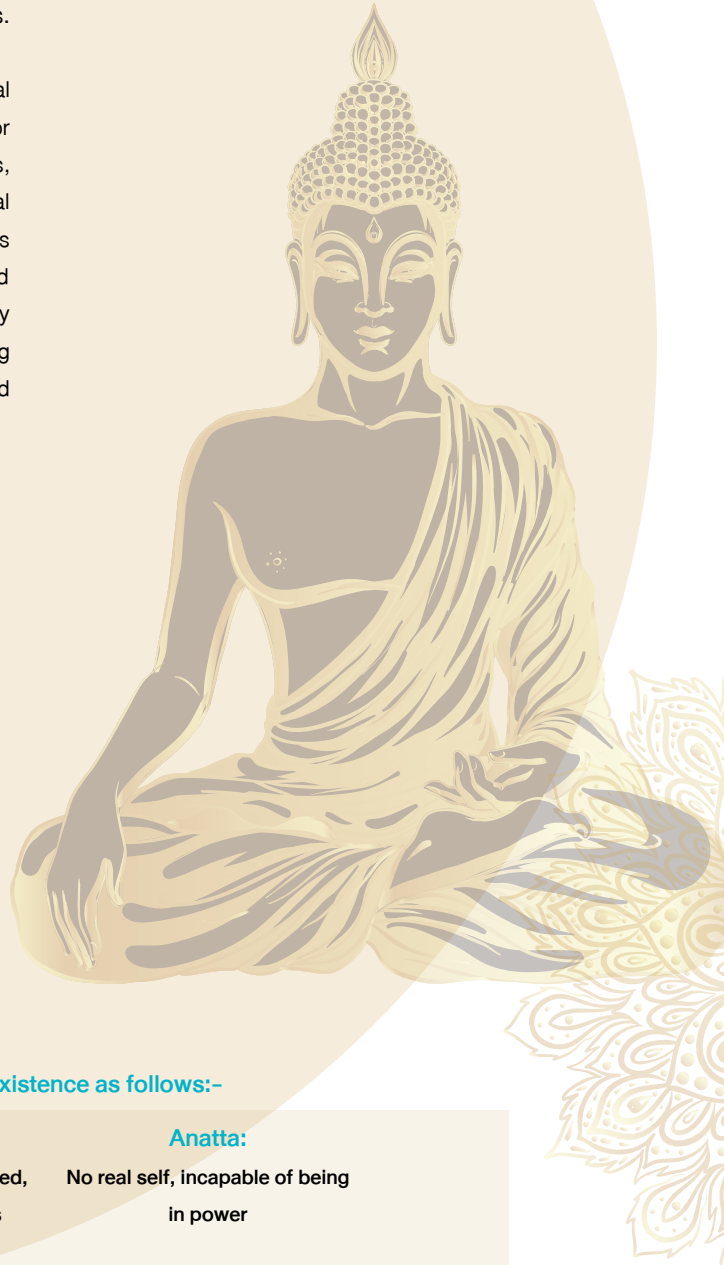
5. Sankhara is Body and Mental Formations, together with Volitional Formations and Volitional Activities. Sankhara also means “formations” or “that which has been put together” of all including ingredients, decorations, parts of the body, mind, life, spirit, all things that made up. (Volitional Formation is what our brains think. The more we think, the more formations follows like a shadow following our body. What is in the brain will be expressed through words and actions, which is karma. Since our minds are endlessly concerned or embellished, we commit karma endlessly, resulting in us being reborn indefinitely). In the Trinity (Trilak), sankhara is the thing being formed or improvised, which is all the the mind and forms.

Paticca-samuppada
(the Dependent
Origination; conditioned arising)
Sankhara 3 is

Kayasangkharas:
bodily formation, bodily volition

Vajisangkharas
verbal formation, verbal volition

Manosangkharas
mental formation,
mental volition



Sankhara has three qualities known as trilak (three marks of existence as follows:-

Anicca:	Dukkha:	Anatta:
Impermanence	State of suffering or being oppressed, state which cannot stand it in its original condition, state that will deteriorate because of being oppressed by Anicca.	No real self, incapable of being in power

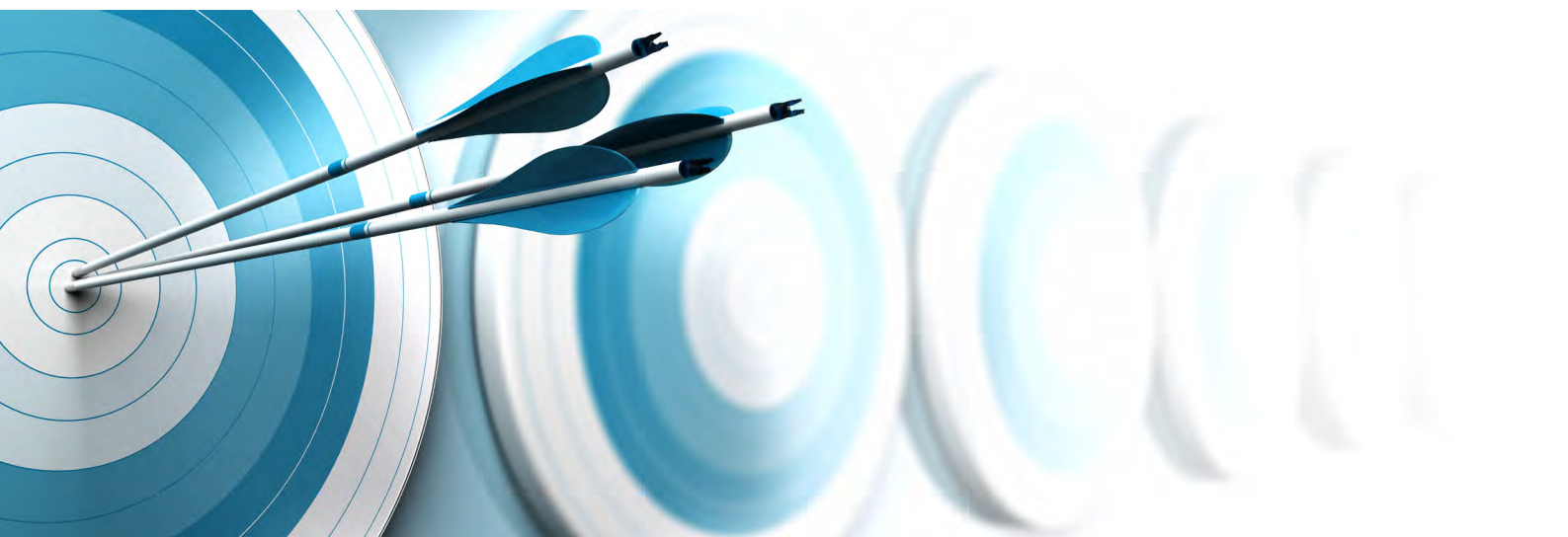
The opposite of Sangkhara is Wisangkharas

Wisangkharas is Nirvana, which is eternal. It leads to nicca, sukhanga, anatta (dharma).

Good Corporate Governance Policy

TPI Polene Group has reviewed its CG policies and manuals to comply with the law, best practices for business operations, changing socioeconomic and environment and requiring directors, the management, and employees at all levels to be acknowledged and adhered to as part of their work as a commitment and to take concrete action. The Board of Directors has established the following good corporate governance policies for TPI Polene as follows:

1. The Board of Directors, the management and employees are committed to implementing the core principles of good corporate governance in the implementation of the management structure that is related to the Board of Directors, the management and shareholders, including fair practices to the stakeholders.
2. The Board of Directors has to perform duties with dedication and responsibility, to be independent with roles and duties between the Chairman and the Managing Director and the President are clearly separated.
3. The Board of Directors plays an important role in determining the Company's vision, strategy, policies and plans by considering risk factors and laying out management guidelines, manage appropriately, and must take steps to ensure that the accounting system, financial reports and audits are reliable.
4. The Board of Directors must be a leader in ethics as an example of the implementation of regulatory guidelines under good corporate governance and monitor the management of conflict of interest and connected transactions.
5. The Board of Directors may appoint a specific committee as appropriate to help carefully verify important tasks.
6. The Board of Directors must provide an annual self-assessment as a framework for monitoring duties of the Board of Directors.
7. The Board of Directors determines the ethical standards and ethics of the Company in order to provide the Board of Directors with the Board of Directors, The Management, employees, and all employees to be used as a guideline for conduct, along with the Company's rules and regulations.
8. The Board of Directors must provide adequate disclosure of the Company's information both financially and non-financially adequate, reliable and timely to ensure that shareholders and stakeholders of the Company receive information equally, as well as to provide privatization agencies and investor relations agencies to be responsible for providing information to investors and the general public.
9. The Board of Directors Shareholders must be treated equally and have the right access to information to communicate with the Company.
10. The Board of Directors must provide a system for selecting personnel to be responsible for important administrative positions at all levels appropriately under a transparent and fair recruitment process.
11. The Board of Directors must provide a system that supports effective anti-corruption in order to confirm that the administration recognizes and focuses on the importance of as well as following an anti-corruption measurement policy.
12. The Board of Directors encourages education and training of employees on environmental issues by setting policies and disclosing their practices.





6.1.1 Policies and Guidelines relating to the Board of Directors

The Board of Directors intends to promote the Company as an effective organization to conduct its business effectively under the good corporate governance and excellent management. It focuses on creating good benefits for shareholders, employees, customers and taking into account stakeholders and all related parties as a whole under good governance principles in business that make the work processes of the Company's management and employees transparent and auditable, and therefore establish topics related to policies and practices related to the Board of Directors as follows:

1. The Board of Directors, the Management and all employees adhering to the adoption of six key principles of good corporate governance with a structure of management that is associated with the board of directors, the Management and shareholders as follows :

- Accountability responsibility for decisions and their own actions
- Responsibility for performing the duties with sufficient competence and efficiency
- Equitable Treatment and fair treatment of stakeholders
- Transparency Auditable operational transparency and transparent disclosure to those involved
- Vision to creat long term for creating value-added for the organization
- Integrity and Ethics for Business Operation

2. The Board of Directors and the Management of the Company play an important role in determining the Company's vision, strategy, policies and plans, considering risk factors and setting out appropriate management practices, responsible for the performance of duties to shareholders, determining the direction of growth to make important decisions of the Company with caution and integrity, as well as ensuring that the accounting system is implemented, financial reports and audits are reliable and shareholders are treated equally.

- The Board of Directors must be a leader in ethics of the implementation of regulatory guidelines, take good care of business operations, and monitor conflicts of interest and connected transactions.
- The Board of Directors is responsible for determining the ethical standards and principles of the Company for the Board of Directors, the Management and all employees, as a guideline for their conduct in conjunction with the Company's rules and regulations.
- The Board of Directors must provide adequate disclosure of the Company's information, both financially and non-financially adequately, reliably and timely to ensure that shareholders and stakeholders of the Company receive equal information, as well as to provide public relations agencies and investor relations agencies to be responsible for providing information to investors and the general public.

- The Board of Directors must ensure that shareholders are treated equally, have access to information and have appropriate channels to communicate with the Company.

3. The Board of Directors and the Management are leaders in ethics, as a good model to operate in accordance with the Company's good corporate governance guidelines and to monitor the management of conflicts of interest and connected transactions.

4. The Board of Directors acts with dedication, responsibility and independence with clearly separate roles between the Chairman of the Board of Directors and the Chief Executive Officer and The President.

5. Roles of the Chairman To ensure the separation of authority in terms of policymaking and management of the Company is clearly separate. Therefore, the Company requires the Chairman of the Board of Directors, the Chairman of the Executive Committee and the President are separate persons, with the Chairman playing a role. (listed on the Company's (<https://www.tpipolene.co.th/th/aboutus/org-tpi/board-roles-th>) or scan QR Code



The Chairman of the Board of Directors is an independent director in another role, with the freedom to comment, ensuring that the Company's director structure is properly balanced as follows:

1. Call the Board of Directors' Meeting, as a Chairman of the Board of Directors' meeting and the Shareholders' Meeting, as well as play a role in setting the agenda with the Chief Executive.
2. Play a role in controlling meetings effectively in accordance with regulations and the Articles of Association of the Company and allow the directors to express their opinions independently.
3. Support and encourage the Board of Directors to perform duties to the best ability in accordance with the scope of authority, duties, responsibilities and in accordance with good corporate governance principles.
4. Monitor the management of the Board of Directors and other sub-committees to achieve the planned objectives.

5. Be the decisive voter in the event that the Board of Directors' meeting has the same vote and in case votes on both sides are equal.

6. The Board of Directors provides self-evaluation and annual evaluation of other directors to serve as a framework for reviewing the duties of the Board of Directors and consider, review, analyze performance for work improvement.

7. Succession Plan : The Board of Directors and management must take steps to ensure that the Company has a system of personnel selection that will be properly responsible for key management positions at all levels. Personnel preparation is required to plan succession, especially in executive positions, by setting policies, the management policy and development approach, including individual development plans to be ready to take higher positions with vacancies.

8. Establishment of a specific committee The Board of Directors may appoint specific committees as appropriate to help screen important tasks carefully. The important work consists of directors who have knowledge and expertise suitable to perform the duties of sub-committees in each committee to help screen various tasks as assigned and in accordance with the best practices of sub-committees. The scope of duties and responsibilities are also defined in the charter of sub-committees for clarity and the results of their duties are regularly reported to the Board of Directors' meeting and disclosed in the Annual Report 56-1 One Report.

The Company's sub-committees consist of the Executive Committee, the Audit Committee, the Nomination Committee, the Remuneration Committee, the Corporate Governance Committee, the Sustainability Development Committee, and the Risk Management Committee.

The Executive Directors consists of six directors who have knowledge, competence, ethics and experience in business operations.

The Audit Committee consists of four independent directors who are fully qualified as announced by the Securities and Exchange Commission, including the Stock Exchange of Thailand to perform the duties of auditing and balancing the management of the Company's business to be accurate, fair and in the best interests of shareholders.

The Nominating Committee, the Remuneration Committee, the Corporate Governance Committee, the Sustainable Development Committee, and the Risk Management Committee, which consist of directors with knowledge and expertise suitable to serve as sub-committees in each committee. The composition of the committees conforms to the relevant rules and regulations to help screen tasks as assigned and in line with the best practices of the committees. The scope of duties and responsibilities are also defined in the charter of sub-committees for clarity and the results of their duties are regularly reported to the Board of Directors for acknowledgment and disclosed in the Annual Report 56-1 One Report.

9. The Board of Directors and the management have recommended and determined the Company's business ethics for the Board of Directors, administrator, including all employees used business ethics as a guideline for conducting in conjunction with the Company's rules and regulations as shown on the Company's <https://www.tpipolene.co.th/th/aboutus/code-of-conduct-th> or scan QR Code



10. The Board of Directors and the management will provide adequate disclosure of the Company's information, financially and non-financially adequately, reliably and timely to ensure that shareholders and stakeholders of the Company receive equal information, as well as to provide public relations agencies and investor relations agencies to be responsible for providing information to investors and the public.

11. The Board of Directors and the management provide effective anti-corruption and anti-corruption support to ensure that management is aware of and focused on anti-corruption, as well as to implement anti-corruption measures, which is shown on the Company's website <https://www.tpipolene.co.th/th/investment/social-responsibility-th> or scan QR Code



<https://www.tpipolene.co.th/th/aboutus/corruption-policy> or scan QR Code



12. Director Development : the Company requires the orientation of new directors and provides a manual of directors, documents and useful information for directors by encouraging directors to continue to consider training with the Thai Institute of Directors and other related institutions throughout the year to promote understanding of the work under the principles of good corporate governance of listed companies, in order to increase knowledge of the roles of directors that will contribute to continuous and modern improvements in operations.

13. The meetings of the Boards and receipt of information : All board members should attend the board meetings. The Office of the Directors is responsible for preparing the documents, the place and coordinating the meetings. Each director must be informed of the date of the meeting and agenda and meeting information for reasonable study in advance. The Company holds regular board meetings on average at least once a month. Additional meetings may be held as appropriate so that the Board of Directors can continuously supervise the management's operations as detailed on the Company's <https://www.tpipolene.co.th/th/aboutus/time-table-board-th>) or scan QR Code



In every meeting, time is allocated appropriately and adequately so that the directors can consider the agenda generally. The Chairman and Chief Executive Officer are the agenda co-ordinators and consider the agenda of the Board of Directors to ensure that all important issues in business operations are considered by the Board of Directors in full. Each director is free to propose topics for consideration at the meeting and has an open and free expression of opinion. It is encouraged to exercise discretion in all issues entering the meeting.

14. The agendas of the Board of Directors must be voted on by at least two-thirds of the directors who attended the meeting.

15. The Board of Directors meetings may be subject to all or part of electronic meetings, and the Company shall properly comply with the Public Limited Companies Act and related legal regulation regarding the board of directors meetings; minutes of meeting are written and certified minutes of meetings are stored systematically and securely kept by the Board of Directors.

16. At the Board of Directors' Meeting, the Company properly complies with the Public Limited Companies Act regarding board meetings. The meeting notes are written and the Board of Directors keeps the minutes of the certified minutes systematically and with good security.

17. Remuneration of Directors and The Management
Determination of remuneration of the Board of Directors is fair and reasonable, by considering the appropriateness and compliance with the responsibilities of the directors and the performance of the Company. Remuneration of directors has also been approved by the Shareholders' Meeting in terms of executive remuneration. The Company determines the compensation appropriately based on responsibilities the Company's performance and the practices of listed companies in the same industry.

18. Corporate Secretary : The Board of Directors appoints a Corporate Secretary to supervise the Board of Directors' meetings and shareholders' meetings in a smooth and transparent manner, in accordance with the rules and legal regulations and to keep track of compliance correctly and regularly. In addition, the Corporate Secretary performs his/her duties to oversee the activities of the Board of Directors, including coordinating compliance with the board's resolutions and complying with the Company's good corporate governance principles.

19. Principles of other positions of TPI Polene Group's management Details shown in Section 8 Important Corporate Governance Performance Report Subsection 8.1.3 Supervision of subsidiary and associate companies.

6.1.2 Policies and Guidelines relating to shareholders and stakeholders

The Company's Directors acknowledged best practice for directors of a listed company as their principle guideline by encouraging the Company to be an organization that operates with transparency, virtue and responsibility to shareholders, customers, employees, society and other stakeholders, it can be concluded as follows:

1. Shareholder 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 related governing laws as follows:

1. Shareholders' Meeting

The Company schedules an annual general meeting of the shareholders ("AGM") within 4 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 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. In 2023, the Annual General Shareholders' meetings were held on April 25, 2023 at the Conference Room on the 9th floor of TPI Tower, 26/56 Chan Tat Mai Rd, Thungmahamek, Sathorn, Bangkok. Total of 14 directors attended the AGM.

The Audit Committee of the Company and the Legal Advisor acted as the agents for the ballot throughout the meeting and the Chairman allocates sufficient time for each item and facilitates the meeting appropriately according to related governing laws and all respective agenda were proposed and resolved in the meeting.

2. Delivering Meeting Notices

After the Company's Board of Directors approved and resolved the Annual General Shareholders Meeting, the Company will disclose the Invitation to the Annual General Shareholders Meeting with all relevant documents on the Company's website at <http://www.tpipolene.co.th> or scan QR Code



for shareholders' consideration prior to the meeting.

The Company assigned Thailand Securities Depository Co., Ltd., its SEC Securities Registrar, to mail meeting notices together with details of the agenda and accompanying documents (both Thai and English). The invitation letter to the shareholders' meeting contains details of the meeting, as well as important and necessary information for the decision of the Board of Directors.

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 ahead of the meeting date. An invitation to the AGM is also announced in newspapers for three consecutive days in advance of the meeting. Foreign shareholders will receive the invitation document of the Annual General Meeting of Shareholders in English.

For Institutional Investors, the Company has contacted institutional investor representatives to coordinate and provide institutional investor information to prepare the documents correctly and completely prior to the meeting date.

3. Facilitating Shareholders

The Company treats all shareholders in a fair manner. The Company always allows registration of shareholders 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 as well as a suitable reception is also extended to all shareholders.

4. Conduct of Shareholders' Meetings

The Company held a meeting venue at TPI Tower, a place accessed by public transport. Before the meeting starts, 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 thorough expression of views and queries by shareholders before voting and summarizes the meeting's resolution on each agenda item and minutes of the meeting must be completely and accurately recorded, with a summary of voting results on each item.

5. Action 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 at <http://www.tpipolene.co.th>



Advance Notice of Meeting Invitation

At the Board of Directors' Meeting No. 2/2023 on February 23, 2023, it was resolved to schedule the 2023 Annual General Meeting of Shareholders for Tuesday, April 25, 2023, at 3:00 p.m. The meeting will be held in the Conference Room on the 9th floor of TPI Tower, located at No. 26/56 Chan Tat Mai Road, Thung Maha Mek Sub-district, Sathon District, Bangkok Metropolis. The resolution regarding the meeting date and agenda was disclosed and announced on the website of the Stock Exchange of Thailand on March 24, 2023, providing shareholders with advance notice before sending the meeting invitation letter. Thailand Securities Depository Co., Ltd., as the Company's securities registrar, will deliver the meeting invitation letter, which will contain details of the meeting agenda, important and necessary supporting information for decision-making/opinions of the committees, minutes of the previous AGM with complete details, and meeting documents. Additionally, the letter will include documents required for granting a proxy, clearly specifying how to use them, and the Annual Report in QR Code format. These materials will be sent to shareholders at least 14 days before the shareholder meeting date. The meeting invitation letter was sent out on April 3, 2023, and was announced in daily newspapers, both Thai and English editions, with one copy each published consecutively for three days (March 27th, 28th, and 29th, 2023), not less than 7 days before the meeting date. This notification provides shareholders with adequate time for preparation before attending the meeting.

During the Annual General Meeting of Shareholders, the Company disclosed pertinent information in the shareholder meeting invitation and accompanying documents on its website on March 27, 2023, a full 30 days in advance of the meeting date. The meeting chairman will appoint a master of ceremonies to oversee proceedings, introducing the Company's Board of Directors, management team, auditor, and legal advisor. The legal advisor serves as a mediator and witness, ensuring shareholders' comprehension by

explaining meeting protocols, including the counting of votes on each agenda as per the Company's regulations. The procedures for exercising voting rights on each agenda, using provided ballots and necessary information, will also be outlined.

The chairman will offer meeting participants the chance to express their ideas, seek feedback, and ask questions regarding each agenda item. In 2023, the Company prepared question sheets for attendees to utilize in place of microphones, ensuring clear and comprehensive questioning. This approach enables the chairman and executives to address the crucial points of shareholders' inquiries.

The chairman will conduct the meeting according to the order of agenda items and will not add additional agenda items without notifying shareholders in advance, unless a resolution is passed during the meeting to change the agenda's order by at least two-thirds of attending shareholders. Alternatively, if shareholders holding shares totaling at least one-third of the Company's total shares request, the meeting can consider matters not initially included in the agenda. During the 2023 Annual General Meeting of Shareholders, there were no changes made to the agenda's order, and no requests were made to consider additional matters beyond those outlined in the meeting invitation.

In every meeting, notes will be taken, and meeting minutes are accurate and complete, concluding with the voting and counting of votes. At the 2023 Annual General Meeting of Shareholders, registration was scheduled to begin at 1:30 p.m., with the meeting set to open at 3:00 p.m. At the time the meeting opened, the Company had a total of 20,755 shareholders, with a total number of shares sold amounting to 18,935,235,000. There were 40 shareholders attending the meeting in person, totaling 2,493,645,901 shares, and 67 shareholders who provided proxies, amounting to 10,588,709,089 shares, including 107 registered shareholders, with a combined share count of 13,082,354,990. This represents 69.09% of the total number of the Company's shares sold, thus forming a quorum. Fourteen directors, representing 93.33% of the total, attended the meeting for clarification of information. The remaining directors were unable to attend due to necessity

or urgent missions. Among those present were the Chairman of the Board, who acted as the meeting's chairman; the Chairmans of all committees; the Chief Executive Officer; the President; as well as executives at the levels of Deputy Managing Director and Assistant Managing Director, and executives from companies within the TPI Polene Group. They were all present at the front of the stage to provide clarifications and respond to related questions. Independent directors also served as proxies for minor shareholders.

Auditors from KPMG Phoomchai Audit Limited attended the meeting, as follows:

1. Mr. Bunyarit Thanormcharoen
2. Miss Thanyalak Ketkaew
3. Mr. Thapanan Krasae
4. Mr. Chatpimuk Srisupan

Legal advisors from SCL Nishimura & Asahi Limited (acting as a witness to review and test the voting in case there are arguments throughout the meeting), namely:

1. Mr. Vira Kammee
2. Mrs. Siriwan Nophaarporn

Practices Guideline for Conflict of Interest

The meeting on the guideline for Good Corporate Governance has required all Executive Directors and employees to prepare a conflict of interest report for both the Annual Report and interim reports. If a conflict arises during the year or in any stakeholder meeting where conflicting interests with the Company are evident, it must be disclosed during the meeting, and individuals with conflicts should abstain from participating in related agenda items. During Shareholders' Meetings, if any directors have personal interests related to any agenda item, they are obligated to disclose this conflict and request to be excused from the discussion and voting on that specific agenda item.

Review of Connected Transactions or Conflict of Interest

The Company has established its Code of Conduct for all directors, executives, and employees at all levels, with the aim of reinforcing an organizational culture that prioritizes operations free from conflicts of interest, ensuring alignment with the Company's interests. This initiative is intended to maximize the benefits of transparent and verifiable business operations. The Audit Committee reviewed the connected

transactions and transactions with potential conflicts of interest, based on reports from relevant directors. It determined that these transactions were reasonable, did not disadvantage the Company, and were appropriately disclosed to the regulatory authority within the specified timeframe.

Disclosure of the results of the vote in the Shareholders' Meeting

In 2023, TPI Polene Public Company Limited delivered a summary report on the results of the vote at the shareholders' meeting to the SET and the SEC by the evening after the completion of the meeting (April 25, 2023) and delivered the minutes of the shareholders' meeting (the minutes of the meeting, with a clear agenda and specifying the number of directors attending the meeting/ absent from meeting, shareholder inquiries and clarifications of the Board of Directors, voting count and the results of the votes in complete) to the SET and the SEC within 14 days.

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. Shareholders can appoint proxies to others attending the meeting and votes on behalf of the shareholders and shareholders can also give proxies to the Company's audit committee to vote on their behalf. It can be indicated in the proxy statement (Form B) that the proxy will be provided to vote on whether to agree or disagree at will.

In addition, the Company also discloses the format of the proxies together with all details and procedures on the Company's website at <http://www.tpipolene.co.th> or Scan QR Code in advance of the meeting.



3. Encouraging 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 and the SEC to facilitate access by shareholders and other interested investors.

3. Ensuring strict supervision of the use of inside information

The Company supervises the use of inside information in accordance with the principles of good corporate governance 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) The Directors and the 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 the 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 B.E. 2535.
- (4) Any misuse of internal information shall be subject to disciplinary action, The penalty for violations of the rules has been imposed, as announced in the Company's Notice of Discipline and Employee Regulations, with a maximum penalty of dismissal.

4. Stakeholders' 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, in which TPIPL 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 line 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 is committed to representing shareholders in transparent business operations, reliable accounting and financial system to ensure maximum satisfaction for shareholders by taking into account the Company's long-term growth and consistently reasonable returns.

(2) Customers : The Company places a great emphasis on customer satisfaction through the quality of its products and services, provided at reasonable prices. For the manufacturing of cement, plastic resin and ready-mixed concrete, the Company and its subsidiaries have also been awarded ISO 9001:2015 certifications from the International Organization for Standardization. In addition, TPI Group has gained recognition for the quality of all cement products from the Thai Industrial Standards Institute and the Office of Customer Protection Board.

In addition, the Company holds seminars for customers to enhance relationships and to educate them about the variety of products offered. We also develop customer interaction via certified agents that welcome all customer suggestions, as these lead to higher efficiency of product development, and maintain customer with brand loyalty.

(3) Employees : The Company realizes the importance of human resources in the organization, regardless of the work, without discrimination, with a policy to continuously improve the potential of the management and employees. It provides training both inside and outside the Company. In addition, the Company has an effective recruitment and hiring process, as well as consideration of equal and appropriate returns and benefits. This can be compared with companies in the same industry. It has also paid attention to the hygiene and safety of employees as workers as can be seen from the cement plant, plastic resins factory and concrete mixing units which are certified to the management system standard. The system focuses on reducing the risk of harm and accidents of employees and stakeholders. Details shown in Section 3: Driving Sustainable Business Sub-topic 3.4.1 Sustainability management in social dimensions and 3.4.2 Social Performance.

(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 and does not have any business commitments that favor or strong involvement with any particular trade partners.

(5) Creditors / Bondholders : The Company considers the equality of all parties involved, honesty in business operations, adherence to building trust and treating creditors fairly, conducting business with transparency, auditable under good corporate governance, compliance with all loan conditions, providing complete financial information, managing efficiently, providing confidence and maximum returns. The Company has a policy to strictly abide by the terms and conditions of contracts and financial obligations, including repayment of principal, interest, and collateral treatment under applicable contracts, as well as not using dishonest methods to conceal information or facts that will harm creditors. In the event that one of the conditions cannot be

complied with, the creditors must be notified in advance in order to jointly consider a solution.

(6) Business Competitors : The Company follows fair trade practices with regard to its rivals, doesn't steal their secrets through dishonest means, operates within a framework of fair competition, abides by the rules of fair competition, doesn't harm their rivals' reputations in the marketplace through false accusations, and respects the partners' intellectual property and copyright rights of business competitors.

(7) Community and Society : The Company, as a company of Thai people, has always been conscious and focused on being responsible for the country, society, and community, and and youth continuously both directly and indirectly through the Environment for Life Foundation. In addition, there are community visits to listen to problems and suggestions to create acceptance, support public activities for the community, educate and train employees at all levels as appropriate to make employees aware of the environment and community, survey the needs and opinions of the community, organizing a mobile medical unit to continuously provide community services for a better quality of life, organizing a reforestation and rehabilitation project after mining, organizing a budget to support community development, including education, creating jobs, creating careers, creating income for the community, etc.

(8) Governmental Authorities : TPI Polene Group takes good environmental considerations and therefore arranges for waste to be processed into fuel instead of coal in the cement production process, to reduce greenhouse gases according to the government's environmental policy, conducting business with transparency. There is compliance with regulations and cooperation, supporting various projects of government agencies to live with the community sustainably.

(9) Mass Media : TPI Polene Group supports media initiatives that are in accordance with the Company's policies and that benefit the

community and society, such as business visits and social events occasionally, participation in the Opportunity Day of the Stock Exchange of Thailand, and business practices that give consideration to the community, society, and environment through the appropriate and regular disclosure of information that benefits society.

5. Anti-corruption Policy

The Company has an anti-corruption policy and establishes anti-corruption practices, which are set out in the Code of Conduct code of conduct regarding gift giving or receiving, detailed as follows: Details are displayed on the Company's website:

<https://www.tpipolene.co.th/th/investment/social-responsibility-th> and Scan QR Code and



<https://www.tpipolene.co.th/th/aboutus/corruption-policy> and Scan QR Code



Gift giving or receiving

- (1) Directors, the Management and employees can receive gifts, assets or other benefits for the benefit of the Company's business and avoid it in a way that exceeds or exceeds normal relationships from other parties concerning the Company or will be future partners, and such receipts or giving must be done with transparency. It must be done in an open way.
- (2) Avoid receiving gifts either in monetary or non-monetary terms from partners or those related to the Company's business, except in festivals or traditions.
- (3) The Company does not have a policy of offering money, incentives, gifts or special benefits in any form to customers, partners, external agencies or individuals to obtain business, except for traditional business certification, trade discounts and company promotions.

- (4) Directors, the Management and employees are responsible for reporting the receipt of gifts, assets or other benefits from partners, contractors, customers or stakeholders of the Company's business. In any case, it may affect decisions to perform duties in a biased or embarrassing way, or cause a conflict of interest.
- (5) Directors, the Management and employees are responsible for reporting the receipt of gifts, property or other benefits by the Company to promote to partners, contractors, customers or stakeholders of the Company's business.
- (6) Gifts, property or any other benefit accepted or provided shall not be illegal.
- (7) The Company does not prohibit the preparation of gifts with the Company's emblem, as long as the gifts to the person are reasonable and consistent with the business operation.

(More details can be found on the Company's website <http://www.tpipolenepower.co.th/index.php/th/th-aboutus/code-of-conduct-th>) or scan QR Code



Practical measures

Anti-Corruption (Business Dealings with Partners and Third Parties)

Employees must comply with the following anti-corruption policies: To deal with customers, sellers, or third parties with business relevance (hereinafter referred to as "third parties with business relevance").

1. Employees must comply with the law, regulations, business practices and business etiquette for dealing with third parties with business relevance.

2. Staff must not accept or make any direct or indirect claims, which are money, vouchers, checks, stocks, gifts or other bribes, any special compensation or incentives of value from third parties with business relevance.

3. Employees may receive gifts that are not cash or any priced gifts from third parties with business interests.

It must be approved by direct supervisors first. However, receiving such gifts must be in accordance with the rules, business traditions or business ethics and must not influence employee business decisions.

4. Employees shall not exploit any of their positions in the Company to receive or call on third parties who are business-related or related to such third parties, including not providing any services that are not related to the Company's business.

5. When an employee refers a person to the Company, such actions shall not contravene the Company's interests or procurement procedures. It must also not be done for unlawful personal gain.

6. Employees who are supervisors with subordinates in the same unit, there should be no relationship as a spouse or parent/child.

7. Employees must not give bribes to officials or government officials by offering money, vouchers, checks, stocks, gifts or other bribes. Any special compensation or incentives are valued.

8. Employees who violate the terms in the previous paragraph shall be punished in accordance with the relevant regulations of the Company and may be prosecuted according to the law.

9. Employees must obtain the approval of their superiors before offering gifts (for example, company products) or certifying them to third parties with business relevance. It remains to be followed by practical traditions or business etiquette, local laws and related regulations of the Company. If an employee is not approved by their superiors in advance due to urgent grounds, the employee will not be approved by his superiors. Such employees must also be approved by their superiors after giving gifts or accreditation to third parties who are already relevant to the business.

10. Employees should not exploit any of their positions in the Company to have unlawful relationships, perform sexual harassment, discrimination in any form (including discrimination based on race, gender, disability or religion as a criterion), burglary, intimidation, coercion or other unlawful conduct.

11. If the employee has already questioned anti-corruption, employees must seek the opinion of their superiors so that there is no dispute.

Dissemination of anti-corruption policies

In order for everyone in the organization to be aware of the anti-corruption policy, the Company will take the following actions:

1. The Company will post an anti-corruption policy to employees.
2. The Company will publish its anti-corruption policy through its communication channels such as electronic letters, company websites, annual reports, etc.
3. The Company will conduct a regular review of its anti-corruption policy.

Additional practices regarding prevention of corruption

The Group of Company has an anti-corruption policy focused on promoting morality, ethics, transparency in business practices in accordance with the Company's business ethics, as well as conducting business with an effective management system, that is transparent, and verifiable. In addition, the Company encourages its personnel at all levels not to be directly or indirectly involved in corruption, and promotes the participation of employees at all levels in preventing and combating corruption related to the Company's business.

The Group of Company has a policy of giving or receiving gifts, gifts, as well as other benefits from individuals or companies engaged in business with the Company so as not to cause conflicts of interest. Any special compensation or incentives of value from third parties with business relevance to employees of the Company must first be approved by direct supervisors. However, receiving such gifts must be in accordance with the rules, business traditions or business etiquette and must not influence employee business decisions.

In addition, the Group of Company has a policy of not authorizing or encouraging unlawful payments or bribing government agencies, and also clearly determines how to report whistleblowers or complaints in cases where unlawful acts are witnessed. The Company also sets out guidelines for conducting investigations and penalties in the Company's anti-corruption policy.

The Company has released an Anti-Fraud and Corruption Policy through its Chief Executive Officer, which outlines guidelines for employees at all levels of the Company to understand and take part in the prevention and anti-corruption in the organization through both direct and indirect channels, including setting up channels for whistleblowing or complaints about corruption actions related to the Company from both internal complainants and external stakeholders. The Company provides protection to complainants and complaints will be kept confidential both during and after the fact investigation is completed. If the accused has actually committed an offense, the Company has imposed disciplinary action in accordance with the regulations set by the Company and if the offender is an unlawful act, the offender must be prosecuted and legally punished.



6. Disclosure and Transparency

The Company is strictly aware of the securities act's compliance with the SEC's notices and related set requirements as follows:

1. Disclosure of the Company's information including financial reports : In order to be materially correct, complete, transparent, thorough and timely and in accordance with generally accepted accounting standards prepared by independent auditors, the Company has provided a report on the responsibility of the Board of Directors to The financial report together with the auditor's report in the Annual Registration Statement / Annual Report (Form 56-1 One Report), including various reports, both financial and non-financial, have been conducted in accordance with relevant regulations of the Securities and Exchange Commission, including the Stock Exchange of Thailand.

2. A plant is provided for interested institutional investors, shareholders and analysts to access information. 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, the SEC and the Company's Internet 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 has provided a report of the Board of Director's responsibility for financial statements in this Annual Report.

5. The Company has disclosed the roles and duties of the Board of Directors and sub-committees, rules, including the number of meetings held and the number of times each director attended the rules in the annual report.

6. Disclosure of remuneration to Directors and Management Remuneration: this is detailed above in the section "Management". Remuneration levels are based on the operating results of the Company during the previous fiscal year; reflect duties and responsibilities fairly and reasonably; and are comparable to general practices in the industry.

7. Investor Relations

The Company held important activities of the Company as follows:

Activities	2022	2023
Analyst Meeting / Zoom	-	4
Via e-mail/ Telephone	20 times/month	20 times/month
Visit the factory	3	8
News & Broadcast	150	110
Listed companies meet investors by the Stock Exchange of Thailand (Opportunity Day) (You can watch the video on the Company's website https://tpipolene.co.th/th/investment/investmentdocument/opportunity-day and scan QR Code	4	4
		
Seminar	1. Seminar "Turn the ESG Bible, Raise the Flag of Sustainable Business and Investment Trends in the Second Half of the Year" (TPIPL) https://www.youtube.com/watch?v=Wrfv-SwoWuA	-

Activities	2022	2023
<p>Press Release (You can watch the video on the Company's website https://www.tpipolene.co.th/th/news/announcement and scan QR Code</p> 	<p>2. Activity Pun Pun Happiness to stop cancer No. 5 "Young Mee Rao Foundation" Top News station organizes spin the joy to stop cancer at Tian Talay Phatthana Prueksapirom Park, Bangkok. https://www.topnews.co.th/news/411000</p> <p>3. TPIPL affirmed and supported the project "Street Art King Bhumibol" https://www.topnews.co.th/news/436505</p>	<p>1. Press Release TPI Polene 2022 Performance https://www.nationthailand.com/pr-news/more/pr-news/40025244</p> <p>2. TRIS upgrades TPIIP's credit rating from 'BBB+' to 'A-' https://www.naewna.com/business/714499</p> <p>3. TPIPL - TPIPP TPIPL - TPIPP won two Global CSR Awards Reinforcing our corporate social responsibility stance https://mgronline.com/business/detail/9660000052503</p> <p>4. TPI Polene listed on 'ESG100 Stocks' list for 4th year https://mgronline.com/business/detail/9660000058321</p> <p>5. Revealing the identity of "Prachai Leophairatanat" and the background of "TPI Organic Fertilizer" https://mgronline.com/online/section/detail/9660000068518</p> <p>6. TPIPL-TPIPP the Company achieved "Excellent CG Scoring, a 5-star corporate governance assessment" (Excellent CG Scoring) https://www.facebook.com/share/R3b9z9SotCTQGvw/?mibextid=WiMSqg</p> <p>7. TPIPL - TPIPP received "2023 SET ESG Ratings: AA" Corporate Sustainability Assessment https://www.bangkokbiznews.com/pr-news/news/prnews/1098001</p> <p>8. TPIPL received Outstanding Innovative Company Awards 2023 from "SET Awards 2023" https://www.bangkokbiznews.com/pr-news/news/prnews/1100345</p> <p>9. Cement business - increase Ft rate, and support target to reduce costs to push EBITDA https://news.trueid.net/detail/ZzGV6yknq6wX</p> <p>10. TPIPL received Sustainability Leadership Awards 2023 https://www.bangkokbiznews.com/pr-news/news/prnews/1104407</p> <p>11. TPIPL - received the Sustainability Disclosure Award 2023 from Thaipat Institute https://www.bangkokbiznews.com/pr-news/news/prnews/1105330</p>

If investors and stakeholders require additional information, please contact Investor Relations at 02-213-1039 ext. 12983.

8. Conflicts of Interest

The Company has clear guidelines for determining transactions that may have conflicts of interest in the interests of the Company and its shareholders. The Company has adhered to the rules and regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand. The disclosure process and approval of transactions between them by directors and the Management who have a stake in transactions made with the Company and its subsidiaries do not participate in the decision of such transactions.

The Company is committed to managing the Company in accordance with the principles of good corporate governance with a commitment to operate with transparency, morality, ethics, and responsibility to shareholders, customers, employees, society, and other stakeholders. The Company has prioritized and supported the development of a strong corporate governance culture. The Chairman of the Board of Directors has established a policy to prevent conflicts of interest in the Company's business ethics manual for the Board of Directors, executives, and all employees to acknowledge and compliance with good practices with a conscience that adheres to honesty, morality, and ethics, as well as protecting the interests of the organization as a whole.

The Company has clear guidelines for considering transactions that may have conflicts of interest for the benefit of the Company and its shareholders. In the event that the Company and its subsidiaries have connected transactions with persons who may have conflicts of interest, the Company has complied with the rules and regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand on disclosure procedures and approval of related party transactions. The committees and executives who have interests in the transactions made with the Company and its subsidiaries do not participate in the decision making of such transactions.

Disclosure of transactions that may have conflicts of interest or connected transactions shall be in accordance with the criteria set out by the SEC and the SET as disclosed in the 2021 Annual Report (Form 56-1 One Report) or other report form on a case-by-case basis, as well as in accordance with generally accepted accounting standards as per details appeared in "Inter-Company Transaction".

In addition, in accordance with the Company's regulations, directors must notify the Company without delay if there is an interest in the contract with the Company or shareholding or debentures increases or decreases in the Company or its subsidiaries.

9. Internal control and inspection system

The Company has provided a good internal audit and control system that can help prevent possible damage, helps in the discovery of errors, reduces business risks and helps accurately report financial statements and other financial reports.

To help protect the Company's assets and shareholder investments, the Company has an internal audit body to monitor its performance effectively and efficiently under an adequate and appropriate internal control system. Independent units can report audit results honestly in order for management to be able to acknowledge operational problems or deficiencies in a timely manner and be used as information on the determination of measures to protect the Company's assets and shareholder investments, including unlawful exploitation from the Company and its subsidiaries, and to consider, improve and develop the Company's operating system to be more efficient and effective.

The Company also has an Audit Committee to perform its duties in reviewing and evaluating internal control systems as well as review the disclosure of information to investors to be in compliance with relevant laws and other important matters.

However, the Company has provided an internal control system of the Company and its subsidiaries with five elements in relation to the environment, risk management control, management operations control information and communication systems and tracking systems.

In addition, there are appropriate and adequate measures and procedures to operate, covering transactions with major shareholders, the Management or related persons to prevent conflicts of interest, which is to preserve the best interests of the Company and its shareholders and all relevant stakeholders.

6.2 Code of Conduct

The Company has focused on driving a concrete corporate governance culture with the Code of Conduct, it is a common obligation to comply with the scope of responsibility to the Company and its stakeholders within the Company's legal and regulatory framework on the basis of professional ethics and maintaining transparent, honest and fair business practices, taking into account the interests of all relevant stakeholders.

The Company has a policy to be updated according to the changing situation regularly. In addition, the Board of Directors acknowledges and adheres to the good practices of the listed directors. The Board of Directors, the management and employees at all levels have behaved with a conscience that adheres to integrity, morality, ethics and awareness of the Company's reputation as a leading company with credibility, stability and reputation for more than 20 years.

Principles of conducting business with ethics

With the intention of TPI Polene Group to operate the business on the basis of ethics and morality along with responsibility to all stakeholders, the Company has prepared this business ethics manual for the directors, executives, and employees of the Company to acknowledge the established guidelines in this business ethics handbook and operate the business operation to achieve its business goals while also reflecting the values and culture of the or, it is a compilation of the policies for taking care of responsibility and treating stakeholders, as well as the principles of business operations of the Company that are of international standards. At the same time, the Company also hopes that business partners with the Company and all related stakeholders are informed and adhere to the same principles for sustainable growth together.

The Company's Business Code of Conduct has 14 categories as follows:

1. Respect and compliance with the law Related Regulations and Regulations
2. Anti-Corruption Practices
3. Interests and Conflicts of Interest
4. Use of internal information and confidentiality
5. Internal control, internal audit, risk management and financial accounting reports
6. Receiving and giving gifts, property or other benefits

7. Sourcing and treatment of partners
8. Intellectual Property Using Information Technology
9. Political Rights and Impartiality
10. Employee Code of Conduct
11. Universal Respect for Human Rights
12. Incident Reports / Complaints / Suggestions / Whistleblowing Channels for Matters Causing Damage to the Company, and Protection of Whistleblower Rights
13. Responsibility to Stakeholders
 - 13.1 Treatment of shareholders
 - 13.2 Treatment of customers
 - 13.3 Treatment of suppliers
 - 13.4 Treatment of trade competitors
 - 13.5 Treatment of creditors
 - 13.6 Treatment of government agencies
 - 13.7 Treatment of employees
 - 13.8 Treatment of communities, society, culture and the environment
 - 13.9 Priority for quality, safety and occupational health

- ## 14. Innovation Research and Development

Details and guidelines according to the Company's Code of Conduct have been published on the Company's website for acknowledgment by stakeholders and the public at

<https://www.tpipolene.co.th/th/aboutus/code-of-conduct-th>



6.3 Significant Changes and Developments of Good Corporate Governance Policy, Guideline and System in 2023

6.3.1 Significant changes and developments regarding the review of good corporate government policy, guideline and system or the Charter of the Board of Directors in 2023 are as follows:

- TPI Polene Group has produced two sets of VDO clips on the "Company's Code of Conduct Manual" and "Employee Code of Conduct (Four Rddhippada)" for its personnel to learn by themselves via mobile phones or PCs. These resources can be accessed through the QR Code sent in the LINE Group application to every function and affiliated company. It is essential for individuals to be informed and act accordingly. This initiative aims to reinforce understanding of the Company's Code of Conduct among executives and employees at all levels. By adhering to these guidelines, individuals are expected to work with honesty and integrity, comply with the rule of law, prioritize transparency, value customers, uphold social responsibility, consider the interests of all stakeholders, and maintain consistency with sustainable business practices.

- The Company promotes awareness and compliance with the principles of corporate governance and TPI Polene's Code of Conduct among executives and employees across all operating areas. This is achieved through organized training sessions aimed at providing knowledge to executives and employees at all levels, with a focus on preventing the misuse of inside information, avoiding conflicts of interest, combating corruption, and fostering adherence to the code of conduct. These efforts align with the Company's Code of Conduct, which is designed to raise awareness among executives and employees at all levels and provide guidelines for best practices. In 2023, the Company conducted a test on its Code of Conduct for new executives and employees at all levels to assess their understanding. Additionally, it promoted the establishment of processes and mechanisms for managing complaints and whistleblowing in cases of ethics violations, Code of Conduct breaches, and corruption. These efforts aimed to strengthen the organizational culture in alignment with TPI Polene Group's Code of Conduct, fostering sustainable growth. Notably, there were no reported violations of the Code of Conduct in 2023.

- The Company considers and reviews the scope of duties of the Corporate Governance Committee, Audit Committee, Nomination Committee, and Compensation

Committee to ensure alignment with the Corporate Governance Code (CG Code) for Listed Companies 2017 of the SEC Office.

- To align with the principles of good corporate governance and the Code of Conduct of TPI Polene Group, the Company provides directors with knowledge about preventing the use of inside information and protecting the conflicts of interest. In 2023, the Corporate Governance Committee conducted comprehensive operations and did not identify any material conflicts. This included encouraging directors to attend meetings and seminars on various topics that would be beneficial in fulfilling their duties, such as the "Subsidiary Governance Program (SGP) for Company's Directors and Top Executives" and the "Role of the Chairman Program (RCP) for the Company's Director who Acts As the Chairman of the Board " organized by the Thai Institute of Directors Association (IOD), etc.

- The security policy for the information system of the Company and its subsidiaries (IT Security) has been reviewed to ensure greater cyber security.

- The Company has prepared an organizational risk assessment report and established risk mitigation measures, which include opportunities arising from climate change. This effort aligns with its goal of achieving carbon neutrality by 2043, surpassing Thailand's announced target of 2050.

- The Company has taken steps to improve its human rights efforts to be more comprehensive for stakeholders throughout the value chain, including employees, suppliers, customers, and local communities. This commitment is established as part of the Company's policy, which encompasses the Code of Conduct and the Supplier Code of Conduct for purchasing, procurement, and hiring, developed in collaboration with suppliers. These policies ensure compliance with the provisions outlined in international human rights principles and labor standards. Such standards include the United Nations Universal Declaration of Human Rights, the International Labour Organization's Universal Declaration on Fundamental Rights at Work, the Thai Labour Protection Act B.E. 2560 (2017), and respect for the International Labour Organization (ILO).

For more details, please scan following QR Code



- The Company considers and reviews risk management information, including the framework of enterprise risk management, which has been accepted as a guideline for promoting internationally recognized risk management practices.

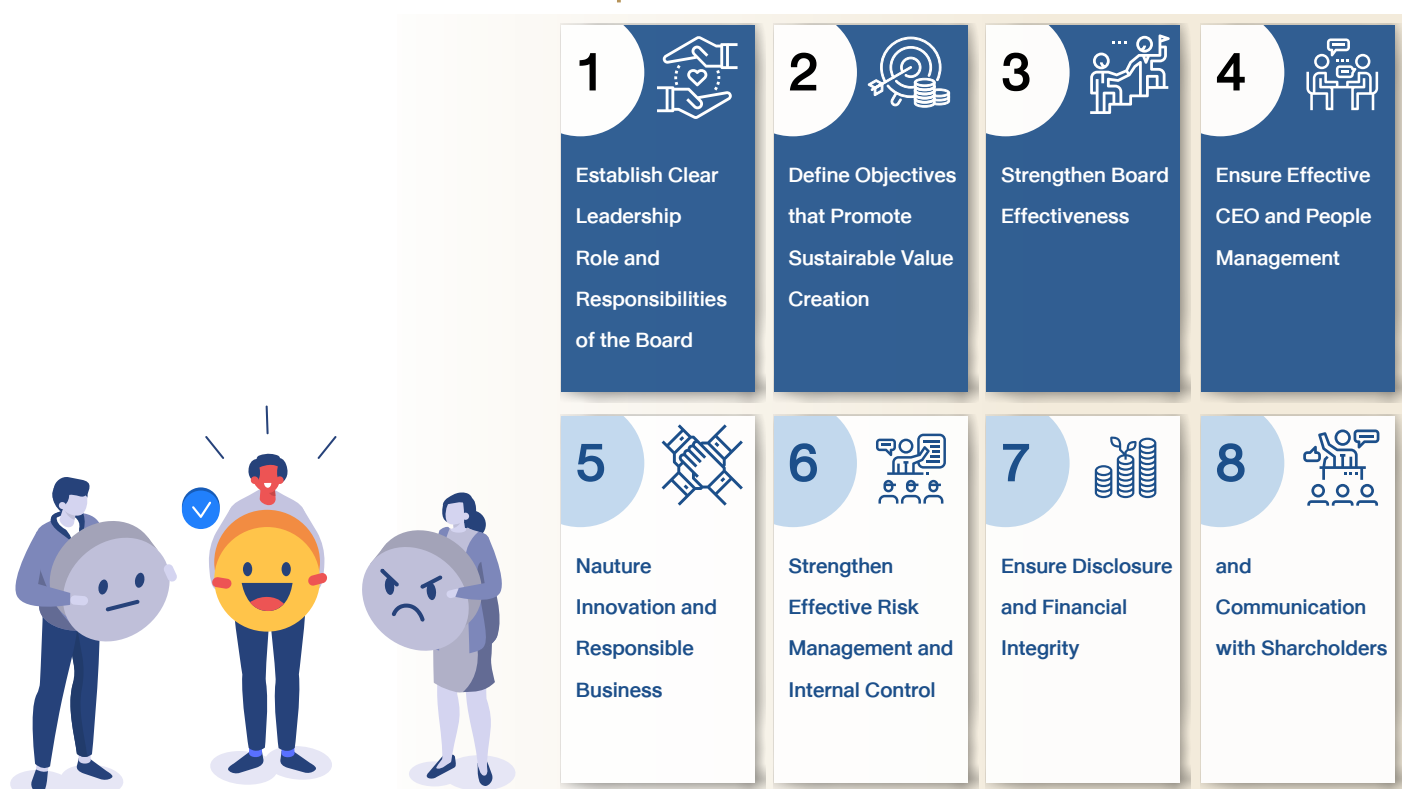
- In 2023, 65.42% of employees participated in the engagement assessment, with a job satisfaction level of 78.50%, an employee engagement level of 89.45%, and an overall level of employee satisfaction and engagement of 81.24%.

In addition, the Company has adopted the results of the employee satisfaction and engagement survey to further improve and create activities to create good relationships with employees at appropriate festivals to create employee engagement level in the organization.

6.3.2 Adoption of good corporate governance principles for 2017 listed companies (CG Code) of the SEC

The Company reviewed the Corporate Governance Policy based on the 2012 Corporate Governance Policy of the Stock Exchange of Thailand and the Good Corporate Governance Principles for Listed Companies 2017 (CG Code) of the Securities and Exchange Commission, considering and recognizing its role as a leader of the Organization (Governing Board). The environment and corporate governance to create value for sustainable development consists of eight main categories as follows:

Corporate Governance Code



Principle 1 Recognize the role and responsibility of the Board of Directors as the leaders of the organization that create value for sustainable affairs (Establish Clear Roles and Responsibilities of the Board)

Principle 1.1

The Board of Directors should understand their roles and recognize their responsibilities as leaders to ensure good management of the organization, which covers:

- (1) Determination of objectives and goals
- (2) Determining strategies, operational policies, as well as allocating important resources to achieve objectives and goals
- (3) Monitoring, evaluating and supervising performance reporting

Principle 1.2

The Board of Directors has a duty to supervise and ensure that all directors and the management perform their duties of care, duty of loyalty and integrity to the organization and ensures compliance with the law, regulations and resolutions of the Shareholders' Meeting.

- (1) Competitiveness and performance with long-term perspective
- (2) Conduct business ethically, respect the rights and responsibilities of shareholders and stakeholders
- (3) Benefit society and develop or reduce negative environmental impacts (good corporate citizenship)
- (4) Adaptability under corporate resilience

Principle 1.3

The Board of Directors has a duty to supervise and ensure that all directors and the management perform their duties of care, duty of loyalty and integrity to the organization and ensures compliance with the law, regulations and resolutions of the Shareholders' Meeting.

Principle 1.4

The Board of Directors should understand the scope, duties and responsibilities of the Board of Directors and clearly define the scope of assignment of duties and responsibilities to the president and management as well as monitoring the president and management to perform their duties as assigned.

Principle 2 Define Objectives and Central Ideas

Principle 2.1

The Board of Directors should define or ensure that the objectives are sustainable, with objectives and goals in line with the creation of value for the business, customers, stakeholders and overall society.

Principle 2.2

The Board of Directors should ensure that the objectives and goals, as well as strategies in the medium period and/or annuality of the business, are in line with achieving the main objectives and goals of the business. Thus, innovation and technology are applied appropriately and safely.

Principle 3 Strengthen Effective Committees

Principle 3.1

The Board should be responsible for determining and reviewing the board structure in terms of size, proportion of independent directors which is appropriate and necessary to lead the organization to its intended primary objectives and goals.

Principle 3.2

The Board of Directors should select the appropriate person as chairman of the Board of Directors and ensure that the composition and operation of the Board of Directors is conducive to the exercise of discretion in independent decision making.

Principle 3.3

The Board should supervise the nomination and selection of directors with a transparent and clear process to obtain qualified members of the Board in accordance with the defined elements.

Principle 3.4

In proposing the board's remuneration for approval, the Board should consider the structure and remuneration rates to be appropriate for responsibility and incentivize the Board to lead the organization to pursue both short-term and long-term goals.

Principle 3.5

The Board of Directors should ensure that all directors are responsible for performing their duties and allocate sufficient time.

Principle 3.6

The Board of Directors should administer a framework and mechanism for significant oversight of the policies and operations of subsidiaries and other entities in which the Company invests to be at the appropriate level for each business operation, including subsidiaries and other businesses that the Company invests in, whereby is a consistent understanding.

Principle 3.7

The Board of Directors should hold an annual assessment of the performance of duties of the board of directors, sub-committees and individual directors. The evaluation should also be used for the development of duties.

Principle 3.8

The Board of Directors should supervise the Board of Directors and each director to have an understanding of its roles as well as supporting all directors to be strengthened with skills and knowledge for regularly performing director duties.

Principle 3.9

The Board of Directors should ensure that the board's operations are carried out, have access to the necessary information, and have a corporate secretary with the necessary knowledge and experience that is appropriate to support the Board's tasks.

Principle 4 Recruitment and Development of Top Executives and Personnel Management

Principle 4.1

The Board of Directors should ensure that the nomination and development of the president and senior management is to have the knowledge, skills, experience and attributes necessary to drive the organization towards its goals.

Principle 4.2

The Board of Directors should oversee the proper determination of the remuneration and evaluation structure.

Principle 4.3

The Board of Directors should understand the structure and relationship of shareholders that may affect the management and operation of the business.

Principle 4.4

The Board of Directors should monitor the management and development of personnel to the appropriate amount of knowledge, skills, experience and motivation.

Principle 5: Promoting Innovation and Responsible Business Operations

Principle 5.1

The Board of Directors should focus on and support the creation of innovations that value the business while creating benefits for customers or related parties and having social and environmental responsibilities.

Principle 5.2

The Board of Directors should monitor the management of business with social and environmental responsibility and reflected in the operational plan to ensure that all parties to the organization are aligned with their objectives, key goals and strategies of the business.

Principle 5.3

The Board of Directors should monitor management to allocate and manage resources efficiently and efficiently, taking into account the impact and development of resources throughout the value chain so that they can achieve their core objectives and goals sustainably.

Principle 5.4

The Board of Directors should provide a framework for corporate governance and management of information technology in accordance with the needs of the business, as well as ensure that information technology is used to increase business opportunities and develop operations. Risk Management in order for the business to achieve its main objectives and goals.

Principle 6 Strengthen Effective Risk Management and Internal Control

Principle 6.1

The Board of Directors should ensure that the Company has a risk management system and internal control to achieve its objectives effectively and to comply with applicable laws and standards.

Principle 6.2

The Board of Directors must establish an Audit Committee that can perform its duties effectively and independently.

Principle 6.3

The Board of Directors should monitor and manage potential conflicts of interest between the Company and the management, the Board of Directors or shareholders, including the prevention of dissemination of property, information and opportunities of the Company and transactions with people who have an inappropriate relationship with the Company.

Principle 6.4

The Board of Directors should manage the preparation of clear anti-corruption policies and practices and communicate at all levels of the organization and to outsiders to achieve practicality.

Principle 6.5

The Board of Directors should supervise the affairs to have mechanisms for receiving complaints and to process the cases with appropriate suggestions.

Principle 7 Ensure Disclosure and Financial Integrity

Principle 7.1

The Board of Directors is responsible for ensuring that the system of financial reporting and disclosure of important information is accurate, adequate, timely, and in accordance with relevant rules, standards and practices.

Principle 7.2

The Board of Directors should monitor the adequacy of financial liquidity and the ability to pay debts.

Principle 7.3

In the circumstance of financial difficulties or likely to experience problems, the Board of Directors should ensure that the business has a plan to resolve the issue or that there are other mechanisms that will be able to resolve financial issues, under consideration of the rights of stakeholders.

Principle 7.4

The Board should consider preparing a Sustainability Report as appropriate.

Principle 7.5

The Board of Directors should supervise the management to provide an agency or person in charge of investor relations that is responsible for communicating with shareholders and other stakeholders such as investors, analysts appropriately, equally and timely.

Principle 7.6

The Board of Directors should encourage the introduction of information technology to disseminate information.

Principle 8 Supports Engagement and Communication with Shareholders

Principle 8.1

The Board of Directors should ensure that shareholders are involved in decisions on important matters of the Company.

Principle 8.2

The Board of Directors should ensure that the implementation of the shareholders' meeting date is carried out in order, transparent, efficient and allows shareholders to exercise their rights.

Principle 8.3

The Board of Directors should ensure that the disclosure of the resolutions of the meeting and the preparation of the minutes of the shareholders' meeting is accurate and complete.

In 2023, there is a matter under consideration to determine appropriate replacement measures as follows:

The Board of Directors has not set a policy limiting the number of years in the tenure of independent directors because the Company has considered knowledge, competence and experience. The duties of each independent director that benefits all stakeholders and benefits the Company's business operations, based on the performance of each independent director's position, can be independent and without conflicts of interest, and considering the Company's current business structure, continuing to hold positions should be beneficial to the Company's business operations.

However, the Company acts in accordance with non-legal practices and in accordance with the corporate culture of the Company and the Company has determined that such actions do not affect the qualifications of the director's independence.

6.3.3 Conducting good corporate governance principles in other matters

The continuous management of TPI Polene Group's prioritization of adhering to the principles of good corporate governance has resulted in the following successes:

1. Out of a total of 782 companies surveyed in the 2023 Corporate Governance Report (CGR) of Thai Listed Companies Project, the Company was assessed and awarded the 5-star level or "Excellent CG Scoring". The scoring process is conducted by the Thai Institute of Directors Association (IOD) with the support of the Stock Exchange of Thailand and the SEC Office.

2. In 2023, the Company's stock was ranked in SET ESG Ratings : AA by the Stock Exchange of Thailand.

3. In 2023, the Company, known for its outstanding environmental, social, and governance practices, earned a spot on the ESG100 list for the second consecutive year, solidifying its reputation as a promising investment in the real estate and construction sector, recommended by the Thaipat Institute.

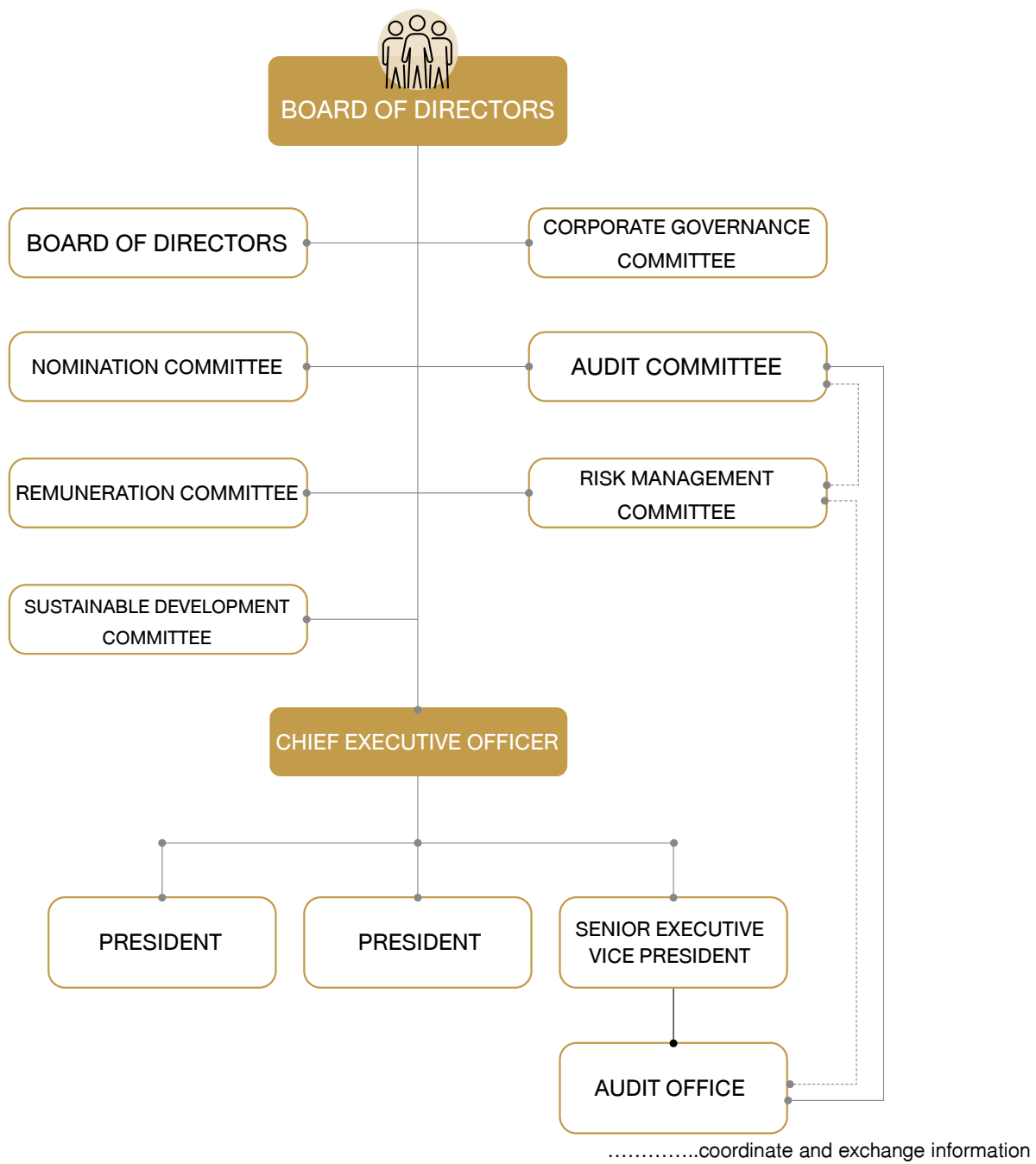
4. The Company was honored with the Sustainability Disclosure Award in 2022. This award recognizes the quality of sustainability information disclosure, assessed through the Sustainability Report and Form 56-1 One Report for the year 2022, among members of the Sustainability Disclosure Community (SDC).

5. The Company received the Best Corporate Governance Thailand 2023 Award from International Business Magazine.



7. Corporate Governance Structure and key information about the Board of Directors, sub-committees, the management, employees and etc.

7.1 Corporate Governance Structure as of December 31, 2023



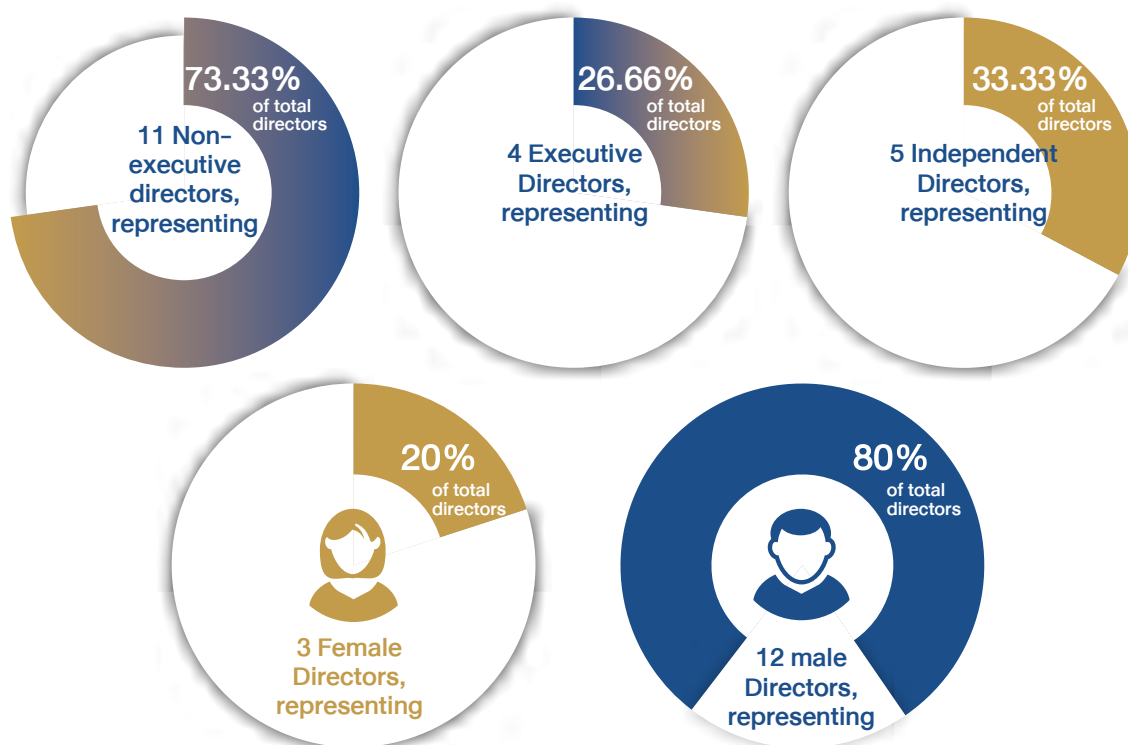
As at 31 December 2023, the management structure of the Company consists of the Board of Directors, which comprises seven Committees: the Executive Management, the Audit Committee. Nomination Committee, Remuneration Committee, Corporate Governance Committee, Sustainability Development Committee, and Risk Management Committee.

The Board of Directors of the Company consisting 15 directors, which comprises five independent directors, which exceeds one third of the total number of directors.

7.2 Information of the Board of Directors

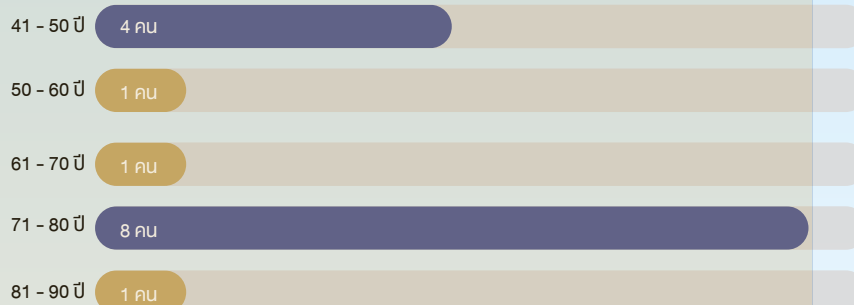
7.2.1 Composition of the Board of Directors

As at December 31, 2023, the Board of Directors of the Company comprises 15 persons as follows:



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ช่วงอายุของกรรมการ



The Board of Directors consists of directors who have a wide range of qualifications in terms of experience skills, each with morality, ethics, and independence, specialized capabilities that benefit the Company and can take care of the overall interests of shareholders. In addition, all directors have an understanding of the Company's responsibilities and business characteristics and act with integrity and careful care whereas knowledge is constantly updated and sufficient time has been devoted to fulfilling their full responsibilities.

The Board of Directors has established the qualifications of independent directors in accordance with the rules and regulation imposed by the SEC and the SET.

7.2.2 Information of the Board of Directors and the Controlling persons

The Board of Directors as at 31 December 2023:

No.	Name	Position
1	Mr. Khantachai Vichakkhana	Chairman and Independent Director
2	Mr. Prachai Leophairatana	Director
3	Mr. Prateep Leopairut	Director
4	Dr. Pramuan Leophairatana	Director
5	Mr. Prayad Liewphairatana	Director
6	Mrs. Orapin Leophairatana	Director
7	Mr. Tayuth Sriyuksiri	Director
8	Miss Malinee Leophairatana	Director
9	Mr. Supoj Singsanei	Chairman of the Audit Committee and Independent Director
10	Mr. Pises Iamsakulrat	Audit Committee and Independent Director
11	Mr. Thavich Taychanavakul	Audit Committee and Independent Director
12	Mr. Pakorn Leopairut	Director
13	Mr. Pornpol Suwanamas	Audit Committee and Independent Director
14	Miss Thanyarat Iamsopana	Director
15	Dr. Virat Chatdarong	Director

However, all directors of the Company have undertaken at least one training course of the Thai Institute of Directors Association regarding directors, including the Directors Certification Program (DCP) or the Directors Accreditation Program (DAP).

The Board of Directors consists of 15 directors, 5 of whom are independent directors, of which 3 are female directors. The Board is diverse (Board Diversity), whose skills align with the Company's business strategy through the Board Skills Matrix, and are diverse in educational background and experience without limiting any other differences. Details of director profiles appear in Attachment 1.



Board Skills Matrix

	Name list/ Specialized knowledge	Policy Development	Business Judgment	Strategic Planning	Finance & Accounting	Internal Audit	Law	Corporate Governance & CSR	Risk Management & Internal Control	HR & Organization Development	Construction Industry Expertise	International Business	Innovation Management
1	Mr. Prachai Leophairatana	X	X	X	X	X	X	X	X	X	X	X	X
2	Mr. Prateep Leopairut	X	X	X				X	X	X	X	X	X
3	Dr. Pramuan Leophairatana	X	X	X				X	X	X	X	X	X
4	Mr. Prayad Liewphairatana	X	X	X				X	X	X	X	X	X
5	Mr. Pises Iamsakulrat	X	X	X	X	X		X	X	X	X	X	X
6	Miss Malinee Leophairatana	X	X	X	X	X		X	X	X	X	X	
7	Mrs. Orapin Leophairatana	X	X	X	X	X	X	X	X	X	X	X	X
8	Mr. Tayuth Sriyuksiri	X	X	X				X	X	X	X	X	X
9	Mr. Thavich Taychanavakul	X	X	X	X	X		X	X	X	X	X	
10	Mr. Khantachai Vichakkhana	X	X	X			X	X	X	X	X	X	X
11	Mr. Supoj Singsanei	X	X	X	X	X		X	X	X	X	X	
12	Mr. Pakorn Leopairut	X	X	X				X	X	X	X	X	
13	Mr. Pornpol Suwanamas	X	X	X	X	X		X	X	X	X	X	
14	Miss Thanyarat Iamsopana	X	X	X				X	X	X	X	X	X
15	Mr. Virat Chatdarong	X	X	X				X	X	X	X	X	X

7.2.3 Functions and Responsibilities of the Board of Directors

Authority of the Board of Directors

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 Management, to ensure that they perform 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.
9. To consider the nomination of qualified persons to perform the duties of directors.

10. To consider the need and appropriateness to determine remuneration to directors.
11. To consider climate change strategies, Annual Action Plan and Climate Change Key Performance Indicator (KPI).

The actions of the Board of Directors that must be approved by the Shareholders' Meeting

1. Entering into the inter-company transactions or acquisition or disposition of the Group's significant assets or any other action as announced by law and the Capital Markets Committee.
2. Sale or transfer of all or part of the Company's business to another person.
3. Amendments to the Memorandum of Association or Articles of Association of the Company.
4. Increase or decrease the Company's registered capital.
5. Dissolution of corporations or mergers with other companies.
6. Issuance of debentures of the Company.

Roles and Responsibilities of the Chairman of the Board of Directors

To ensure the separation of authority in terms of policymaking and management of the Company is clearly separate. Therefore, the Company requires the Chairman of the Board of Director, the Chairman of the Executive Board and the President are different persons, with the Chairman of the Board of Directors has role and responsibilities as follows:

1. Call the Board of Directors' Meeting and act as the Chairman of the Board of Directors' meeting and the Shareholders' Meeting, as well as play a role in setting the agenda with the Chief Executive.
2. Play a role in controlling meetings effectively in accordance with rules and regulations of the Company, support and allow directors to express their opinions independently.
- 3 Support and encourage the Board of Directors to perform duties to the best of ability in accordance with the scope of authority, duties, responsibilities under good corporate governance principles.
4. Monitor and follow up the administration of the Board of Directors and other sub-committees to achieve the intended objectives.
5. Be the decisive voter in the event that the Board of Directors' meeting holds a vote and votes on both sides are equal. (Details are provided on the Company's website

<https://www.tpipolene.co.th/th/aboutus/org-tpi/board-roles-th>) or Scan QR Code



7.2.4 Recruitment process and procedure and Nomination and appointment of directors and sub-directors and Presidents

1) Nomination and appointment of the directors of the Company

The Company's Board of Directors comprises qualified members who have skills, experience, honesty, ethics, and independence and have capabilities in diverse fields, pertinent to the Company's businesses and the appointment of new directors must be approved at the Board of Directors' Meeting and/or the Shareholders' Meeting (as the case may be).

The shareholders' meeting shall be elected the directors according to the following guidelines and procedures:

- (1) To assume that one shareholder has the same vote as 1 share per 1 vote.
- (2) Each shareholder can use all available votes according to (1) elect a single person or multiple persons as directors. In the event of an election of several individuals as the directors, votes cannot be divided into anyone more or less.
- (3) The person receiving the highest number of votes respectively will be elected as a director as much as the number of directors who will have or will be elected at that time. In the event that the person who is elected in the next order has the same votes and exceeds the number of directors who should have or will be elected at that time, the Chairman of the board will be the decisive voter.

At every annual ordinary meeting of shareholders, the directors shall be removed from their positions for one-third of the number of directors at the time. If the number of directors can't be straightened into three parts, the number issued by the closest number to one-thirds, considering the longest-in-position director is the one who leaves the position. Thus, departing directors may be re-elected by the shareholders' meeting to become new directors.

In the event that the director's position is vacated for reasons other than the term of issue under the term, the Board of Directors shall select a qualified person who does

not have a prohibited nature under the law on public limited companies and the law on Securities and Exchange to be a replacement director at the next board meeting unless the term of the director is less than 2 months. The person who becomes the director only serves as much as the remaining term of the director he replaces. However, the resolutions of the board, as mentioned above, must consist of at least three-fourths of the remaining number of directors.

2) Nomination of independent directors

The Company has a policy of nominating independent directors in accordance with the Announcement of the Capital Market Supervisory Board No. 39/2016. Re: Permission and Authorization for IPO issuance, dated September 30, 2016 (including amended) as follows:

1. Are restricted in the number of shares they may hold to not greater than 1% of the voting shares in the Company, its subsidiaries, its associated companies, or its juristic persons that may impose conflicts of interest.

2. Have no management participation in the Company, its subsidiaries, and are not employees or regularly paid consultants, or persons, who have control over the Company or its associated companies, its subsidiaries, or its associated companies or is the same order as a major shareholder or of control over the Company, unless it has been removed from such characteristics at least two years prior to the date of appointment as an Audit Committee member. Such prohibited characteristics do not include cases where independent directors have been officials or advisors of government offices that are major shareholders or controlling persons of the Company.

3. Have no close relatives, or persons related in a way by legal registration in a manner that is a parent, spouse, siblings and children, as well as spouses of children of other directors, the management, major shareholders, controlling persons, or persons who will be proposed as the directors, the management or controlling authorities of the Company or its subsidiaries.

4. Have no business relationship with the Company, its subsidiaries, or its associated companies, major shareholders or controlling persons of the Company in a manner that may impede the use of their independent judgment, including not being or has been an implicit shareholder or controlling person of a person with a business relationship with a company, a major company, a subsidiary unless it has been removed from such characteristics at least two years prior to the date of filing an application for permission to the SEC.

Such business relationships include commercial transactions that are normally conducted for business operations as well as renting or leasing a property, assets or services transaction, or providing or receiving financial assistance by receiving or lending guarantees, provision of assets as collateral for liabilities, as well as other similar circumstances, which results in the Company or its parties having to pay debts to the other party, from 3% of net tangible asset of the Company or Baht 20 million or more, whichever is lower. The calculation of such debt obligations is based on value of connected transaction to comply with criteria as announced by the Capital Market Supervisory Board on for connected transaction. However, such debt obligations include those incurred during the one year prior to the date of business relationship with the same person.

5. Not being or used to be an auditor of the Company, mother company, a subsidiary, associates, major shareholders or controlling persons of the Company and are not implicit shareholders, the supervisor or partner of the audit office, which the auditor of the Company, mother company, a subsidiary, associates, major shareholders or controlling persons of the Company unless it has been removed from such characteristics at least two years prior to the date of filing an application for permission to the SEC.

6. Not being or used to be a professional service provider, including providing services as legal advisors or financial advisors, which receive service fees in excess of Baht 2,000,000 per annum from the Company, mother company, a subsidiary, associates, major shareholders or controlling persons of the Company and are not implicit shareholders unless it have been removed from such characteristics at least two years prior to the date of filing an application for permission to the SEC.

7. Not being a director appointed to represent the Company's Director, major shareholders, or shareholders who are related to major shareholders.

8. Not to operate a business under the same conditions that materially competes with the business of the Company or its subsidiaries, nor to be a partner materially involved in such a competing partnership, or to serve as a director involved in the management, employment, or consultancy of entities receiving regular salaries, or holding more than 1% of the total voting shares of other companies that operate under similar conditions and materially compete with the Company's business or its subsidiaries.

9. There are no other characteristics that prevent them from giving an independent opinion on the Company's operations.

3) Process and Procedures for Consideration and Nomination of Directors

Once the Nomination and Remuneration Committee has put forward nominees for the Company's Directors or sub-committee members, it will assess their qualifications in accordance with the criteria outlined by the Board of Directors, considering the following conditions:

1. To ensure the appropriateness of their knowledge, experience, and specific competencies beneficial to the Company, individuals must have experience in the primary business or industry where the Company operates. This ensures that the Board of Directors maintains the necessary composition. The establishment of the Board Skills Matrix facilitates consistent nomination of directors aligned with the Company's business direction.

2. To consider diversity in terms of gender, age, race, nationality, expertise, skills, and experience (as outlined in the Board Skills Matrix/Board Diversities), encompassing knowledge and abilities in both academic (Hard Skills and Soft Skills) and sustainability-supporting factors. This aims to secure directors capable of efficiently executing their duties and contributing to the overall composition of the Board, encompassing dimensions of knowledge, competency, experience, and diversity, thereby facilitating maximum efficiency in operations.

3. To ensure that nominees meet the qualifications stipulated by regulatory agencies, such as those outlined in the Public Company Limited Act, B.E. 2535 (1992), and the Securities and Exchange Act, B.E. 2535 (1992).

4. The time dedication of the directors will be taken into account, especially if they are former directors returning for another term, in which case their performance during their previous tenure will also be evaluated.

5. When proposing the appointment of an independent director, the individual's independence should be considered in alignment with the criteria established by the SEC Office and the Company, alongside the necessity of nominating additional independent directors. If it becomes apparent that current independent directors lack qualifications or are not fulfilling their duties, it is imperative to adjust the composition of the Company's Board in accordance with the policies set by the Board itself.

6. To determine the term of office for independent directors, if a former independent director returns for another term, he or she must have had continuous tenure from the date of their initial appointment as an independent director.

7. To approach individuals who meet the specified qualification criteria to ascertain their willingness to serve as directors of the Company if appointed.

8. To propose a list of individuals who have been screened according to the above criteria, along with their qualifications and reasons for selection, to the Board of Directors for consideration and approval, and to present it to shareholders for approval. Alternatively, the Board of Directors can approve the appointment in the case of appointing a director to fill a vacant position or if a director resigns during the year, as specified in the Company's regulations and the Public Limited Companies Act.

9. The knowledge and competencies of members within sub-committees, like the Nomination and Remuneration Committee, along with the overall composition of the sub-committee and criteria for positions such as the Board Skills Matrix and Board Diversities, as well as the independent qualifications of directors, will be thoroughly evaluated. Subsequently, the findings will be presented to the Board of Directors for their consideration and approval.

4) General Guidelines for the Appointment of Members in the Company's Sub-committees

The Board of Directors may appoint one or more sub-committees to support its operations. These subcommittees will be responsible for considering and reviewing matters that are specifically important. The Board of Directors will approve the appointment of sub-committee members and issue sub-committee charters outlining various regulations concerning the composition, duties, responsibilities, and other relevant matters of the sub-committee, as deemed appropriate. Annually, the Board of Directors will review the charter of each sub-committee.



7.3 Information about sub-committees

The Sub-Committees consist of the followings:

7.3.1 Executive Management Committee as of 31 December 2023

No.	Name	Position
1.	Mr. Prachai Leophairatana	Chairman of Executive Management Committee
2.	Mr. Prateep Leopairut	Executive Director
3.	Dr. Pramuan Leophairatana	Executive Director
4.	Mr. Prayad Liewphairatana	Executive Director
5.	Mrs. Orapin Leophairatana	Executive Director
6.	Mr. Pakorn Leopairut	Executive Director
7.	Miss Tanyaratt Iamsopana	Executive Director

Seven Directors are authorized to sign on behalf of the Company. Two of the seven directors must jointly sign, together with the affixation of the official company stamp.

Consider and monitor replacement management creation plans, including workforce plans and remuneration guidelines and management's performance evaluation criteria.

Functions and Responsibilities of the Executive Management Committee

The Board of Directors is appointed by the Board of Directors or the Shareholders' Meeting to perform the following functions :

1. To govern and formulate the operational strategy of the business, goals and operational plans, the Company's financial goals and budgets, taking into account appropriate business factors. To present and seek approval to the Board of Directors in case the circumstances change, the Board of Directors will review the use of approved budgets to suit the situation, as well as implement business strategies in accordance with the policies of the Board of Directors.

2. To monitor the performance of parties in accordance with the policy, business strategy, goals and operational plans, the financial goals and budgets of the Company approved by the Board of Directors to be effective and effective in favor of business conditions and provide advice, advice, management to senior management.

3. To consider selecting and appointing senior executives. The Board of Directors will be the preliminary consideration of the nomination of qualified persons who have knowledge, skills and experience that are beneficial to the Company's operations before offering them to the Board of Directors for approval. Define organizational structure and policies regarding the management of the Company.

4. To appoint and remove employees as well as assign rewards to employees.

5. To consider and provide feedback or opinions to the Board of Directors regarding any projects, proposals or transactions related to the Company's business operations, as well as to consider fundraising options when necessary and exceeding the limits set and/or to applicable laws and regulations or in the Articles of Association of the Company to be approved by the Shareholders' Meeting and/or the Board of Directors.

6. To conduct business related to the general administration of the Company, including any authority and responsibilities as assigned or in accordance with the policies assigned by the Board of Directors.

7. To appoint and/or assign to the Executive Committee or any person or persons to act within the jurisdiction of the Executive Committee deemed appropriate by the Board of Directors, as well as the Table of Authority schedule specified by the Board of Directors, where the Board of Directors may withdraw or amend such powers within the scope of the Board of Directors.

7.3.2 The Audit Committee as at 31 December 2023

No.	Name	Position
1.	Mr. Supoj Singsaneai *	Chairman of the Audit Committee
2.	Mr. Pisej Iamsakulrat	Audit Committee
3.	Mr. Thavich Taychanavakul	Audit Committee
4.	Mr. Pornpol Suwanamas	Audit Committee

Remark : Possesses background and experience in auditing of financial statements.

Functions and Responsibilities of the Audit Committee

The Audit Committee is responsible for reviewing the Company's financial reports, adequacy of internal control systems, risk management systems, compliance with legal regulations and prepare reports or comments to the Board of Directors for approval or to be presented to the Shareholders' Meeting, as the case may be:

1. To monitor the auditing process and internal control systems of the Company to ensure that they are appropriate and efficient.
2. Review the Company's appropriate and effective Internal Control system and consider the independence of the Internal Audit agency as well as approve the appointment, removal, dismissal of the head of the internal audit agency and/or the hiring of an internal audit company or any other entity responsible for the internal audit.
3. To supervise and ensure that the Company acts in compliance with the regulations imposed by the SET and the SEC and related governing laws.
4. To consider, select and propose the appointment of an independent person to act as auditor of the Company and present the person's remuneration to the Board of Directors for approval from the shareholders' meeting, as well as attend meetings with the auditor without management attending the meeting at least once a year.
5. To consider the disclosure of information regarding connected transactions or transactions that may have conflicts of interest in accordance with the rules and legal regulations imposed by the Capital Market Committee and the terms of the SET to ensure that the transaction is reasonable and in the best interests of the Company.
6. Prepare the audit committee's report publicly in the Company's annual report. The report must be signed by the Chairman of the Audit Committee and must contain at least the following information:
 - Opinion on accuracy, completeness and reliability

of the Company's financial reports.

- Opinion on the adequacy of the Company's internal control system.
- Opinion on compliance with securities and exchange laws Set of Exchange of Thailand or laws relating to the Company's business operations.
- Opinion on the suitability of the auditor.
- Comments on transactions that may have conflicts of interest.
- Number of audit committee meetings and attendance of each audit committee member.
- Opinions or overall observations received by the Audit Committee for the performance of charter duties.
- Other items that shareholders and investors should know Within the scope of duties and responsibilities assigned by the Board of Directors.

7. In the performance of the duties of the Audit Committee, if the following items or actions are found to have a significant impact on the Company's financial position and performance, the Board of Directors shall report to the Board of Directors to make revisions within the period designated by the Audit Committee.

- (1) List of conflicts of interest.
- (2) Fraud or irregularities or significant impairments in the internal control system.
- (3) Violation of securities and exchange laws SET's terms or laws relating to the Company's business.

If the Board of Directors or management does not make revisions within the above period, the Company will not be updated. One of the audit committee members may report the above items or actions to the SEC or the SET.

8. Perform any other operations as assigned by the Board of Directors with the approval of the Audit Committee.
9. Review regulations and performance in the past year at least once (1) times a year.

7.3.3 Nomination Committee as of 31 December 2023

No.	Name	Position
1	Mr. Khantachai Vichakkhana	Chairman and Independent Director
2	Mr. Prachai Leophairatana	Director
3	Mr. Prateep Leopairut	Director
4	Dr. Pramuan Leophairatana	Director
5	Mr. Prayad Liewphairatana	Director
6	Mrs. Orapin Leophairatana	Director
7	Mr. Tayuth Sriyusiri	Director
8	Miss Malinee Leophairatana	Director
9	Mr. Supoj Singsanei	Chairman of the Audit Committee and Independent Director
10	Mr. Pises Iamsakulrat	Audit Committee and Independent Director
11	Mr. Thavich Taychanavakul	Audit Committee and Independent Director
12	Mr. Pakorn Leopairut	Director
13	Mr. Pornpol Suwanamas	Audit Committee and Independent Director
14	Miss Thanyarat Iamsopana	Director
15	Mr. Virat Chatdarong	Director

Functions and Responsibilities of the Nomination Committee

1. Select persons who deserve to be nominated as new directors when there is a vacancy (from resignation or a full term) to propose to the Board of Directors or the Shareholders' Meeting to proceed with the appointment, taking into account the composition of the knowledge and skills of the Board member. The qualifications of directors who wish to be nominated must be in accordance with the Company's business strategy.

2. Consider the nomination of directors to act as a specific director based on the composition of the Board of Directors, knowledge and competence of Directors deemed appropriate to perform the duties of the directors and presented to the Board of Directors for appointment.

3. Disclose the nomination committee's operational report in the annual report.

4. The Nomination Committee should meet together at least once a year.

The nomination method has been set out for appointment as a director as follows:

1. The Nomination Committee determines the qualifications of directors who wish to nominate for

replacements and have elements and qualifications in accordance with the related legal regulations and to be in line with the Company's strategy and business operation. The Guide to Good Corporate Governance, Ethical Standards and Business Ethics has stated the qualifications of the Board of Directors that each director must come from a qualified person in the various professions necessary to manage the Company's business that they should consist of those with business knowledge, legal and financial luminaries, political science, security, risk management in various crises / civil society, community enterprises, natural resource Environment and Sustainable Development.

2. The Nomination Committee concludes the nomination and nomination of the appropriate person to be a director with the accompanying reasons and present it to the Board of Directors.

3. The Board of Directors considers the selection of qualified persons according to the list presented by the Nomination Committee for appointment as a director or to present the list to the Shareholders' Meeting for approval of the appointment of the next director.

4. Corporate Secretary performs duties as Secretary of the Nomination Committee.

7.3.4 Remuneration Committee as at 31 December 2023

No.	Name	Position
1	Mr. Khantachai Vichakkhana	Chairman and Independent Director
2	Mr. Prachai Leophairatana	Director
3	Mr. Prateep Leopairut	Director
4	Dr. Pramuan Leophairatana	Director
5	Mr. Prayad Liewphairatana	Director
6	Mrs. Orapin Leophairatana	Director
7	Mr. Tayuth Sriyusiri	Director
8	Miss Malinee Leophairatana	Director
9	Mr. Supoj Singsanei	Chairman of the Audit Committee and Independent Director
10	Mr. Pises Iamsakulrat	Audit Committee and Independent Director
11	Mr. Thavich Taychanavakul	Audit Committee and Independent Director
12	Mr. Prateep Leopairut	Director
13	Mr. Pornpol Suwanamas	Audit Committee and Independent Director
14	Miss Thanyarat Iamsopana	Director
15	Mr. Virat Chatdarong	Director

Functions and Responsibilities of the Remuneration Committee

1. Set guidelines or methods for determining compensation, as well as consider offering fair and reasonable compensation. For directors and directors and shareholders' meetings for approval.
2. To consider and propose the evaluation and remuneration guidelines of the Management and the President for approval.
3. Acknowledge and provide feedback on organizational restructuring and job level, including evaluation and consideration of executive remuneration.
4. Responsibility to the Board of Directors directly by roles and board of directors responsible for the operation of the Company to all stakeholders.
5. Disclose the report of the remuneration committee's operations in the annual report.
6. The remuneration committee should meet at least once a year.
7. The Corporate Secretary Performs Duties of Secretary of the Remuneration Committee.



7.3.5 The Corporate Governance Committee as of December 31, 2023 consists of:

No.	Name	Position
1	Mr. Khantachai Vichakkhana	Chairman and Independent Director
2	Mr. Prachai Leophairatana	Director
3	Mr. Prateep Leopairut	Director
4	Dr. Pramuan Leophairatana	Director
5	Mr. Prayad Liewphairatana	Director
6	Mrs. Orapin Leophairatana	Director
7	Mr. Tayuth Sriyusiri	Director
8	Miss Malinee Leophairatana	Director
9	Mr. Supoj Singsanei	Chairman of the Audit Committee and Independent Director
10	Mr. Pises Iamsakulrat	Audit Committee and Independent Director
11	Mr. Thavich Taychanavakul	Audit Committee and Independent Director
12	Mr. Pakorn Leopairut	Director
13	Mr. Pornpol Suwanamas	Audit Committee and Independent Director
14	Miss Thanyarat Iamsopana	Director
15	Mr. Virat Chatdarong	Director

Functions and Responsibilities of the Corporate Governance Committee

1. Determine the objectives and goals of the business that lead to good governance and sustainable business growth.

2. Consider giving opinions, giving suggestions, and reviewing the good corporate governance policy, business ethics, sustainable development policy of the company, anti-fraud and corruption policy, including the policy and any other guidelines related to corporate governance that will support the Company's operations on the basis of corporate governance for sustainable development, including the operation of taking care of all stakeholders, society, communities, environment, and any other policies or guidelines that will support the Company's operations in accordance with good governance to suit the business of the Company and its subsidiaries.

3. Supervise the management to implement various policies and practices to continuously develop the Company by promoting innovation and responsible business practices. However, such guidelines must be in line with and suitable for the business of the Company, recommendations of regulatory agencies or relevant and comparable to international standards.

4. Follow up and review practices and systems within the organization to be in line with good corporate governance policies, business ethics, and good practices as defined and supervise for concrete practical results.

5. Follow up and direct in the event that the operations of the management and employees have issues regarding non-compliance with the established policies and guidelines.

6. Assess the performance of the Board of Directors, the management team, and any subsidiaries in accordance with the Company's and its subsidiaries' policies on good corporate governance, business ethics, and sustainable development. Process the corporate governance assessment that will be presented to the Board of Directors for the following year along with the necessary comments and recommendations.

7. Reporting the Company's performance, encouraging participation, and fostering communication with all stakeholders shareholders, customers, partners, society, and the environment will help everyone realize and comprehend good corporate governance, business ethics, work practices, anti-fraud and corruption policies, and relevant practices as well as the Company's performance.

8. Seek professional opinions from individuals or external organizations to provide advice or independent advice on good corporate governance to the Corporate Governance Committee and related parties, including hiring a third party from time to time to help the performance of the Corporate Governance Committee and to be able to perform its duties to achieve its objectives within the specified period and such employment will be beneficial to the Company.

9. Report the performance of duties to the Board of Directors and/or the shareholders' meeting.

10. Assess the performance of the Corporate Governance Committee annually and report the results to the Board of Directors.

11. Perform duties or perform any other acts as assigned by the Board of Directors and perform any acts as stipulated by laws or regulations of government agencies.

7.3.6 The Risk Management Committee as of December 31, 2023 consists of:

No.	Name	Position	Attendance *
1	Mr. Prachai Leophairatana	Chairman	1/1
2	Mrs. Orapin Leophairatana	Vice Chairman	1/1
3	Mr. Prasert Ittimakin	Committee	1/1
4	Miss. Chularat Danwattanachai	Committee	1/1
5	Mr. Chettha Maneechai	Committee	1/1
6	Dr. Nithipong Vikittaset	Committee	1/1
7	Mr. Sanong Jiradarakul	Committee	1/1
8	Mr. Virat Chatdarong	Committee	1/1
9	Mr. Kamjohn Pairojsak	Committee	1/1
10	Mr. Somchai Kitpipat	Committee	1/1
11	Miss Kusuma Chantarothorn	Committee	1/1
12	Mrs Somaphan Kaewsuwan	Secretary	1/1

Functions and Responsibilities of the Risk Management Committee

1. Review and propose the policy and risk management framework to the Board of Directors for approval.

2. Review and approve the risk appetite (Risk Appetite) and present to the Board of Directors for acknowledgment.

3. Overseeing the development and implementation of risk management policies and frameworks on an ongoing basis to ensure that the Group has an effective enterprise-wide risk management system and consistent compliance.

4. Review risk management reports to monitor material risks and take action to ensure that the organization has adequate and appropriate risk management.

5. Coordinate with the audit committee to identify significant risks, and have the internal audit department conduct a review to make sure the Company has the necessary internal controls in place to manage those risks. This includes putting the right risk management systems in place and ensuring that everyone is following the rules throughout the Company.

6. Regularly report to the Board of Directors on key risks and risk management.

7. Provide advice and consultation to the Sub-Risk-Management Committee (SRM) and/or the departments and/or working groups related to risk management, including considering appropriate ways to correct various information about developing a risk management system.

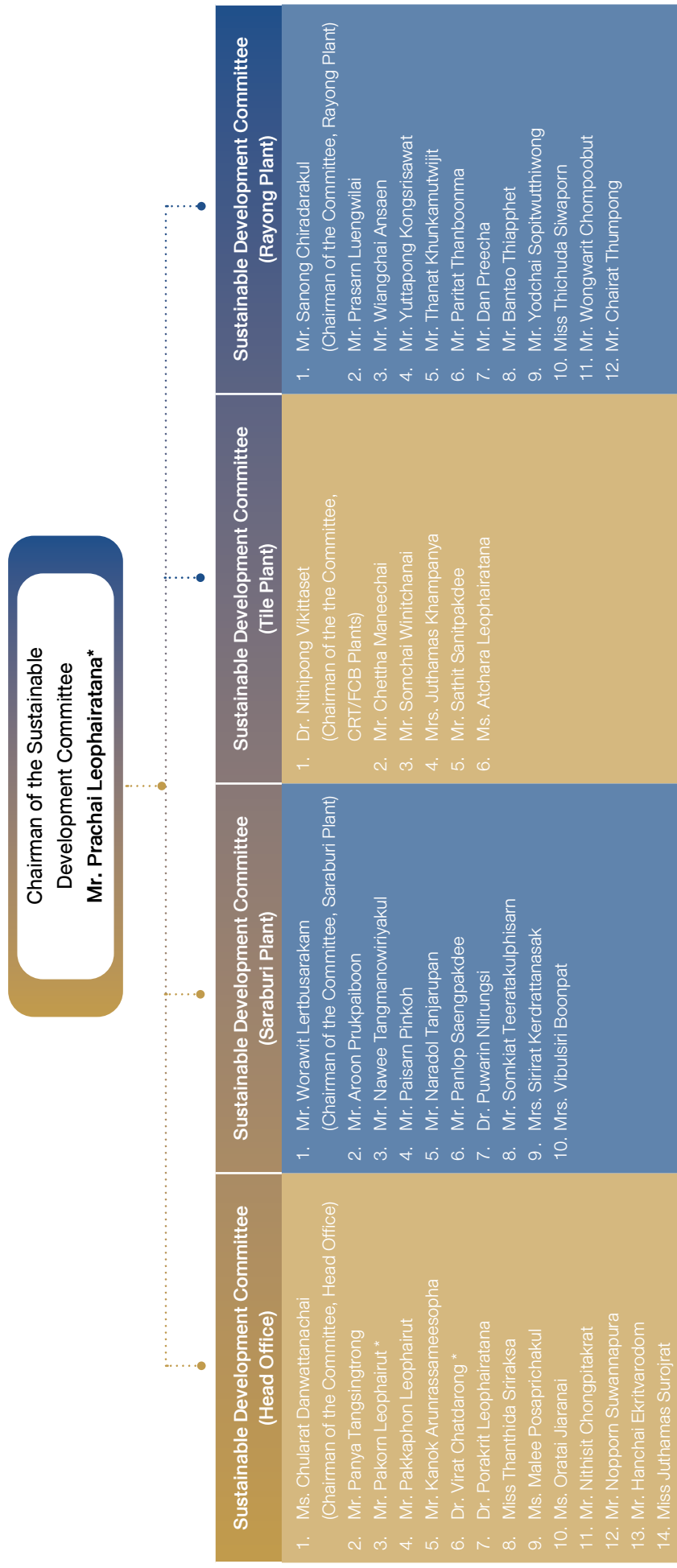
8. Consider appointing sub-committees and/or additional or replacement personnel in the risk management sub-committee and/or units and/or working groups related to risk management as appropriate, including determining roles and responsibilities for the benefit of carrying out the objectives

9. Any other operations related to risk management assigned by the Board of Directors. Assess organizational risks, including climate change opportunities risks.

In this regard, the management and/or the risk management subcommittee and/or the unit and/or the working group related to risk management and/or the internal auditor and/or the auditor must report or present the information and related documents to the Risk Management Committee to support the work of Risk Management Committee to achieve the assigned duties.



7.3.7 The Sustainable Development Committee as of December 31, 2023 consists of:



Remark : * The Director of TPI Polene Public Company Limited

Sustainable Development Committee

No.	Name	Position	Attendance *
1	Mr. Prachai Leophairatana	Chairman of the Sustainability Committee	1/1
2	Sustainable Development Committee (Head Office team)	List of committees according to organization structure	1/1
3	Sustainable Development Committee (Saraburi Plant team)	List of committees according to organization structure	1/1
4	Sustainable Development Committee (CRT/FCB plants team)	List of committees according to organization structure	1/1
5	Sustainable Development Committee (Rayong Plant team)	List of committees according to organization structure	1/1

Functions and Responsibilities of the Sustainability Development Committees

1. Determine policies, strategies, operational frameworks, strategic approaches, and consider and select issues that promote sustainable development of the organization, including setting sustainable development goals that are in line with business operations in economic, social, and environmental aspects propose to the Chief Executive Officer for approval.

2. Supervise, review, monitor the progress of implementation, and evaluate the effectiveness of the implementation of the sustainability development policy.

3. Encourage relevant organizations both inside and outside the organization to practice and create involvement in the implementation of various projects under the umbrella of sustainable development.

4. Consult, promote, support the appropriate resources and personnel to ensure that the sustainability strategy is implemented throughout the organization and aligned in the same direction.

5. The Chairman of the Committee has the power to appoint sub-committees or working groups to be responsible for each aspect of sustainable development operations to cover and be consistent with the organization's key issues.

6. Report on the performance of the preparation of sustainability reports to senior executives.

7. Supervise the implementation of climate change strategies.

The names of the Sustainable Development Committee and their responsibilities can be studied at the Company's website at <https://www.tpipolene.co.th/th/aboutus/org-tpi/esg-board> or Scan QR Code



7.4 Information about Executives

The management structure as of December 31, 2023 can be found on the Company's website at <https://www.tpipolene.co.th/en/aboutus-en/organization-management/the-board-of-directors> or scan QR Code



7.4.1 The Management as at 31 December 2023:

No.	Name	Position
1.	Mr. Prachai Leophairatana	Chief Executive Officer
2.	Mr. Prateep Leophairut	President
3.	Dr. Pramuan Leophairatana	President
4.	Mrs. Orapin Leophairatana	Senior Executive Vice President
5.	Mr. Prasert Ittimakin	Senior Vice President - Finance Division
6.	Mr. Somkeart Srisuwan	Senior Vice President - Information Technology Division
7.	Miss Chularat Danwattanachai	Vice President - Finance Division
8.	Mr. Pongsak Yiengsakun	Vice President - Finance Department
9.	Mrs. Narumol Chattawan	Vice President - Accounting Department

Functions and Responsibilities of the Chief Executive Officer

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. Have the power to issue orders, regulations, announcements, records to ensure compliance with the Company's policies and interests and to maintain work discipline within the organization.

6. To have the power to delegate the authorities and/or assign another person to perform a specific task instead by delegating such subsidies and/or assignments

to be subject to the scope of power of attorney and/or in accordance with the regulations. The terms, as well as the Table of Authority table specified by the Board of Directors, or the orders set by the Board of Directors and/or the Company.

7. The Company has designated the Board of Directors to authorize the approval and amendment of the plan. Annual budget, investment plan, one-time investment expenses, as well as the Company's management and sales expense budget The Chief Executive Officer and/or President and/or Senior Executive Vice President has the authority to approve investments from approved investment statements. Requesting expenses, determining or changing marketing plans and annual marketing budgets in accordance with an approved budget without limits, including: The Chief Executive Officer and/or The President and/or Senior Executive Vice President have the authority to approve advertising, promotions and marketing activities, both in accordance with the plan and not within the plan within the limits approved by the Board of Directors.

In addition, the Board of Directors has authorized the management of the Company to the Chief Executive Officer and the President with the following principles and jurisdictions as follows:

1. To be authorized to manage the Company's business in accordance with the objectives, regulations,

policies, regulations, requirements, orders, as well as resolutions of the Board of Directors meeting and/or the resolutions of the Shareholders' Meeting of the Company in all respects.

2. Be an authorized contact person, order and process and sign legal agreements, contracts, order documents, notices or any necessary and appropriate notices in order to complete the above actions.

The use of the powers of the aforementioned CEO and President cannot be done if the Chief Executive Officer and President have a stake with the Company.

Succession Plan

The Company has a policy and has continued to develop senior management in order to have qualified corporate executives to replace top executives by setting out a Succession Plan for preparing personnel to be prepared for higher positions. Through the nomination committee and the remuneration committee, there are appropriate and transparent criteria and procedures for selecting personnel to assume responsibility for key management positions in the Company. This helps to guarantee that the Company has qualified executives with skills, experience, and professional abilities.

In addition, there is a succession plan according to employee level with the objective to make the organization ready in terms of manpower, recruitment planning, and developing personnel in the organization with potential in the department manager level and above to plan replacement and succession for employees who will retire. Furthermore, there is a talent management or job position that is the target of the competitor market in order to reduce the loss rate of personnel with knowledge, ability, and experience, as well as to retain employees with potential and potential

to be ready for opportunities in development and promotion to higher positions.

Business relationships or professional service relationships between independent directors and the Company, or the parent company, or its subsidiaries, or subsidiary companies, or associated companies, or juristic persons within the Company, that may impose conflicts of interest in an amount exceeding the restricted amount under the notification of the SEC regarding permission and approval of new shares issuance (if any), as well as the resolution and opinion of the Board of Directors approval (if any) for the transaction concerning such a business relation or professional service.

- None -

7.4.2 Remuneration policy of directors and the Management

The remuneration of the Management at all levels is based on performance, which is determined by the Board of Directors, the Chief Executive Officer and the President and top executives together, considering the perspectives of the processes within the organization and employees, and covering both the annual performance and the assessment of potential and leadership that will ensure that the organization can be led to achieving its long-term goals. Each executive has operational indicators that correspond to their roles. Each year, the Board of Directors considers the salary adjustment of the chairman of the executive committee, the president and senior executive vice president and chief executive officer and top executives in accordance with their performance. However, salary adjustments must meet the Company's criteria and be comparable to companies in the same industry.



7.4.3 Remuneration of the Directors

In 2023, remuneration awarded to the Company's six Executives including salaries and bonuses was Baht 260,326,000 compared with Baht 233,235,800 for total of six persons in 2021.

7.5 Human resource management in line with business strategy

7.5.1 Number of Employees

As at 31 December 2023, the Company and its subsidiaries have a total of 10,037 employees, divided into line of business as follows:

Company / Business Group	Number of Employees (2023)			Number of Employees (2022)		
	Head Office	Plant	Total	Head Office	Plant	Total
1. TPI Polene Public Co., Ltd.						
1.1 Head Office	1,320	-	1,320	1,388	-	1,388
1.2 Cement plant and Cement Distribution Terminal	-	4,274	4,274	-	4,364	4,364
1.3 LDPE plant, Rayong Province	-	575	575	-	574	574
1.4 Concrete Roof Tiles plant and Fiber Cement plant, Saraburi Province	-	927	927	-	900	900
2. TPI Concrete Co., Ltd.	181	1,191	1,372	180	1,127	1,307
3. TPI Polene Bio Organics Co., Ltd.	35	21	56	36	39	75
4. TPI Polene Power Public Co., Ltd.	94	1,047	1,141	98	1,045	1,143
5. Master Achieve (Thailand) Co., Ltd.	-	45	45	-	49	49
6. Thai Nitrate Co., Ltd.	13	75	88	13	70	83
7. TPI All Seasons Co., Ltd.	8	176	184	8	226	234
8. TPI Healthcare Co., Ltd.	19	-	19	2	-	2
9. TPI Bio Pharmaceuticals Co., Ltd.	-	36	36	2	-	2
Total	1,670	8,367	10,037	1,727	8,394	10,121

As of December 31, 2023, the Company and its subsidiaries had a total of 10,037 employees, comprising 8,609 male employees and 1,428 female employees.

7.5.2 Employee remuneration

Remuneration to employees (excluding executives) for 2023 was Baht 6,826 million such remuneration includes salary, commissions, bonuses, allowances and other benefits.

7.5.3 Provident Fund

Some companies under the Company Group have set up provident funds for their employees on a voluntary basis, allowing employees to become fund members. These employees contribute cumulative rates ranging from 3% to 10% of their monthly salary, while the Company makes corresponding contributions of 3% to 10% of the employee's

salary each month. These provident funds are registered in accordance with the requirements of the Ministry of Finance and are managed by authorized fund managers.

In addition, the Company has established a savings cooperative to promote savings and create financial security for its employees, with a total of 5,033 members.

7.5.4 Human Resource Management in Compliance with Business Strategy

The Company is cognizant of forthcoming changes, business competition, and challenges spanning various industries. Consequently, it is dedicated to cultivating and amplifying the organization's competitiveness across multiple domains. This dedication extends to human resource management, as delineated below:

- Employment: Manpower planning aligns with future business missions.

- Upskilling, Reskilling, and fostering a mindset for learning and creativity are essential. This entails a customer-centric focus and adaptability to digital and technological advancements, as well as acquiring the knowledge necessary for new business operations in the future.

- Recruitment and selection guidelines have been enhanced to increase the number of personnel with knowledge, experience, and diverse abilities from outside (mid-career) by utilizing a psychometric test to assess personnel potential. The aim is to recruit high-quality individuals who can contribute to driving the Company's various missions both now and in the future.

7.5.5 Personnel Development Policy

The Company prioritizes the training and development of its employees, striving to enrich their knowledge, skills, and experiences, while fostering ethics and integrity in their endeavors. As a part of this commitment, the Company arranged a two-day, one-night Dhamma practice course for new employees at Rama IX Golden Jubilee Temple, designed to imbue both personal and societal ethics, honesty, and moral conduct. The Company has established personnel development courses to align with employees at all levels. New employees will be provided with a mentor system to support them, offering supervision, advice, coaching, and assistance in developing their work potential for a period of 4 months. The Company organizes training courses tailored to specific job positions. These courses

are designed to support career growth for employees at all levels (Career Development) and to provide knowledge of new technologies that have transformed, fostering unity, teamwork, and readiness to efficiently perform assigned tasks. This initiative aims to instill pride in work and support sustainable growth for employees. In 2023, the COVID-19 outbreak situation was resolved. Consequently, more classroom-style training has been organized, and an online learning channel has been added as another option to allow employees to continuously develop, providing them with convenience and safety. This initiative also reduces risks and costs.

In addition, the Company promotes a culture of risk management. This policy was established by the management team, and a training course titled 'Risk Management in the Organization' was organized to provide employees with knowledge and understanding of risk management. Training sessions will be held at least twice a year for employees at all levels to foster knowledge, understanding, and active participation in systematic risk management.

In 2023, the company introduced a training plan for employees focused on enhancing both soft and hard skills through in-house and external training sessions. A total of 840 personnel development courses are as follows:

Type of Course *	Number of Courses	Objectives
1. Management	50	To acquire management skills, such as effectively guiding personnel within the organization to successfully accomplish their work objectives.
2. Technical Areas	525	To enhance employee efficiency through learning, especially in professional fields and other services, aiming to encourage employees to demonstrate their full potential.
3. Technology and Engineering	18	To adapt the organization to the demands of the digital age in response to the current situation, it is essential to possess knowledge of innovative technology and engineering.
4. Occupational Health and Safety	128	To organize safety operations aimed at reducing the risk of illness, injury, or death, and to ensure the good quality of life of employees and personnel within the organization.
5. Environmental Management	42	To manage the environmental impact resulting from resource usage and its effects on employees and society, and subsequently propose appropriate management strategies.
6. Quality System	77	To ensure and maintain the quality of the organization, implementing a quality management policy to build confidence and confirm compliance with international standards.

Remark : * As courses mentioned above, Hard skills refer to specialist skills required for a profession, while soft skills refer to performance skills that enable effective work and communication with others.

Average Training Hours of Employees

No. of training house*	2021	2022	2023
Employees : the target is 20 hours/person/year (hours)	25.49	24.47	22.49
Training Expense (TPIPL and its subsidiaries)*	3,570,689.34	2,739,308.95	4,157,011.13

Remark : * The Company and its subsidiaries primarily utilize internal speakers for in-house training sessions.

7.6 Other key information

7.6.1 The list of persons assigned to perform the Company's important tasks is as follows:

Corporate Secretary

The Company has appointed Mr. Nitisit Jongpitakrat as the Corporate Secretary since June 30, 2006, as approved and resolved in the Company's Board of Directors' meeting no. 6/2549 on June 30, 2006, with duties and responsibilities as defined in the Securities Act as follows:

1. Prepare and keep documents of the Company, namely the register of directors, Letter of The Board of Directors meeting, minutes of the Board of Directors Meeting, Letter of Shareholders' Meeting Minutes of the Shareholders' Meeting and Annual Report.
2. Keep track of conflict of interest reports, as reported by the directors or the management.
3. Conduct regarding the Board of Directors' meeting and the Shareholders' Meeting.
4. To advise on the related rules and regulations that the Board of Directors and the management should be aware of.
5. Supervise and coordinate the Company's compliance with the legal regulations and resolutions of the Board of Directors' Meeting and the Shareholders' Meeting, as well as the Policy of Good Corporate Governance and Business Ethics in full and complete.
6. Take other actions as announced by the Capital Market Supervisory Board.

Details of the Corporate Secretary appear in attachment 1 on "Details about the Directors, the Management, controlling persons, the person directly responsible for supervision of the accounting work and the corporate secretary".

Supervision of the accounting work

The Company assigned Mrs Narumol Chattawan, Vice President, Accounting Department to be responsible directly for supervising the Company's accounting work, with an autobiography, in attachment 1 on "Details about the Directors, the Management, Controlling persons and the person directly responsible for supervising the Company's accounting work and the corporate secretary".

The Company's Internal Audit Supervisor

The Company has assigned Mr. Somchai Kitpipat, Assistant Vice President, Internal Audit Department, as the Head of Internal Auditing of the Company, with an autobiography in Attachment 3 on "Details about Supervision of the Internal Audit and Supervisor of Compliance".

The Company's Chief Risk Management Officer

The Company has assigned Miss Kusuma Chantarothorn, Department Manager, Risk Management Department: In the position of the Company's Risk Management Supervisor.

Head of Corporate Compliance

The person assigned to the responsibility is the supervisor of the supervision of the Company's operations. Initially, the Company requires each supervisor to be responsible for the Company's job as follow.

- Corporate Secretary :** Responsible for compliance with relevant laws and regulations of the Stock Exchange of Thailand and the Securities and Exchange Commission, as well as relevant laws.
- Legal Department :** Legal officers are responsible for compliance with relevant laws and regulations relating to the Company's business operations.

The Plant	: The plant manager is responsible for legal compliance in various aspects of management within the plant.
Environment Department	: Responsible for environmental management both within the plant and surrounding communities, including within the Company's various projects and complying with occupational health and environmental laws, as well as factory laws, etc.
Risk Management Department	: Responsible for the risk management the Company's business, including assessing the risks in various areas of the company to comply with legal issues.

7.6.2 List of Investor Relations

Contact Person

Mr. Siam Viriyosuttikul Department Manager/Finance Management Department

Tel : 02-213-1039 Ext. 12983 / 12985

7.6.3 Audit Fees and Other Remuneration

1. The Company and its subsidiaries paid Audit Fee as follows:

- (1) The statutory auditor of the Company for the financial year ended 2023 in the amount of Baht -0-
- (2) The office of the statutory auditor of the Company, or other persons or related enterprises relating to the statutory auditor of the Company for year 2023 in the amount of Baht 11,900,000.

2. Non-audit fee: TPIPL and its subsidiaries paid a fee to KPMG Phoomchai Audit 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 2023 for a total of Baht 240,000.



8. Report on the important performance of corporate governance

8.1 Summary of the board's performance in 2023

In 2023, the Board of Directors reviewed and defined the Company's vision, mission, operating policy, business strategies and goals, monetary policy, investment direction, as well as risk services.

The Board of Directors has evaluated the Company's performance both financially and non-financially, assessing it based on stakeholders' perspectives (e.g., customer satisfaction, employee satisfaction, etc.), in-house processes within the organization, employee learning and organizational growth.

8.1.1 Nomination, Development and Training of Directors

When considering the nomination of individuals for director positions, particularly those who will conclude their terms, it is essential to evaluate their knowledge, ability, experience, and transparent work history, reflecting morality and responsibility. Additionally, they should demonstrate leadership and professionalism. Additionally, the Board diversity is taken into consideration through the use of the Board Skills Matrix to evaluate the qualifications of directors for recruitment, ensuring that the required skills are appropriate and aligned with the composition and structure of the Board according to the Company's business strategy. In addition, criteria are used for recruiting directors according to the principles of good corporate governance. It is a component in recruiting new directors and providing orientation for those who take up the position, including encouraging the Company's directors to continuously develop their knowledge.

1) Nomination of Independent Directors

In 2023, no additional independent directors were appointed by the Company; however, if independent directors are nominated, the Company will act in accordance with relevant regulations.

2) Recruiting CEO and Presidents to replace vacant positions with the consideration of the Nomination Committee based on the following criteria:

1. Being a director of the Company according to the Articles of Association
2. Having the knowledge and ability to run a business, including skills, experience, professionalism, and specific qualifications in various areas that are extremely necessary and beneficial to the business of the Company.
3. Possessing skills and experience necessary for the business operations of the Company Group.
4. Possessing leadership qualities and a robust sense of responsibility.
5. Received recognition from business organizations within the Company's industry.
6. Obtaining approval from the Board of Directors
7. Considering conflict of interest

3) Development and Training of Directors

The Board of Directors and top executives prioritize regular attendance at training seminars aimed at developing knowledge and competency in performing director duties. All directors have a track record of attending training courses offered by the Thai Institute of Directors Association (IOD) and other prominent organizations and institutes. Additionally, they actively engage in seminars geared towards enhancing knowledge for effective business management.

Currently, several directors are undertaking IOD's training courses tailored to their responsibilities as directors, including the Directors Certification Program (DCP) or Directors Accreditation Program (DAP).

The Company has arranged for directors to attend training sessions organized by the Thai Institute of Directors Association (IOD) to enhance their knowledge about performance in their roles as directors.

In 2023, directors participated in training sessions, both within and outside the Company, covering various courses as follows:

1. Directors Attending Trainings (External Trainings)

No.	Name	Course	Organized by	Training Date
1	Mr. Pornpol Suwanamas	Executive Architect Council Training, Class 4	Architect Council of Thailand	November 5, 2022 to April 29, 2023
		Advanced Insurance Science (WPS) 11th generation	Office of Insurance Commission (OIC)	February 3, 2023 to July 23, 2023
		Medical Leadership Certificate Program Class 1 (MD Class 1)	สถาบันพระปกเกล้า	1 December 2023 to 31 August 2024
2	Mr. Khantachai Vichakkhana	Role of the Chairman Program (RCP) Class 54/2023	สมาคมส่งเสริมสถาบันกรรมการบริษัทไทย (IOD)	30-31 May 2023
3	Dr. Virat Chatdarong	Executive Program in Digitalization Industry of Thailand (DIT, Class 6)	The Federation of Thai Industries (FTI)	August 25 to September 30, 2023
4	Mr. Pakorn Leopairut	Executive Architect Council Training, Class 4	Architect Council of Thailand	November 5, 2022 to April 29, 2023
		Refreshment Training Program (RFP) Class 9/2023	Thai Institute of Directors Association (IOD)	21 April 2023
5	Miss Thanyarat Iamsopana	Automotive Insurance Claims Association		

2. Directors attend training (In-house courses training)

No.	List of Directors	Courses	organized by	Training Date
1	Mr. Prachai Leophairatana Mrs. Orapin Leophairatana Mr. Pakorn Leopairut	Sustainability Reporting Procedure Compliance with GRI Standards	Thaipat Institute	17 September
		Sustainability Reporting	Thaipat Institute	15 October 2021
		Sustainability Reporting	Thaipat Institute	27 October 2023
2	Mr. Pakorn Leopairut	Risk Management in the Organization (Risk Management)	Development and Training Human Resources Section/ Personnel Department	23 February 2023
		International Standard Reporting Process (2021 Version)	Development and Training Human Resources Section/ Personnel Department	7 April 2023
		Understand the scope of geomanagement information.	The Stock Exchange of Thailand	9 June 2023
		Assessing climate indicators which are below the standards	The Stock Exchange of Thailand	4 August 2023
		Monitor the company's actions and provide further guidance.	The Stock Exchange of Thailand	20 October 2023
		Summary of operational results and development guidelines.	The Stock Exchange of Thailand	16 November 2023

No.	List of Directors	Courses	organized by	Training Date
3	Dr. Virat Chatdarong Mr. Pakorn Leopairut	Driving the organization with ESG data and introducing ESG systems.	Thaipat Institute	29 September 2022
		Study, review and identify sustainability issues		4 October 2022
		Prioritizing sustainability issues		6 October 2022
		International Standard Reporting Process (2021 Edition)	Development and Training Human Resources Section/ Personnel Department	7 April 2023
		Understand the scope of geomanagement information.	The Stock Exchange of Thailand	9 June 2023
		Preparation of sustainability reports	Thaipat Institute	12, 27 October 2023
		Summary of operational results and development	The Stock Exchange of Thailand	16 November 2023

In addition, the Company has always informed directors of information related to good corporate governance practices to increase knowledge and understanding.

However, information on the training of the directors from the Thai Institute of Directors Association (IOD); as per details appeared in attachment 1 on “Details about the Directors, the Management, controlling persons, the person directly responsible for supervision of the accounting work and the corporate secretary.”

The Company recognizes the importance of the duties of new directors, thus providing the introduction of guidelines for the overall implementation of the Company, structure of subsidiaries, associates and related business companies to have an understanding of the shareholding structure between them. In addition, it provides important and necessary information to perform the duties of the directors, such as in-house structure, Memorandum of Association, Articles of Association, Business Ethics of the Board of Directors, Manual of Listed company, Good Corporate Governance Policy, related governing laws, Financial Statements, Notes to the financial statements, including holding meetings with the Chairman of the Board of Directors, Board of Directors, Sub-Committee of the Company to be informed about the Company's business operations.

Directors Orientation

For directors who have taken new positions in the Board of Directors, orientation has been held so that new directors can receive the Company's business policy, as well as related information such as management

structure, shareholders, performance, as well as law, rules and handover of directors' manuals, which are useful for performing duties as a director. Director's Manual / Information for Directors consist of the following:

Director's Manual :

1. Public Limited Companies Act, B.E. 1992
2. Securities and Exchange Act, B.E. 1992
3. Company Registration
4. Company's Certificate
5. Company Memorandum of Association
6. Company Articles of Association
7. Code of conduct
8. Guide to Directors of Listed Companies

Information for Directors :

1. Presentation to recommend the Company's business operations.
2. List of Boards of Directors, Specific Committee and Management Structure Chart.
3. Good Corporate Governance Principles for Listed Companies.
4. Connected transactions of listed companies
5. Information Advice for Registered Executives
6. Company Profile
- 7 Annual Report
8. Financial Statements

which are shown in detail on the Company's web site <https://www.tpipolene.co.th/th/aboutus/board-orientation-th> or scan QR Code



4. Summary of performance appraisal of directors and top executives (CEO) (Year 2023)

TPI Polene Public Company Limited arranges for the Board of Directors, subcommittees, and top executives (CEO) of the Company to conduct self-evaluations at least once a year in order to adhere to the principles of good corporate governance. This is done by including the factors that affect the Company's sustainability performance as part of the performance assessment indicators for the Board of Directors and executives, and concentrating on the assessment results that can be used to make improvements (CEO). The assessment form includes.

1. Performance assessment form of the Board of Directors as a whole (Assessment as a whole)
2. Performance assessment form for the committee as a group
3. Performance assessment form of the Board of Directors individually (for the Board of Directors/ Sub-Committees)
4. Performance assessment form of Chief Executive Officer (CEO)

The assessment criteria are determined by the percentage of the full score for each item as follows:

More than	90%	Score	=	Excellent
More than	80%	Score	=	Very Good
More than	70%	Score	=	Good
More than	60%	Score	=	Fair
Below	60%		=	Need Improvement

1. Performance assessment form of the Board of Directors as a whole (Assessment as a whole)

Consists of 6 topics, namely structure and qualifications of the committee, roles, duties and responsibilities of the committee, meetings of the committee, performance of duties of directors, relationship with management, self-development of directors, and development of executives. The assessment results have an average score of 92.5% (Excellent).

2. Performance assessment form for the committee as a group

Consists of 3 topics: structure and qualifications of directors, meetings of sub-committees, roles, duties and responsibilities of sub-committees.

☐ Audit Committee The assessment results have an average score of 92% (Excellent).

☐ Nomination and Remuneration Committee The assessment results have an average score of 90% (Very Good).

3. Performance assessment form of the Board of Directors individually (for the Board of Directors/Sub-Committees)

Consists of 3 topics: structure and qualifications of the committee/sub-committee, meetings of the committee/sub-committee, roles, duties and responsibilities of the committee/sub-committee.

The assessment results have an average score of 93% (Excellent).

4. Performance assessment form of Chief Executive Officer (CEO or equivalent)

It is an assessment that takes into account the elements that determine the Company's sustainability performance as part of the KPI. To assess the performance of Chief Executive Officer (CEO), including financial performance (e.g. revenue, company sales, Economic Value Add (EVA), other financial performance) and environmental, social and/or governance (ESG) performance, such as employee/supplier/community satisfaction, especially with the aim of reducing greenhouse gas emissions, reducing the use of company resources, etc. These are part of the performance assessment indicators of Chief Executive Officer (CEO or equivalent) that consists of 10 topics:

1. Leadership
2. Strategies
3. Strategy Implementation
4. Financial Planning and Performance
5. Relationship with the Board of Directors
6. External Relations
7. Management and Relations with Personnel
8. Succession
9. Knowledge of Products and Services
10. Personal Attributes

The assessment results have an average score of 95% (Excellent).

8.1.2 Attendance and remuneration of the Board of Directors and audit committees of the Company individually

(1) Attendance of the Board of Directors and the Audit Committee of the Company

The Company has set a formal pre - meeting date annually in accordance with good corporate governance principles so that directors can plan to allocate time to attend meetings regularly, and additional extraordinary meetings might be held to consider urgent matters of importance. In each meeting, The Company will send the invitation to the Meeting and the supporting documents to the Board of Directors not less than 7 days prior to the meeting; unless there are urgent circumstances such as extraordinary board meetings, for example, to provide directors with sufficient time to study the information prior to the meeting. The directors can make further relevant inquiries through the Corporate Secretary for further coordination.

However, the Company has provided a preliminary schedule on the date and time of the 2024 Board meeting* as detailed below:

Meeting number	Date/ Month/ Year of The Meeting	note
1/2567	Thursday, January 25, 2024	
2/2567	Thursday, February 29, 2024	
3/2567	Thursday, March 28, 2024	
4/2567	Thursday, April 25, 2024	*Subject to change according to the date of the Annual General Meeting of Shareholders.
5/2567	Thursday, May 30, 2024	
6/2567	Thursday, June 27, 2024	
7/2567	Thursday, July 25, 2024	
8/2567	Thursday, August 29, 2024	
9/2567	Thursday, September 26, 2024	
10/2567	Thursday, October 31, 2024	
11/2567	Thursday, November 28, 2024	
12/2567	Thursday, December 26, 2024	

Remark : * For such preliminary schedules, changes are subject to appropriate. Additional details is shown on the Company's web site <https://www.tpipolene.co.th/th/aboutus/time-table-board-th> or Scan QR Code



In 2023, there were meetings of the Board of Directors and sub-committees with the details of the directors attending the meeting as follows :

Name	Position	Board meeting in 2023				
		The Board of Directors total 12 times	Audit Committee total 5 times	Nomination Committee total 1 time	Remuneration Committee total 1 times	Corporate Governance Committee total 1 time
1. Mr.Khantachai Vichakkhana	Chairman and Independent Director	12/12	-	1/1	1/1	1/1
2. Mr. Prachai Leophairatana	Director	12/12	-	1/1	1/1	1/1
3. Mr. Prateep Leopairut	Director	12/12	-	1/1	1/1	1/1
4. Dr. Pramuan Leophairatana	Director	11/12	-	1/1	1/1	1/1
5. Miss Malinee Leophairatana	Director	10/12	-	1/1	1/1	1/1
6. Mr. Prayad Liewphairatana	Director	9/12	-	1/1	1/1	1/1
7. Mrs. Orapin Leophairatana	Director	12/12	-	1/1	1/1	1/1
8. Mr. Pises Iamsakulrat	Audit Committee and Independent Director	10/12	5/5	1/1	1/1	1/1
9. Mr. Thavich Taychanavakul	Audit Committee and Independent Director	11/12	5/5	1/1	1/1	1/1
10. Mr. Tayuth Sriyuksiri	Director	11/12	-	1/1	1/1	1/1
11. Mr. Supoj Singsanei	Chairman of the Audit Committee and Independent Director	12/12	5/5	1/1	1/1	1/1
12. Mr.Pakorn Leopairut	Director	12/12	-	1/1	1/1	1/1
13. Mr. Pornpol Suwanamas	Audit Committee and Independent Director	12/12	3/5	1/1	1/1	1/1
14. Miss Thanyarat Iamsopana	Director	12/12	-	1/1	1/1	1/1
15. Dr.Virat Chatdarong	Director	12/12	-	1/1	1/1	1/1

However, at the end of the meeting, the Company will prepare the minutes of the meeting, proposed to the Board of Directors' meeting at the next meeting, and the Chairman of the Board of Directors to sign the authentication and certified minutes are systematically stored for reference queries.

(1) Remuneration of the Board of Directors

1. Monetary compensation

In 2023, the remuneration of 15 directors received in the form of director remuneration and bonuses totaling Baht 35,935,740 compared with the remuneration and bonuses of 15 directors totaled Baht 33,330,652 in 2022 with details of remuneration and bonuses for 2023 as follows:

Unit: Baht

No.	Name	Position	Remuneration	Bonus	Total
1.	Mr. Khantachai Vichakkhana	Chairman of the Board	Bonus	Total	2,395,716
2.	Mr. Prachai Leophairatana	Director	2,064,816	330,900	2,395,716
3.	Mr. Prateep Leopairut	Director	2,064,816	330,900	2,395,716
4.	Dr. Pramuan Leophairatana	Director	2,064,816	330,900	2,395,716
5.	Mr. Supoj Singsanei	Director	2,064,816	330,900	2,395,716
6.	Miss Malinee Leophairatana	Director	2,064,816	330,900	2,395,716
7.	Mr. Prayad Liewphairatana	Director	2,064,816	330,900	2,395,716
8.	Mrs. Orapin Leophairatana	Director	2,064,816	330,900	2,395,716
9.	Mr. Pises Iamsakulrat	Director	2,064,816	330,900	2,395,716
10.	Mr. Tayuth Sriyusiri	Director	2,064,816	330,900	2,395,716
11.	Mr. Thavich Taychanavakul	Director	2,064,816	330,900	2,395,716
12.	Mr. Pakorn Leopairut	Director	2,064,816	330,900	2,395,716
13.	Mr. Pompol Suwanamas	Director	2,064,816	330,900	2,395,716
14.	Miss Thanyarat Iamsopana	Director	2,064,816	330,900	2,395,716
15.	Mr. Virat Chatdarong	Director	2,064,816	330,900	2,395,716
Total			30,972,240	4,963,500	35,935,740

Remuneration of Directors in Subsidiary Company (Thai Nitrate Co., Ltd.) in 2023

No.	Name	Position	Remuneration	Bonus	Total
1.	Mr. Prachai Leophairatana	Director	120,000	240,000	360,000
2.	Mr. Prateep Leopairut	Director	80,000	160,000	240,000
3.	Dr. Pramuan Leophairatana	Director	80,000	160,000	240,000
4.	Mr. Prayad Liewphairatana	Director	80,000	160,000	240,000
5.	Mrs. Orapin Leophairatana	Director	80,000	160,000	240,000
6.	Mr. Pakorn Leopairut	Director	80,000	160,000	240,000
7.	Mr. Pakkapol Leopairut	Director	80,000	160,000	240,000
Total			600,000	1,200,000	1,800,000

2. Other remuneration

The Company provides personal cars to the management.

8.1.3 Supervision of subsidiaries and associates

The Company has an investment policy in subsidiaries and/or associates with policies in line with the Group's vision and growth plan, which will enable the Group to increase its performance or profitability in order to achieve its goals of becoming a leading entrepreneur in the business and to support the Company's core business operations, including convenience and mobility, efficiency in operations and increased competitiveness based on factors such as legal provisions, financial structure, taxation and risk management, etc.

However, the Company has a policy of managing TPI Polene Group by requiring the subsidiaries to conduct businesses in accordance with the Company's policies in order to have systematic management and supervision in the same direction. As for the management of associates and other subsidiaries, the Company has sent representatives to join as the Executive Committee to make decisions about policies and operational plans based on good corporate governance principles, ethical business operations to ensure efficient, transparent, fair operation and achieve the goals set forth.

The Company has a policy of supervising the operations of its subsidiaries and associates as follows :

1. The Company will send the person on behalf of the Company to be a director in each subsidiary and/or associate in accordance with the shareholding in each company. However, sending representatives of the Company as directors in each subsidiary and/or associates must be considered and approved by the Board of Directors' Meeting, taking into account the suitability of each company.

2. The Board of Directors and the Management of each subsidiary and/or associates will have significant scope of authority and responsibilities in accordance with applicable laws, such as disclosure of information about financial position and performance. Connected transactions of subsidiaries and/or associates, as well as the acquisition or disposition of significant assets to the Company by applying the relevant notices of the Capital Market Supervisory Board and the Notification of the Board of Directors, including disclosing and submitting information on their interests and persons relating to the Board of Directors to the relationships and transactions with subsidiaries and/or associates in a manner that may cause conflicts of interest and avoid transactions that may cause conflicts of interest.

3. The Company will formulate the necessary plans and actions to ensure that the subsidiary and/or associates

disclose information about their operating performance and financial position, and that the Company will take the necessary actions and monitor the subsidiary and/or associates with adequate and appropriate internal control systems and control systems to conduct the business.

In addition, the Company will closely monitor the performance and operations of such subsidiaries and/or associates and present the results of the analysis, including comments or recommendations, to the Board of Directors and the Board of Directors of those subsidiaries or associates for consideration, policy determination or improvement, to encourage the business of its subsidiaries and/or associates with developing and growing continuously.

8.1.4 Monitoring compliance with corporate governance policies and practices

The Company has followed up to achieve good corporate governance practices in 4 issues as follows:

(1) Protection of 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 its subsidiaries) and anyone, with which a possible conflict of interest might occur, require approval under the rules and regulations imposed by the SEC and the SET concerning information disclosure. In addition, such transactions are subject to an approval process in which only unconnected persons may participate.

Disclosure of the details of connected transactions that may involve conflicts of interest (according to criteria of the SET and the SEC) in the Company's Annual Report or 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.

In 2023, the Company has prepared a plan and performance regarding the prevention of conflicts of interest of the Company.

The Company has the determination to manage according to the principles of good corporate governance by striving to operate with transparency, morality, ethics, and responsibility to shareholders, customers, employees, society, and other stakeholders. The Company has given importance to and promoted the creation of a concrete corporate governance culture. The Chairman of the Board of Directors has established a policy to prevent conflicts of interest in the Company's business ethics manual for the Board of Directors, executives, and all employees acknowledge and compliance with good practices with a conscience that adheres to honesty, morality and ethics including protecting the interests of the organization as a whole.

(2) Dissemination of internal information

1) Monitoring of internal data usage

The Company maintains the use of internal information in accordance with the law and in accordance with good corporate governance guidelines. It is set out in writing in the Directors' Business Code of Conduct, the management and employees, which will be given to the directors, the management and employees when start working on the first day in the workforce, key policies can be summarized as follows :

1. The Company has designated the directors, the management and employees sign acknowledgement of the relevant notices of the SEC to designate directors and the management to be responsible for reporting changes in securities holdings to the SEC under Section 59 of the Securities and Exchange Act B.E. 2535 (1992) within three working days from the date of the change of securities holdings and shall notify the Corporate Secretary to provide a record of the change and summary of the number of securities of directors and the management individually to present to the Board of Directors at the next meeting. In addition, penalties have been imposed if they have violated or not met such requirements.
2. The Company has a requirement not to use financial statements or other insider information that affects the price of the Company's securities to disclose to third parties or non-affiliated parties and do not trade securities for a month before financial statements or other information affecting the price of securities of companies/group companies in public. The Company must not trade securities until after 24 hours since all such information has been disclosed in public. Failure to act in accordance with such requirements constitutes a disciplinary act of the Company. If the director any executive

or employee who has learned of important internal information, anyone who commits a disciplinary offense, will be punished from warning , payment cuts, unpaid suspensions, until dismissal.

However, the guidelines as above have been resolved and approved by the Board of Directors.

In recent years, it has not been found that directors and the Management have traded securities during the Company's term of referminion. In addition, the Company has begun to introduce electronic systems to enhance reporting efficiency with directors, the Management and employees as well.

The Company has made it a priority to achieve equality and fairness to all shareholders. Internal information or material information regarding changes in the price of unsealed securities is considered to be internal information used in the business operations and is classified information of the Company, which, if disclosed, will affect the Company, especially affecting the value of the shares of the Company that is traded on the SET. Therefore, the Management and employees at all levels of the Company must keep the internal information confidential Thus, guidelines practices are established as follows:

1. The Company's employees must maintain and keep customers' information and commercial information confidential, which must be maintained in respect of their responsibilities unless required by law to disclose for litigation purposes or the Board of Directors approves the disclosure.
2. Disclosure of information that may have any impact on the Company must be undergone by the person who has the decision to act on such matters unless assigned by the disclosure authority.
3. Internal information is information on business operations and management of confidential business. If disclosed in public, it will affect the Company.
4. Employees and related persons must not disclose information that has not been disclosed in public and do not trade securities of the Company or the companies they are involved in when they know information that has not been disclosed in public.
5. Important documents and confidential information must be maintained in specific ways defined at each level and type or type of data must be carefully stored, and easy to use. After the period of time, the data or documents or stored in electronic system, the employees involved must ensure that the destruction is made in an appropriate way, valid

for each type of information or document, some documents must be preserved as required by legal regulations imposed and should be studied on a case-by-case basis.

The Company has policies and procedures to ensure that directors and the management do not provide internal information of the Company, that has not been made public to exploit themselves, including securities trading as follows:

1. The Company will educate the directors, the management, including executive positions in accounting or finance or equivalent, regarding the duties that must be prepared and submitted to their securities holding reports of their offspring the SEC under Section 59 and penalties under Section 275 of the Securities Act, including reporting the acquisition or distribution of their own securities, couple marriage and their offsprings to the SEC under Section 246 and penalty imposed under Section 298 of the Securities Act.
2. The Company requires the Directors, the management, including executive positions in accounting or finance or equivalent, to prepare and submit reports of the holding of their securities, of married couples and their offsprings to the Corporate Secretary before sending them to the SEC, the reports of which shall be prepared and delivered within 30 days from the date of appointment to the position of director and/or executive, or report the change in securities

holdings within three business days from the date of the purchase, sale or transfer of such securities.

3. The Board of Directors and employees in particular business units of the related information (including couple marriage and offsprings of such persons) are prohibited to trade the Company's securities at least one month prior to the disclosure of quarterly and annual financial statements and within 24 hours after the disclosure of such financial statements.

In addition, in the event of the Board of Directors and employees in the particular business units concerned with the information (including couple marriage and offsprings of such person) know undisclosed information that may affect the Company's securities price, such persons must not trade the Company's securities until after 24 hours since all such information has been disclosed in public.

4. The Company imposes disciplinary penalties if there is a breach of internal information to exploit themselves, disciplinary action starts with written warning, wages cut, suspend unpaid work, or dismissal. The punishment will be determined by the intent of the offense and the seriousness of the offense.



Company shares held by the Directors and the Management (including couple marriage and their offspring) as at December 28, 2023.

Name	Shareholding As at January 4, 2023 (Shares)	Shareholding As at December 28, 2023 (Shares)	Shareholding As at December 28, 2023 (Shares)
1. Mr. Prachai Leophairatana	975,746,240	975,746,240	-
2. Mr. Prateep Leopairut	100,000	100,000	-
3. Dr. Pramuan Leophairatana	544,900,000	544,900,000	-
4. Mr. Prayad Liewphairatana	603,122,740	603,122,740	-
5. Mrs. Orapin Leophairatana*	*	*	*
6. Mr. Pisej Iamsakulrat	8,128,400	8,128,400	-
7. Mr. Thavich Taychanavakul	270,800	370,800	100,000
8. Mr. Tayuth Sriyaksiri	94,425,890	93,147,890	1,278,000
9. Mr. Khantachai Vichakkhana	27,760	27,760	-
10. Miss Malinee Leophairatana	8,143,080	8,143,080	-
11. Mr. Supoj Singsane	-	-	-
12. Mr. Pakorn Leopairut	596,651,800	596,651,800	-
13. Mr. Pornpol Suwanamas	-	-	-
14. Miss Thanyarat Iamsopana	13,455,000	13,455,000	-
15. Dr. Virat Chatdarong	8,000,000	8,000,000	-
16. Mr. Prasert Ittimakin	10,480	10,480	-
17. Mr. Somkeart Srisuwan	-	-	-
18. Miss Chularat Danwattanachai	-	-	-
19. Mr. Pongsak Yiengsakun	-	-	-
20. Mrs. Narumol Chatrawan	-	-	-

Remark : * Included in shareholding changes of Mr. Prachai Leophairatana to comply with the provisions contained in the SEC Act, article 258.

(3) 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 Company has the policy that 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 dealings 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 to perform in compliance with the principles of good corporate governance, codes 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 employees must not induce to act or refrain from acting that may lead to malfeasance and corruption, and not get involved in corruption, whether directly or indirectly.
2. To support all employees' roles and responsibilities to take part in the activities of the Anti-Corruption Policy.
3. To conduct its business with fairness and enhance the confidence of its stakeholders.

Scope of Anti-Corruption Policy

Stakeholders of the Company who are involved in the Anti-Corruption Policy are classified into 2 major groups as follows :

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

Definition

Corruption means any type 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, private sectors, 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 business transactions. Exceptions shall be applied in the case of laws, regulations, statements, standards, customs, or business traditions that are enabled to do so.

Roles and Responsibilities

The Board of Directors is responsible for determining the policy, monitoring, and forming of an effective system supporting the anti-corruption act in order to affirm that the Management Team is intensively concerned with, emphasizes, and cultivates an anti-corruption mindset as the Company's culture.

Presidents and the management are responsible for determining the anti-corruption system, promoting, and encouraging that anti-corruption manners are conveyed to all staff and related parties. This also includes reconsideration of systems or regulations in order to best adjust to business changes, regulations, standards, and laws.

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.

The Internal Audit Director is responsible for auditing, assessing, and evaluating whether business transactions are accurate and comply with guidelines, approval authorities, standards, laws, and policies in such monitored departments in order to assure 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 members shall not be negligent in any

corruption conditions involved directly with the Company. All staff members must notify such acts to supervisors or the responsible person provided in particular channels, including cooperating with any fact-finding investigation.

2. A person who commits corruption is considered for disciplinary offenses. This means such person is to be considered for discipline according to the Company's standards. Legal prosecution may be applied in case such acts violate laws.
3. The Company shall be fair and provide safeguards for staff members who report corruption cases relating to anti-corruption.
4. The Company understands the importance of dissemination, knowledge sharing, and constant communications 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 employees will be responsible for adhering to the Company's Anti-Corruption Policy in their business connections with customers, suppliers and all parties concerned. (Thereinafter 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 code of business conduct and hospitality activities from other persons in business dealing with the Company.
2. The employees must not accept gifts, entertainment and hospitality offerings or entertainment and hospitality activities from other persons in business dealing with the Company, whether directly or indirectly.
3. Employees must not be corrupt or accept corruption in any form under any circumstances, related to the business without getting prior approval from the 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 on the business decision of said employee.

4. Employees must not perform any act to acquire or keep benefits from their positions in the Company to accept gifts, entertainment and hospitality offering or entertainment and hospitality activities from other persons in business dealing with the Company.
5. Whenever the employees advise the HR department of the Company, those actions must not go against the benefits and/or recruitments of the Company and employees must refrain from doing any act to acquire or keep benefits that go against relevant 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, or parents or offspring, that may impose conflicts of interest.
7. The Business Relations and Procurement Process 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 an approval from their supervisors before offering all types of gifts (such as the Company's products) or entertainment and hospitality activities to other persons for business purposes, to be in compliance with the Anti-Corruption Policy and measures, the Company's corporate governance principles, and its code of business conduct. In case of emergency that in any circumstances, supervisor approval has not been granted in advance, such employees are deemed to get an approval from their supervisors immediately after offering all types of gifts (such as the Company's products) or all forms in any circumstances to other persons for business purposes.
10. Employees must not acquire or take benefits from their positions in the Company to perform 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 (discrimination based on race, sex, disabilities or religion). This also includes burglary, threats, force or any other kind of action that violates the law.

11. Employees should ask or request opinions from their supervisors or responsible persons when the employees face or have doubt about any act that is considered corruption in order to avoid any arguments.

Disclosure of the Anti-Corruption Policy

In order for everyone in the organization to be aware of the anti-corruption policy, the Company will proceed as follows.

1. The Company announces the written publication of the Anti-Corruption Policy and measures 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.
3. The Anti-Corruption Policy needs to be reviewed regularly, including with a possible revision of such policy.

Additional practices regarding prevention of corruption

The Group has an anti-corruption policy focused on promoting morality, ethics, transparency in business practices in accordance with the Company's business ethics, as well as conducting business with an effective management system, that is transparent and verifiable. In addition, the Company encourages its personnel at all levels not to be involved in any corruption directly or indirectly, and promotes the participation of employees at all levels in preventing and combating corruption related to the Company's business, including the Company has trained employees at all levels.

The Group has a policy of giving or receiving gifts, as well as other benefits from individuals or companies engaged in business with the Company so as not to cause conflicts of interest. Any special compensation or incentives of value from third parties with business relevance. Employees of the Company must first be approved by direct supervisors. However, this is receiving such gifts must be in accordance with the rules, business traditions, or business etiquette and must not influence employee business decisions.

In addition, the Group has a policy of not authorizing or encouraging unlawful payments or bribing government agencies, and also clearly determines how to report whistleblowers or complaints in cases where unlawful acts are witnessed. The Company also sets out guidelines for conducting investigations and penalties in the Company's anti-corruption policy.

(4) Whistleblowing

1. Complaints or recommendations

- 1.1 A complaint if encountering any acts that are considered corruption, either directly or indirectly.
- 1.2 Any act that is considered corruption and/or has a direct effect on the internal controls of the Company, to 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 goes against the law, morals or business ethics.

2. Whistleblowing or complaint channels

All employees are obliged to report to the following persons and/or agencies when they see fraud, or corruption related to the Company's activities that violate this policy by using one of the channels.

3. Internal feedback mechanism (internal complainant)

- (1) Head of Audit Head of Human Resources or Head of Legal Affairs
- (2) Feedback box
- (3) Electronic mail (E-mail: orapinr@tpipolene.co.th)

4. External feedback mechanism (external complainant)

- (1) **Letter :** Mrs. Orapin Liaopirata
Senior Executive Vice President
TPI Polene Public Company Limited
26/56 Chantad Mai Road,
Tungmahamek, Sathorn, Bangkok
10120
- (2) **Electronic mailbox** (E-mail: orapinr@tpipolene.co.th)
- (3) **Letter :** Audit Committee
TPI Polene Public Company Limited
26/56 Chantad Mai Road,
Tungmahamek, Sathorn, Bangkok
10120

(4) Tel : 02-285-5090 or 02-213-1039
ext. 12962 / 12963
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, said whistleblower or the person subject to such grievance and parties involving in the fact-finding and reporting process, regardless of the 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 a policy to investigate such reports with equality, transparency, care, and fairness and subject them to a proper investigation. All information will be kept confidential and only be revealed when necessary while we will take into consideration the safety of and damage to the whistleblower or the person filing the grievance, which will be carried out in a confidential manner to ensure staff that 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 employees) may choose not to reveal his or her name, address or contact number unless he or she feels that such a disclosure will enable the Company to inform him or her of the progress. Information will be kept confidential and only be revealed when necessary while we will take into consideration the safety of and damage to the whistleblower or the person filing the grievance. The Company will hear all such reports with equality, transparency, care, and fairness and subject them to a proper investigation, which will be carried out in a confidential manner to ensure the staff members who make the reports will have their identities protected.

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 for conducting an investigation.
2. During the fact-finding process, the Management Representatives and the Audit Committee might ask the Management Representatives to keep them informed of the progress of further investigation.
3. In case tips or grievances are found to contain material evidence, the person committing corruption

or violating or failing to comply with the anti-corruption measures will be granted an opportunity to acknowledge the charges and will have the right to defend themselves by providing additional information or evidence that they weren't involved in any corruption or that they violated or failed 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 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 person will be considered for discipline according to Company standards. Legal prosecution may apply in case such acts violate the laws. The Management's decision is considered the final judgment for punishment on employees at fault relating to corruption matters.

Monitoring compliance with anti-corruption policies

The Company has reviewed the audit of corruption and the Chief Executive Officer has announced the anti-fraud and corruption policy, which outlines expectations for all employees to be aware of and actively engage in preventing and combating corruption in the organization, both directly and indirectly, and will have established channels for internal communications regarding complaints of corruption related to the Company. The Company provides protection to complainants and complaints will be kept confidential both during and after the investigation is completed. If the accused has actually committed an offense, the Company has imposed disciplinary action in accordance with the regulations set by the Company, and if the offender is an unlawful act, the offender must be prosecuted and legally punished.

In 2023, all divisions of the Company, especially those that are in contact with third parties, risks associated with fraud and/or corruption, there are total of 73 department assessed as vulnerable to corruption, representing 100%.

The proportion of employees who have trained in anti-corruption courses is 5.40% of the Company's total employees (not including employees in subsidiaries and subsidiaries companies which have the same policy). Those 7,096 employees are aware of the anti-corruption policy and accounted for 100%.

Besides, the Company's suppliers acknowledged the policies and practices regarding corporate anti-corruption representing 96% of total suppliers or accounting for total of 1,641 companies.

There were no lawsuits filed by the organization for corruption, and there were no corruption incidents against suppliers, despatchers or trade partners, including fraud incidents that occur within the organization. More details of the Privacy Policy can be found on the Company's website, <https://www.tpipolene.co.th/th/aboutus/corruption-policy> or scan QR Code



(5) Data Security Performance

The Company recognizes that personal data is important so that the personal data of Customers, Suppliers of Employees and or those involved (Visitor or all concerned) to the business of TPI Polene Group is collected, disclosed securely and being used for the purposes agreed by the data subject and in accordance with the Personal Data Protection Act B.E. 2562, under the establishment of a privacy policy.

As for Customer Information, the Company recognizes the importance of protecting personal data of customers with the aim of providing products and services to meet the needs of customers in the most efficient way.

In 2023, the Company has not received any complaints of personal data breaches. More details of the Privacy Policy can be found on the Company's website, <https://www.tpipolene.co.th/th/aboutus/pdpda>



(6) Formulating IT Security Policy and disclosing the results of follow-up

Cyber Threat Response Guidelines

The Company is aware of how cyber risks affect the information system. Malicious individuals or hackers currently have the means and tools necessary to damage an information system or steal information in a variety of ways, which could have a significant negative effect on the Company, its business partners, including various agencies that have contact with it regarding trade information, important information of the Company, and related parties, including the Company's reputation.

Operational Objectives

The Company understands the significance of creating and enhancing cyber security defenses since cyber attacks

have a significant impact on the operation and reputation of the Company (Cyber Security Protection). As a result, it is thought acceptable to continuously examine the cyber threat protection system as well as to create and upgrade the cyber protection system in order to keep up with the growing cyber dangers and the gravity of ongoing threats to information systems.

Current Operational Plan

The Company has taken measures to prevent and monitor cyber threats in the following areas :

1. Communication systems and networks outside the Company as follows :

Install a firewall to separate the scope of the network system outside and inside the Company apart from each other to prevent attacks from malicious people or hackers on the information systems of the Company and its subsidiaries from outside the Company.

2. Host computer and client computer :

1. Closing vulnerabilities in the operating system of the host and client computers that may result in cyber threats (Cyber Security Patching for Computer Operating System).
2. Install Endpoint Security to protect against computer viruses and malicious programs.

3. Connecting to the Company's information system from the Company's branch offices or external agencies :

The use of Virtual Private Network or VPN is required to connect to the Company's work system for the safety of data transmission/receiving between branch offices or external agencies to the Company's information system.

4. Knowledge Base :

1. The information management team regularly conducts cybersecurity studies.
2. Basic Cyber Security Awareness Training (Basic Cyber Security Awareness Training) is a guideline for working and using information systems to be safe from cyber threats.

5. Review of information systems by external auditors :

Receive annual information system reviews from external auditors according to standards and frameworks or information system review standards such as ITIL, ISO27001, etc., and make improvements to correct deficiencies found from information system reviews so that the information system is more reliable.

Future Action Plan

The Company is aware of cyber security in which

malicious people or hackers have developed various methods and technologies continuously and consistently. As a result, the Company needs to develop and improve the cyber threat protection system to keep up with the cyber threats that occur all the time. The Company has therefore discussed with experts in the field of cyber protection with additional action plans as follows.

1. Conduct a cybersecurity review of the Company by conducting a Cyber Security Assessment to find cyber vulnerabilities and will find ways to improve and develop additional cyber protection systems.

2. Prepare work plans and ask for budgets to improve the cyber defense system from top executives and the Board of Directors.

3. Implementation of a knowledge base system on cyber threats and prevention guidelines for use in disseminating knowledge to users of information systems of the Company and its subsidiaries.

4. Procure or hire a Cyber Security Operation Team for 24-hour surveillance and establish a Cyber Security Operation Center (CSOC) to be a cyber-threat surveillance unit.

Operational Goals

Establishing the following goals aims to enhance confidence not only in the Company's operations but also in those of its affiliated companies, suppliers, and various related agencies.

1. To prevent or reduce damage caused by cyber threats, implement preventive measures and surveillance to minimize the risk of harm. It's important to note that cyber threats cannot be completely prevented.

2. To enhance cyber security awareness among employees at all levels, fostering knowledge and understanding of various cyber threats, with the aim of effectively reducing risks within the Company's information systems and in employees' daily lives.

Performance in 2023

The development of information security systems involves a significant amount of technology and necessitates the establishment of a team to mitigate cyber threats. This undertaking demands both time for thorough information analysis and a substantial investment budget. Consequently, it is imperative to assess the effectiveness of safeguarding the Company's information system before seeking budget approval, ensuring cost-effectiveness and suitability for organizational use.

In 2023, the Information Technology Department conducted a study on guidelines for developing information security. This involved inviting a team of experts in cyber

threat prevention to offer fundamental knowledge and advice on enhancing cybersecurity protection systems, including :

- National Telecom Public Company Limited
- The Practical Solution Public Company Limited
- Advanced Info Service Public Company Limited
- Distributors of cyber protection equipment and systems, both domestically and internationally, especially the products and services of the following service providers such as Palo Alto Networks, Check Point, Fortinet, McAfee, Cisco, etc.

Based on the information provided by service providers as mentioned above, the Information Technology Department has periodically evaluated the cybersecurity system enhancement plan as follows:

1. Phase 0: Through evaluating the current cybersecurity system, the Company assesses its capability to protect against cyber threats. This evaluation includes conducting both a Cyber Security Assessment Test and a Cyber Security Penetration Test to determine the effectiveness of the current cyber defense system.

2. Following the receipt of the test results during Phase 0, the service provider will compile a report assessing the Company's cyber threat protection capabilities and offering recommendations for enhancing cybersecurity systems. This comprehensive report will be structured into three distinct phases for clarity and coherence.

1) Phase I

To enhance and augment cybersecurity systems for safeguarding against highly severe threats that may compromise the Company's operational systems. In the event of such an occurrence, the Company may experience disruptions in normal operations and incur significant financial losses.

2) Phase II

To enhance and bolster cybersecurity systems to mitigate medium-level threats that may target the company's operational systems. In the event of an incident, the impact may not be as severe as outlined in 1). The Company's operations can still continue, albeit with potential temporary disruptions, and there may be some financial losses incurred.

3) Phase III

To enhance and bolster cyber security systems to safeguard the Company's work systems against potential minor threats. While these threats may not initially pose severe impacts, they could accumulate damage and escalate in severity over time.

3. 3. The establishment of a cyber threat prevention team by the Company is comparable to recruiting specialized doctors. Presently, there remains a shortage of personnel in this field—individuals with specialized expertise in cyber

security who necessitate dedicated hours for work in this specific domain. High wages are typically attributed to the specialized skill set required. As a result, the Company often resorts to hiring external teams to monitor cyber security.

The Cyber Danger Surveillance Team will continuously analyze data traffic flow through Data Traffic Log Analysis, requiring the processing of a significant volume of data at all times. Should any suspicious activity be detected, the team will promptly implement preventive or corrective measures according to the agreed scope outlined in the service contract and will promptly notify the Company's designated personnel.

Remarks :

1. Investing in cyber defense requires allocating resources to develop systems that can consistently address cyber threats. This involves staying up-to-date with advancing technology, encompassing hardware, software, and specialized cyber security personnel. These experts must adeptly handle pressure during critical incidents, working against time constraints to minimize potential damage from cyber threats. This urgency is especially critical as hackers leverage AI to bolster their capabilities in executing diverse cyberattacks.

2. Once the service provider has completed all required steps, the results will be compiled into a detailed plan or proposal, accompanied by a budget. This presentation will then be delivered to the Company's top executives or Board of Directors for their review, consideration, and approval in determining the allocation of the next budget.



8.2 Report on the performance of the Audit Committee in 2023

8.2.1. Attendance of individual audit committees

In 2023, the Audit Committee conducted a total of 5 meetings with the following details of the meeting :

Name	Position	Number of Meeting Attendance
1. Mr. Supoj Singsanei	Chairman of the Audit Committee and Independent Director	5/5
2. Mr. Pises Iamsakulrat	Independent Director and Audit Committee	5/5
3. Mr.Thavich Taychanavakul	Independent Director and Audit Committee	5/5
4. Mr. Pornpol Suwanamas	Independent Director and Audit Committee	3/5

8.2.2 Performance of the Audit Committee

As per details contained in the Audit Committee report.



Audit Committee's Report for 2023

To: Shareholders:

The Audit Committee of TPI Polene Public Company Limited for the year 2023 consists of four independent directors, who are all qualified with knowledge of finance, law and management administration: namely, Mr. Supoj Singsanei as the Chairman of the Audit Committee; Mr. Pises Iamsakulrat, Mr. Thavich Taychanavakul and Mr. Pises Iamsakulrat as Audit Committee members; with Mr. Nitisit Jongphitakrat, the Corporate Secretary, as Secretary to the Audit Committee.

In 2023, the Audit Committee held a total of 5 meetings to review, consider, and evaluate the internal control system, review financial statements and disclose information to investors, review compliance with relevant legal requirements, review risk management, review connected transactions or conflicts of interest, and consider selection, appointment, and determination of the auditor's remuneration. The performance of duties can be summarized as follows:

1. To review and to evaluate internal control systems

The Company and its subsidiaries have appropriate internal control systems and have operated the business efficiently and effectively under appropriate and sufficient internal controls, as supported by the operational performance report. The Company and its subsidiaries have 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 and its subsidiaries, 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 public well-being creation and environmental conservation and fosters 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.

Based on the review of the Audit Committee in the previous year, the Company has a sound internal control system and works effectively and efficiently under an adequate and appropriate internal control system, which can help prevent damage, according to the Audit Committee's examination of the Company's operations over the previous year. This might take place quickly, lower operational risks, aid in making the Company's financial statements and reports accurate and trustworthy, and enable the protection of the Company's assets and investors' money. A unit dedicated to internal auditing is in place to give assurance in accordance with the yearly plan, which is reviewed and approved by the chairman of the audit committee.

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

Financial statements are financial reports that show the performance and financial position of an entity that must be disclosed to stakeholders. The Audit Committee has reviewed important items in the consolidated financial statements of the Company and its subsidiaries, both quarterly financial statements and fiscal year 2023 financial statements as well as having a meeting with the Company's auditor to independently exchange opinions on the financial statements without the presence of management on issues of material information of the financial statements and disclosures in the notes to

the financial statements. It was found that the Company prepared financial reports in accordance with generally accepted accounting standards and disclosed sufficient information in the notes to the financial statements within a reasonable period of time as required by law and the financial reporting standards set by the Federation of Accounting Professions which are beneficial to the decision of investors and all stakeholders.

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. Risk Management Review

The Company has set up a risk management committee chaired by the Chief Executive Officer and has executives from related departments as committees to consider structures, policies, risk management frameworks, risk management plans, review risks, and follow up on risk management. The Risk Management Department is responsible for preparing risk management reports, implementing and supporting risk management across the organization. The Company has focused on the environmental risks from greenhouse gas emissions that affect climate change, the risks that may arise from economic crime and modern technology (IT SECURITY), consumer behavior risks from rapidly changing communication technologies, risks caused by the outbreak of COVID-19, etc. The Company, through the Risk Management Committee and all organizational departments, has continuously observed the changing environment and taken into account significant risks that could have an impact on the Company's operations. From weekly management meetings, the Company has determined measures to respond to risks within acceptable levels and has included them in the annual work plan.

5. Review of fraud investigations

The Company has announced an Anti-Fraud and Corruption Policy through its Chief Executive Officer, which outlines guidelines for employees at all levels of the Company to understand and take part in the prevention and fight against corruption in the organization both directly and indirectly. This includes creating channels for whistleblowers or complaints about corruption actions related to the Company from both internal complainants and external stakeholders. The Company provides protection to complainants and complaints will be kept confidential both during and after the investigation is completed. If the accused has actually committed an offense, the Company has imposed disciplinary action in accordance with the regulations set by the Company. If the offense is an unlawful act, the offender must be prosecuted and subject to legal penalties.

6. Review of connected transactions or conflicts of interest

The Company has developed the Company's business ethics (Code of Conduct) for company directors, executives, and employees at all levels in order to acknowledge and strengthen the organizational culture that places importance on non-conforming operations with interests and conflicts of interest with the Company in order for the organization to benefit the most from business operations that are transparent and verifiable. The Audit Committee has reviewed the connected transactions and transactions that may have conflicts of interest from the relevant director's reports and found that the transactions were reasonable, did not cause the Company to lose benefits, and properly disclosed to the regulatory authority within the specified timeframe.

7. To select, nominate, and propose the remuneration of the statutory auditors of the Company for the year 2024

The Audit Committee has taken into consideration the independence, performance, experience and an 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 Miss Thanyalux Keadkaew, CPA registration no. 8179 or Mr. Ekkasit Chuthamsatid, CPA registration no. 4195 or Mr. Nattapongse Thantijatthanon, CPA registration no. 8829 , KPMG Phoomchai Audit Limited, to be the statutory auditors of the Company for the year 2024.

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. Supoj Singsanei)

Chairman of the Audit Committee

8.3 Summary of performance of other sub-committees

1. Report of the Executive Committee, which is included with the board of directors' report signed with Chairman of the Board of Directors and Chief Executive Officer
2. Audit Committee Report 2023, signed by Chairman of the Audit Committee
3. Rules for reports of other sub-committees of the Company for the year 2023 are as follows:
 - 3.1 Report of the Nomination and Remuneration Committee
 - 3.2 Report of the Corporate Governance Committee
 - 3.3 Report of the Risk Management Committee
 - 3.4 Report of the Sustainable Development Committee
4. At the Board of Directors' Meeting No. 12/2023 held on December 28, 2023, the Board of Directors signed and acknowledged the report of the sub-committees of the Company for the year 2023 as follows:



Report of the Nomination and Remuneration Committee

In 2023, the Nomination and Remuneration Committee held a single meeting, with 100% attendance from its members. As per the regulations governing the Nomination and Remuneration Committee of TPI Polene Public Company Limited, it comprises qualified experts in various fields. Mr. Khanchai Vijakkhana serves as the Chairman of the Nomination and Remuneration Committee, while the entire Board of Directors collectively fulfills their duties as members of the committee. Additionally, Mr. Nitisit Jongpitakrat serves as both the Company Secretary and the secretary of the Nomination and Remuneration Committee.

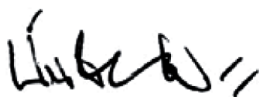
The Nomination and Remuneration Committee has fulfilled its duties as outlined in the Nomination and Remuneration Committee Charter approved by the Board of Directors. The committee reported the meeting results to the Board of Directors, addressing important matters, which can be summarized as follows :

1. Consider the nomination of new directors to replace those who retire by rotation based on knowledge, ability, experience, transparent work history, morality, responsibility, leadership, and professionalism. Additionally, board diversity is taken into account, and the Board Skills Matrix is defined to determine the qualifications of the directors to be recruited, considering appropriate qualifications, necessary skills, and consistency with the composition and structure of the Board in accordance with the Company's business strategy. Moreover, the criteria for recruiting directors in accordance with good corporate governance principles are utilized as a factor in recruiting new directors. New directors who have been appointed will be provided with orientation and encouraged to continuously advance their knowledge.

2. Consider the annual budget, and determine the remuneration of the Board of Directors based on evaluation criteria and the Company's performance. Additionally, take into account the appropriateness of the duties and responsibilities assigned, which are linked to the Company's performance and compared with companies in the same industry group and of similar size.

3. Consider and review the Nomination and Remuneration Committee Charter in compliance with the Corporate Governance Code (CG Code).

The Nomination and Remuneration Committee has independently carried out its duties in accordance with the Corporate Governance Code to ensure transparency and confidence in the recruitment and remuneration process for shareholders and stakeholders across all sectors.



(Mr. Khantachai Vichakkana)

Chairman of the Nomination and Remuneration Committee



(Mr. Prachai Leophairatana)

Chief Executive Officer

Report of the Corporate Governance Committee

In 2023, the Corporate Governance Committee held a single meeting, with 100% attendance from its members, and provided valuable feedback to the management in developing good corporate governance for the TPI Polene Group. The summary of the Corporate Governance Committee's performance in 2023 can be outlined as follows:

1. Promote the performance of the Board of Directors in compliance with the Corporate Governance Code and TPI Polene Group's Code of Conduct. Provide directors with knowledge about the prevention of insider information usage and the avoidance of conflicts of interest. In 2023, the Corporate Governance Committee conducted its operations thoroughly and did not encounter any material conflicts. This included encouraging directors to attend meetings and seminars on various subjects beneficial for carrying out their duties. For instance, courses such as the "Subsidiary Governance Program (SGP)" for the Company's Directors and top executives, and the "Role of the Chairman Program (RCP)" for the Company's Director who serves as the Chairman of the Board, organized by the Thai Institute of Directors Association (IOD), among others.

2. Promote awareness and compliance with the Corporate Governance Code and TPI Polene's Code of Conduct among executives and employees of the TPI Polene Group in all operating areas. This will be achieved by organizing training sessions to educate all executives and employees on preventing the misuse of inside information, avoiding conflicts of interest, and combating corruption. Additionally, the Company promotes compliance with the Code of Conduct in accordance with the Company's Code of Conduct manual for executives and employees at all levels. This manual will serve to raise awareness and provide guidelines for good practice. In 2023, the Company arranged for new executives and employees at all levels to take a test on the Company's Code of Conduct to assess their understanding. Additionally, the Company has promoted the establishment of processes and mechanisms for managing complaints and whistleblowing in cases of ethics violations, breaches of the Code of Conduct, and corruption. These efforts aim to strengthen the organizational culture in alignment with the TPI Polene Group's Code of Conduct. As a result of these initiatives, there were no violations of the Code of Conduct in 2023, contributing to sustainable growth.

3. Consider and review the scope of duties of the Corporate Governance Committee, Audit Committee, Nomination and Remuneration Committee to be in compliance with the Corporate Governance Code for Listed Companies 2017 (CG Code) of the SEC Office.

4. Promote disclosure and transparency, prepare the Annual Registration Statement/Annual Report (Report 56-1 One Report) and disclose its quarterly operating results. This ensures continuous coverage of subject matters, completeness, sufficiency, reliability, and timeliness through various channels, such as the Stock Exchange of Thailand system and TPI Polene's website. Additionally, the Company actively participates in events such as Opportunity Day in collaboration with the Stock Exchange of Thailand on a quarterly basis and the SET AWARDS event.

5. Promote quarterly disclosure of sustainability performance across three dimensions (Environmental, Social, and Governance) to investors through the 56-1 One Report, Sustainability Report, and on the TPI Polene's website.

As a result of the TPI Polene Group's continuous focus on good corporate governance, the following achievements have been made.

1. The Company has been rated as "Excellent CG Scoring" (5-star) in Corporate Governance from the Corporate Governance Report of Thai Listed Companies (CGR) for the year 2023 organized by the Thai Institute of Directors Association (IOD) with the support of the Stock Exchange of Thailand and the SEC Office.

2. The Company was rated as "SET ESG Ratings : AA " for the year 2023 by the Stock Exchange of Thailand. This reflects business operations that have continuously evolved towards sustainability. With responsibility to stakeholders by taking into account environmental, social and corporate governance (ESG).

3. The Company was recognized among the ESG100 securities companies for its exceptional performance in environmental, social, and governance (ESG) criteria within the Real Estate and Construction category. The award is administered by the Thaipat Institute.

The Corporate Governance Committee is dedicated to fulfilling its duties in alignment with the organization's direction and goals. Its aim is to foster sustainable growth, creating maximum benefit for shareholders and all stakeholders, while ensuring fairness and progress for collective advancement.



(Mr. Khantachai Vichakkana)
Chairman of the Corporate Governance Committee



(Mr. Prachai Leophairatana)
Chief Executive Officer

Report of the Risk Management Committee

In 2023, the Risk Management Committee held a single meeting, with 100% attendance from its members, and provided valuable feedback to the management in developing the risk management of TPI Polene Group. Summary of the performance of the Risk Management Committee in 2023 can be summarized as follows:

1. Approve the preparation of an organizational risk assessment report, which includes risk mitigation measures and opportunities arising from climate change. The goal is set to achieve carbon neutrality by 2043, surpassing Thailand's announced intention to achieve it by 2050.

TPI Polene Group aims to replace coal with waste fuel in all four production lines of its cement plants by 2023, targeting the utilization of waste fuel for up to 25% of the heat output. Additionally, the power plant, managed by TPI Polene Power Public Company Limited, a subsidiary, intends to achieve complete substitution of coal with waste fuel by 2024. This initiative yields tangible benefits to business operations by reducing exposure to risks associated with fluctuations in coal prices, contrasting with the relatively stable waste costs. Furthermore, it mitigates risks linked to climate change, a globally significant issue. This commitment aligns with the Company's goal of reducing greenhouse gas emissions, thereby reducing operational costs and mitigating such risks.

The Company has evaluated the risks associated with water shortages and flooding, categorizing them as medium-level and low-level basic risks, respectively.

There is also the risk of Carbon Tax, which poses a high risk to the business of producing cement from fossil fuels and a low to moderate risk to the supply chain. However, it is classified as an opportunity for the business of producing cement from green energy sources (Low Carbon). The Company has implemented measures to mitigate these risks, such as reducing reliance on fossil fuels and utilizing electrical energy produced from clean sources, etc.

Additionally, aside from the aforementioned risks, there are also opportunities emerging from the potential to market cement with low carbon values, such as Hydraulic Cement, etc.

2. Systematically supervise risk management in all aspects to ensure compliance with the established plan as follows:

- 2.1 For a new investment project, the Company requires the preparation of a feasibility study for the investment to serve as a tool for evaluating and screening new investments.
- 2.2 To effectively manage financial liquidity, arranging the project's capital structure and preparing financial projections in advance is required. These actions enable the management of net cash flow, facilitate the assessment of financial liquidity, and allow for the planning of both short-term and long-term finances.
- 2.3 The MIS information system is used as a tool for managing production, raw materials, sales, transportation, inventory levels, receivables, EBITDA, profit/loss, cash status, etc.
- 2.4 Mitigate the risk of key production factor shortages to prevent business interruptions by seeking a license to operate a limestone and shale mining business. Ensure that the renewal process is fully approved. Additionally, enter into coal and raw materials procurement contracts for both short-term and long-term needs, without relying solely on any single supplier.

- 2.5 Manage foreign currency through the principles of Natural Hedging. As the Company is a net exporter, it has managed the excess foreign currency in accordance with the conditions of the foreign currency market.
- 2.6 Utilize technology and innovation to develop products that enhance value, and advance production technology and services.
- 2.7 Develop online platforms, online sales channels, and 'New Normal' stores in communities to support changes in consumer behavior and cater to the lifestyle of new generations.
- 2.8 Continuously highlight the importance of product research and development. This encompasses the development of 43 distinct types of mortar, Bio Knox (a virus-killing solution), Microme Knox Solution, bio-organic fertilizer products, and additional innovations.
- 2.9 Emphasize IT security with a dedicated team responsible for it, organizing system testing, and practicing various plans to protect against cyber threats.
- 2.10 Strictly comply with relevant rules and regulations.

3. In the long term, TPI Polene Group continues to seek investment opportunities in businesses with high profit margins and growth rates. It also emphasizes the management of production costs by substituting waste fuel for coal and enhancing production efficiency. This includes implementing systems such as a raw material conveyor belt in the factory and employing electric vehicles for transporting raw materials in quarry, among other initiatives.

- 4. Consider and review risk management information by classifying risks into eight types, consisting of
 - 4.1 Strategic Risk arises from the inability to operate the business according to the given plan in compliance with internal and external factors. Therefore, managing the risk of the business plan is essential. For example: (1) Managing the risk of using waste fuel energy to replace coal to reduce production costs, which necessitates managing the amount and cost of waste procurement, including properties such as moisture content; (2) Investing in environmentally friendly projects; and (3) Investing in projects and businesses with high growth potential in the future.

Before investing in such projects, it is essential to conduct a feasibility study and sensitivity analysis of crucial factors. Additionally, it is necessary to closely monitor investment progress to mitigate the risks of underperforming investments, project implementation delays, and exceeding budgeted investments.

- 4.2 Operational Risk refers to the risk to operations stemming from internal processes or external factors that can affect revenue and operating costs, such as cost control and securing sufficient raw materials within budget constraints, etc.
- 4.3 Financial Risk involves the prudent implementation of financial policies within a defined budget to achieve suitable returns and maintain sufficient cash flow for business operations. This ensures that the Company effectively manages risk and maintains a robust internal control system adaptable to changing environments. It aims to mitigate financial risks arising from factors such as exchange rate volatility, interest rates, liquidity adequacy, etc.
- 4.4 Compliance Risk refers to the risk of failing to adhere to applicable rules, regulations, or existing standards, which may be inappropriate, outdated, or obstructive to operations, potentially leading to legal penalties. The Company must establish robust compliance oversight, ensuring adherence to government regulations and policies, including measures against corruption. This entails operating in accordance with the rules and regulations set forth by authorities such as the Securities and Exchange Commission and the Stock Exchange of Thailand.

- 4.5 Sustainability Risk refers to the potential loss of opportunities to sustain growth. Neglecting investments may lead to missed opportunities, hindering sustainable income and potentially resulting in business failure. Inability to adapt to disruptive industries necessitates organization-wide risk management, including thorough risk analysis and response strategies to mitigate risks to an acceptable level.
- 4.6 Environmental Risk arises from the release of pollutants during the production process, impacting the environment. Therefore, effective management is imperative to prevent the Company's production activities from generating dust, chemical residues, excessive energy and water consumption, garbage, waste, and other pollutants that adversely affect the local environment. Furthermore, climate change impacts may necessitate adjustments in product design, raw material procurement, and may lead to increased expenses due to industrial sector taxes, particularly for businesses emitting carbon dioxide. Consequently, the Company has implemented a policy to substitute waste fuel for coal in the cement production process and has intensified efforts towards producing Green Products and hydraulic cement to mitigate carbon dioxide emissions and address environmental concerns.
- 4.7 Social Risk encompasses various factors related to human resource management, safety, occupational health, and the working environment, including human rights violations. Accordingly, the Company has implemented a policy aimed at enhancing the knowledge and skills of its employees, ensuring appropriate remuneration, respecting human rights concerning benefits and equality, and supporting employees in creating new innovations to align with consumer behavior, which is the organization's goal. The Company also provides industry-standard safety operating manuals. Furthermore, the establishment of a complaint channel and a welfare committee further supports the Company's commitment to safeguarding the safety and occupational health of its employees.
- 4.8 Governance Risk pertains to the image, reputation, and survival of an organization, such as the organization's failure to disclose significant information, issues related to stakeholders, or deficiencies in internal governance measures. To address these concerns, the Company has established the Corporate Governance Committee, Audit Committee, Risk Management Committee, Internal Audit Department, Legal Department, Compliance Department, and various relevant departments to collaborate in upholding the highest standards of corporate governance.

The Company has managed ESG Risk, comprising Environmental Risk, Social Risk, and Governance Risk, as mentioned above, aligning with the mission and defining the organization's strategy. Risk and sustainability issues were analyzed to incorporate risk management at various levels, aiming to build confidence among key stakeholders.

The Company fosters a culture of risk management across the organization, instituting it as a policy set forth by the management team. Furthermore, the Company has arranged a training course named 'Risk Management' to equip personnel at all levels – directors, senior executives, and employees – with comprehensive knowledge and understanding of risk management principles.

The Risk Management Committee has diligently fulfilled its responsibilities by independently overseeing risk management within the TPI Polene Group with caution and complete competence. This ensures effective risk management, thereby facilitating the achievement of the organization's objectives and goals, and maximizing benefits for TPI Polene, its shareholders, and all stakeholders fairly and sustainably over the long term.



(Mr. Prachai Leophairatana)


Chairman of the Risk Management Committee

Report of the Sustainable Development Committee

In 2023, the Sustainable Development Committee held a single meeting with 100% attendance from its members and prioritized the promotion of sustainable development at all levels. The committee considered sustainable development goals and implementation plans for the year 2023, monitoring progress and driving concrete operations and tangible results, including elevating sustainable development to the forefront of the industry. This can be summarized as follows:

1. Encourage the preparation of sustainability reports, review key sustainability issues (materiality), and improve sustainability development plans and indicators to align with the situation and stakeholders' expectations.

In 2023, the Company identified topics which are the materiality of the business in accordance with the Global Reporting Initiative standards in all three areas (ESG), as follows:

ESG	22 Highly Important Topics
Environment (6 Topics)  ENVIRONMENT	1. Climate management 2. Material use 3. Energy 4. Used water and wastewater 5. Waste management 6. Transportation
Social (9 Topics)  SOCIAL	1. Employment 2. Labor management and labor relations 3. Training and education 4. Occupational health and safety 5. Customer health and safety 6. Customer satisfaction 7. Products and services 8. Data security and customer privacy 9. Local community
Governance (7 Topics)  GOVERNANCE	1. Economic performance 2. Risk and crisis management 3. Indirect economic impacts 4. Technology, innovation and services 5. Anti-corruption 6. Research and development 7. Guidelines for procurement

2. Approve the determination of climate change strategies, goals, and management plan

The Company has increased production efficiency by applying the Total Productive Maintenance system to the production process. This initiative aims to achieve multiple goals, including reducing breakdowns, increasing the use of electricity produced from clean energy sources, and decreasing reliance on electricity generated from fossil fuels. Additionally, efforts have been made to increase the proportion of hydraulic cement in place of Portland cement and to incorporate alternative materials to complement the use of clinker. Furthermore, initiatives such as expanding forest planting areas to enhance carbon absorption and implementing CCUS (Carbon Capture, Utilization, and Storage) technology have been pursued.

3. Oversee sustainability development in alignment with strategies consistent with the international Sustainable Development Goals (SDGs)

The Company recognizes the significance of stakeholder involvement and conducts an analysis encompassing both internal and external stakeholders across the entire business value chain, including employees, suppliers, customers, and social communities. The Company holds the belief that strong relationships are rooted in trust. Alongside the valuable opinions and suggestions from stakeholders directed towards the organization crucial elements in striving towards the goal of fostering sustainable development and growth effective stakeholder management will enable the organization to adeptly mitigate risks that might tarnish its reputation and hinder business prospects. The Company's sustainability operations are outlined as follows :

3.1 Environmental Dimension can be summarized as follows:

- 3.1.1 Aiming for a low-carbon society, in 2023, the cement factory could utilize replacing coal fuel for approximately 14% of the total amount of heat required. Throughout 2023, the cement factory gradually installed machinery to enable the use of waste fuel instead of coal in four cement production lines. The final production line completed the installation of machinery in December 2023. Consequently, the average rate of using waste fuel instead of coal in 2023 did not reach the target set at 25%.
- 3.1.2 In 2023, the Company invested in acquiring 41 sixty-ton EV Mining Trucks and 4 EV Wheel Loaders to replace vehicles with tires powered by combustion engines. Furthermore, an additional 14 vehicles underwent conversion from combustion engines to electric power. This investment aims to reduce transportation costs, greenhouse gas emissions, and PM 2.5 dust.
- 3.1.3 The Company has a policy to produce products that reduce greenhouse gas emissions by developing hydraulic cement production. This helps reduce heat buildup and carbon dioxide emissions in the production process compared to the production of other types of cement. Additionally, starting from June 1, 2023, the Company has designed and manufactured Green Products consisting of Green Clinker, Green Cement, Green Fiber Cement, and Green Concrete Roof Tile (Green CRT). These products will focus on using renewable raw materials such as crushed stone and recycled materials, alternative fuels such as garbage, and electricity from renewable energy sources. Green Products also include plastic pellets used as a component in the production of solar panels, which are becoming popular in both domestic and international markets, and the use of ethylene released from the EVA production process to produce water-based glue.
- 3.1.4 TPI Polene Group implements a waste management policy aligned with the principles of the 3 Rs, embracing the concept of Zero Waste by refraining from releasing waste, wastewater, used oil, chemicals, and other materials into the ground. Instead, waste is disposed of in a cement kiln operating at temperatures exceeding 1,800 degrees Celsius within a closed system, leveraging modern technology and promoting environmental friendliness. Furthermore, the Company conducts its operations in line with the guidelines of the Bio-Circular-Green Economy (BCG) for Sustainability, with a focus on efficiently utilizing raw material resources. This includes utilizing 100% of leftover crushed stone from the construction stone production process and repurposing excess raw materials from one factory to serve as inputs for another factory.

The Company aims to utilize at least 95% of the total industrial waste generated. In 2023, it achieved this goal by repurposing industrial waste from the production process as alternative fuels, materials, and for recycling.

- 3.1.5 TPI Polene Group has implemented a water management policy aimed at maximizing efficiency. Wastewater generated during the production process is channeled into the wastewater treatment system, where comprehensive water quality analysis is carried out to ensure adherence to the standard criteria established by the Department of Industrial Works prior to discharge into the factory's drainage chute. Continuous monitoring of wastewater quality is undertaken across all operational areas.

- 3.1.6 TPI Polene Group has implemented a policy aimed at minimizing the environmental impact of its operations across the entire value chain. This involves adopting eco-friendly transportation methods for conveying construction stone raw materials to the Company's factories, thus avoiding pollution. Specifically, the Company utilizes electric vehicles and a belt system instead of gasoline-powered vehicles to transport stones from the quarry to the factory. Furthermore, TPI Polene Group has introduced a policy shift from conventional combustion engine vehicles to electric ones for transporting its products. This strategic initiative is anticipated to decrease both transportation expenses and pollution emissions.
- 3.1.7 In 2023, the Company disposed of approximately 39,132.25 tons of hazardous industrial waste and approximately 17,542.49 tons of non-hazardous industrial waste, using it as fuel in the production process.

3.2 Social Dimension can be summarized as follows:

- 3.2.1 Focus on generating favorable returns for shareholders through consistent dividend payments while maintaining strong and consistent operating results.
- 3.2.2 Consider principles of human rights, respect personal data, protect labor rights, and promote youth education by ensuring the respect and protection of the basic rights and human dignity of everyone involved in the operations of the TPI Polene Group. In 2023, there were no incidents of human rights violations.
- 3.2.3 Ensure occupational health and safety in a conducive working environment.
- 3.2.4 Continuously manage and develop the potential and skills of personnel, in 2023, the target for training is at least 20 hours per person per year, which the Company can pursue according to its goals.
- 3.2.5 The Company assessed job satisfaction and employee engagement levels for the year 2023, discovering an average total score of 84.17%, exceeding the Company's target of 75%. Using these findings, the Company surveyed employee opinions and is now initiating activities to consistently nurture positive employee relationships, aiming to elevate employee satisfaction to its peak level.
- 3.2.6 The Company ensures equal employment opportunities without discrimination, encompassing both disabled individuals and other disadvantaged groups. In 2023, a total of 562 new employees were hired, including 516 general employees, 1 disabled employees, and 45 elderly employees.
- 3.2.7 Prioritize customer satisfaction in the products and services of TPI Polene Group.
- 3.2.8 Prioritize the Company's IT Security.
- 3.2.9 Promote green procurement to mitigate risks in conducting business with suppliers.
- 3.2.10 The Company has generated value and enhanced the quality of life in communities where TPI Polene Group's business operations are situated through various initiatives. These include organizing dialogue projects with communities and developing communities, implementing chemical-free agriculture projects for local schools such as Ban Sub Bon School in Saraburi Province, and providing scholarships to outstanding students, etc.
- 3.2.11 In 2023, the Company supported various public benefit projects and activities, contributing a total of approximately Baht 27.92 million to communities, educational institutions, temples, hospitals, and various government agencies. These contributions encompassed donations of health products and items from TPI Polene Group, including cement and other construction materials, organic bio-fertilizers, drinking water, and health products targeting pathogen prevention.

3.3 Corporate Governance Dimension can be summarized as follows:

- 3.3.1 Promote the performance of the Board of Directors, executives, and employees in compliance with good corporate governance and Code of Conduct in every operational area.
- 3.3.2 Set guidelines for operating social enterprises, focusing on meeting the needs and enhancing the quality of life for communities in every area where the Company's business operations are located, including community areas for social networks throughout the country.

3.3.3 Respond to the needs of all stakeholders in a balanced way for sustainable growth.

Due to the Company's successful efforts in consistently integrating sustainability values into its business operations, it received awards and certifications from recognized organizations in 2023. Regarding its contributions to sustainable development, these achievements can be summarized as follows :

International Awards

1. The Company received the 3G Excellence Award in CSR Activities 2023 from the Global Good Governance Awards (3G Awards) 2023 Event, organized by the financial consulting company 'Cambridge IFA International Financial Advisory, United Kingdom'. This award honors organizations that have been successful in leading initiatives related to social responsibility.

2. The Company received the 2023 Most Sustainable Conglomerate Group in Thailand Award from World Business Outlook, a printed and online magazine that provides comprehensive analysis of the financial industry, international business, and the global economy.

National Awards

1. On June 23, 2023, the Thaipat Institute announced that the Company was ranked among the ESG100 securities companies for the year 2023, marking the second consecutive year (2022-2023) of its exceptional performance in environmental, social, and governance (ESG) criteria. This solidified its position as a company with promising investment opportunities within the real estate and construction sector.

2. On July 14, 2023, the Company received two honorary awards from the "One Million Good Deeds with Brave in Repayment to the Land" ("Neung Lan Kla Kwam Dee Torb Than Pan Din"),

3. The Company has been certified as a Green Industry Level 4 (Green Culture), signifying that everyone in the organization cooperates and works in an environmentally friendly manner in every aspect of business operations, making it an integral part of the organization's culture. This certification is issued by the Ministry of Industry to the Company's Cement Factories 1, 2, and 3, effective from August 26, 2021, to August 25, 2024.

The Company's Cement Factory 4 has been certified as a Green Industry Level 3 (Green System), indicating systematic environmental management practices. This includes monitoring, evaluation, and review for continuous improvement. This certification was issued by the Ministry of Industry, effective from March 1, 2021, to February 29, 2024.

4. On September 13, 2023, the Company received the honorary award, CSR-DIW CONTINUOUS AWARD 2023, which recognizes standards for social responsibility among entrepreneurs, from the Department of Industrial Works, Ministry of Industry. This marks the 9th consecutive year, starting from 2015.

5. On September 29, 2023, the Department of Primary Industries and Mines, Ministry of Industry, awarded the Company the CIRCULAR ECONOMY Certificate for Cement Factories 1, 2, 3, and 4, recognizing their evaluation of the efficiency of applying circular economy principles within organizations as part of the project aimed at developing and upgrading industrial establishments to adhere to circular economy principles.

6. On October 31, 2023, the Company has been rated as "Excellent CG Scoring" (5-star) in Corporate Governance from the Corporate Governance Report of Thai Listed Companies (CGR) for the year 2023 organized by the Thai Institute of Directors Association (IOD) with the support of the Stock Exchange of Thailand and the SEC Office.

7. On November 6, 2023, the Company was awarded a "SET ESG Rating: AA" for 2023 by the Stock Exchange of Thailand, signifying its commitment to sustainable business practices and responsibility to stakeholders by consistently integrating Environmental, Social, and Governance (ESG) considerations into its operations.

8. On November 21, 2023, the Company received an award in the Business Excellence category from the SET Awards 2023 for its innovative work. The award, titled 'Outstanding Innovative Company Awards 2023,' honored the Company's innovation in developing "Diffuser-Profile Vortex Generator." Organized by the Stock Exchange of Thailand in collaboration with the Money & Banking Magazine, this award aimed to recognize outstanding businesses in organizational development

according to sustainability guidelines. These guidelines emphasize considering social and environmental issues in the operational process, alongside achieving positive operating results.

9. On November 22, 2023, the Department of Social Development and Welfare, Ministry of Social Development and Human Security, awarded a certificate of honor to the Company for its excellence in supporting social development in the year 2023.

10. On December 21, 2023, the Company was honored with the Sustainability Disclosure Award for the 2nd consecutive year, recognizing its disclosure of sustainability information for the year 2023. This award was granted by Thaipat Institute.

The Sustainable Development Committee has consistently intended to elevate the Company to be the Sustainable Organization that will benefit all economy, society, and environment, continuously further to the future.

A handwritten signature in black ink, consisting of stylized, overlapping loops and a long horizontal stroke extending to the right.

(Mr. Prachai Leophairatana)

Chairman of the Sustainable Development Committee

9. Internal Controls and Inter-Company Transactions

9.1 Internal Controls

At the Board of Directors' meeting no. 1/2567, held on 25 January 2024, attended by the four Audit Committee members, the Board considered and evaluated the sufficiency of the 5-component internal control system in accordance with the guidelines announced by the Securities and Exchange Commission No. SEC (W) 8/2009 dated March 3, 2009 on the number of independent directors and the importance of the internal control system.

1. CONTROL ENVIRONMENT

The Company has provided a good internal control environment in terms of organizational structure, policies, guidelines for operating practices that realize adequate internal control systems and personnel management methods, as well as setting strategies and business goals that are appropriate, clear, reasonable, and measurable. The Company requires various departments to prepare annual goals or plans based on the principle of consideration to adhere to the benefits and fairness to all relevant stakeholders in the manner of sustainable business operations on the basis of fairness, honesty, ethics, ethics, responsibility for the environment, society, and good governance by setting up TPIPL Code of Conduct (Code of Conduct) and an employee handbook that brings the principles of influence 4 ways to success and the determination to create a balanced happiness with a sustainable better quality of life according to the Four Brahma Vihara principles, including the Four Noble Truths, which are the noble truths leading to the release of suffering according to the Lord Buddha's teachings, are used as guidelines in the performance of executives and employees as follows:

1. The Principles of Iddhibat, 4 Virtues of Success that are used in work, consisting of

- | | | |
|-----|---------|---|
| 1.1 | Chana | means love of work, being satisfied with the work that is being done. |
| 1.2 | Viriya | means being diligent in the work you have. |
| 1.3 | Chitta | means being attentive and responsible for the work done. |
| 1.4 | Wimansa | means scrutinizing and using intelligence to examine the work. |

2. Principle of Brahma Vihara 4, which means the Dharma of Brahma or of the Grand Master.

Brahma Viharn is principles for all It is a principle that will help us live a noble and pure life. This principle includes

- 2.1 Mercy, the desire for others to be happy
- 2.2 Kindness, the desire for others to be free from suffering
- 2.3 Mudita, the joy when others do well
- 2.4 Upekkha: Knowing to be indifferent and neutral.

3. The Four Noble Truths for this work consist of

- 3.1 Suffering means the problem itself.
- 3.2 Samudaya means the cause of the problem.
- 3.3 Nirodha means the end of the problem.
- 3.4 The Eightfold Path means a practical way to eliminate problems.

2. RISK MANAGEMENT

The Company has implemented a risk management policy, ensuring its communication to executives and employees across all levels and departments to secure acknowledgment and compliance. The primary objective is to mitigate both business and operational risks, including those susceptible to fraudulent activities, to levels deemed acceptable by the organization, achieved through consistent and suitable financial risk management practices. The Company has established the Risk Management Committee responsible for considering the policy structure, risk management framework, and risk management plan. The committee also reviews risks and follows up on risk management activities with support from the Risk Management Department, ensuring risk management throughout the organization. Internal and external risk factors are carefully evaluated, leading to the establishment of diverse risk mitigation measures. These measures are designed with consideration of the cost of risk management compared to the potential benefits for the Company. In the preceding year, the Company placed emphasis on environmental risks linked to greenhouse gas emissions, which contribute to climate change, as well as risks associated with the swiftly evolving consumer behavior driven by communication technology. Additionally, attention was given to risks stemming from economic crime and modern technology (CYBER CRIME).

3. CONTROL ACTIVITIES

The Company has established operating procedures and controls across all levels of departments within the organization, including management, to effectively achieve the organization's objectives. This involves specifying written authorization and levels of approval for transactions. Additionally, there is a clear separation of work duties to prevent potential corruption, ensuring that the authority for approving and recording accounting transactions and information is distinct from the responsibility for safeguarding and managing assets.

Additionally, the Company has established a policy on Transaction Procedures for connected transactions or those that may involve conflicts of interest with major shareholders, directors, executives, or individuals associated with them, in compliance with relevant regulations. These transactions are overseen by individuals without vested interests, primarily considering the best interests of the Company and all relevant stakeholders.

4. INFORMATION AND COMMUNICATION

The Company has established an important information system with accuracy, reliability, and updates to enhance employee work performance and streamline management administration through an efficient communication system within the organization.

In arranging appointments for the Board of Directors' meetings, the Company has provided an adequate information system and sent invitations to the Board of Directors at least 7 days in advance, including a report of the meeting results with sufficient details for shareholders or related persons to verify. Detailed accounting information has been arranged to be stored in complete categorization for at least 5 years in accordance with accounting laws, and the Company has never been informed by the auditor of any deficiencies in this matter.

5. MONITORING ACTIVITIES

The Company has a system for monitoring and evaluating internal control continuously. by personnel with sufficient knowledge and competence, as well as comparing the performance of the management with the set business goals on a monthly basis There is a meeting every week at the Company's management meeting. To take corrective

action if the performance is different from the business goals set. The results of the quarterly operations are reported at the Board of Directors' meeting.

Audit office

The Company has an internal audit department so that internal work processes can manage risks have internal control and compliance to achieve the operational objectives of the organization The internal audit department has an annual internal audit plan. by preparing an audit plan in accordance with the business strategic direction and significant risks that affect operations Audit results are reported to the management and the audit committee for consideration. The results of the implementation of the suggestions found from the audit are regularly followed up. However, in the operation of the Internal Audit Department, there is no limitation in expressing opinions.

The person holding the position of head of internal audit of the Company

The Company has assigned Mr. Somchai Kitpipit, the position of Assistant Vice President. internal audit department Served as the head of the Company's internal audit department. Because he is a person who has knowledge and understanding of the business of the Company. together with knowledge, skills and experience in internal auditing for working in the Company as well The details about the head of the internal audit of the Company.

9.2 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 2023, the Company and its subsidiaries 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 4 of the consolidated financial statements as at December 31, 2023, which can be summarized as follows:

Company	Description of transaction	million Baht	Necessity and reasonableness
1. United Grain Industry Co., Ltd. ("UGI") There are 5 common Directors. Mr. Prachai Leophairatana Dr. Pramuan Leophairatana Mr. Prayad Liewphairatana Mrs. Orapin Leophairatana Miss Malinee Leophairatana	<ul style="list-style-type: none"> The Company and its subsidiaries paid UGI for cement bags. Accounts Payable 	3.299 2.871	Transactions are always undertaken at market rates to support normal business operations of the Company.
2. Thai Plastic Film Co., Ltd. There are 6 common Directors. Mr. Prachai Leophairatana Mr. Prateep Leopairut Dr. Pramuan Leophairatana Mr. Prayad Liewphairatana Mrs. Orapin Leophairatana Miss Malinee Leophairatana	<ul style="list-style-type: none"> The Company sells plastic resin to Thai Plastic Film Co., Ltd. The Company hires Thai Plastic Film Co., Ltd. to produce cement bags at the rate of Baht 2.00 to 2.60 per bag. (This rate includes labor cost, rental charges, electricity and other related expenses) The Company and its subsidiaries paid Thai Plastic Film Co., Ltd. for cement bags. Accounts Payable 	0 94.108 78.155 129.282	Transactions are always undertaken at market rates to support normal business operations of the Company.
3. Thai Plastic Product Co., Ltd. There are 6 common Directors. Mr. Prachai Leophairatana Mr. Prateep Leopairut Dr. Pramuan Leophairatana Mr. Prayad Liewphairatana Mrs. Orapin Leophairatana Miss Malinee Leophairatana	<ul style="list-style-type: none"> The Company and its subsidiaries purchased cement bags for export from Thai Plastic Product. Accounts Payable The Company sells plastic resin to Thai Plastic Product Co., Ltd. 	351.322 225.583 0	Transactions are always undertaken at market rates to support normal business operations of the Company.
4. Bangkok Union Insurance Plc. (BUI) There are 4 common Directors. Mr. Prachai Leophairatana Miss Malinee Leophairatana Mr. Thavich Taychanavakul Miss Tanyaratt Iamsopana	<ul style="list-style-type: none"> The Company and its subsidiaries pay insurance premium to BUI. 	304.150	Transactions are always undertaken at market rates to support normal business operations of the Company.
5. Bangkok Union Life Insurance Plc. There are 4 common Directors. Dr. Pramuan Leophairatana Mr. Prayad Liewphairatana Miss Malinee Leophairatana Miss Tanyaratt Iamsopana	<ul style="list-style-type: none"> The Company and its subsidiaries paid life insurance premium to Bangkok Union Life Insurance Plc. 	23.210	Transactions are always undertaken at market rates to support normal business operations of the Company.

The details of the connected transactions for the year 2022 (the previous year) are disclosed in the annual report of the Company through the Company's website (www.tpiolene.co.th)

Procedures to approve Related Transactions

Since the Company is a listed company, its practices regarding related transactions are conducted according to the rules and regulations of the SET and the SEC. The Company is highly aware of the sensitivity of this issue and closely monitors any situation in which a potential related transaction could occur. The above inter-company transactions were subject to the normal terms and conditions of business to reflect applicable market prices. Directors of the Company who are not deemed to be connected parties to such transactions are responsible for making decisions in regard to the said connected transactions.

The process for approval of connected transactions will be carried out under the standards of integrity and be reviewed by the Audit Committee to be in the best interests of the Company and its shareholders. This complies with SEC and SET regulations. The Company will disclose types and values of transactions that might present conflicts of interest accurately and completely. For any transactions that are considered to have potential conflicts of interest, market prices will be used as criteria to consider those transactions.

Potential Future Related Transactions

The Company expects to continue its business transactions with subsidiaries, the Joint Venture Company, affiliated companies, and related companies in the normal course of its business. Inter-company transactions are subject to normal terms and there is no conflict of interest. The Company adheres to practices for the above transactions that comply with the SET regulations, and regulations of other relevant governmental authorities, with regard to the reasonableness of the conditions and fair prices.





Part 3

Financial Statements

Independent Auditor's Report

To the Shareholders of TPI Polene Public Company Limited

Opinion

I have audited the consolidated and separate financial statements of TPI Polene Public Company Limited and its subsidiaries (the “Group”) and of TPI Polene Public Company Limited (the “Company”), respectively, which comprise the consolidated and separate statements of financial position as at 31 December 2023, and 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 2023 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 including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that is relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current 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.

<i>Valuation of inventory</i>	
Refer to Note 3 and 7 to the financial statements.	
The key audit matter	How the matter was addressed in the audit
Inventory is a significant balance. There is slow moving in some type of inventory. There is a risk arising from the degree of judgment involved in assessing the net realisable value which is based on assumptions concerning future events and activities.	<p>My audit procedures in this area included, among others:</p> <ul style="list-style-type: none"> • understanding the Group's business plan and process on estimate the net realisable value. • considering the management's significant assumptions used in their assessment of the net realisable value of inventory, which included comparing them to internally and externally derived data; • assessing the appropriateness of the methodology used to calculate the net realisable value at year end, considering the reasonableness of selling price used by comparing to the selling price during subsequent sales and assessing the accuracy of the calculation; and • evaluating the adequacy of disclosure in accordance with the related Thai Financial Reporting Standards.

<i>Recognition of deferred tax assets</i>	
Refer to Note 3 and 25 to the financial statements.	
The key audit matter	How the matter was addressed in the audit
<p>The Group has recognised deferred tax assets for unused tax losses that it believes are recoverable.</p> <p>The recoverability of recognised deferred tax assets is in part dependent on the Group's ability to generate future taxable profits sufficient to utilise tax losses (before the latter expire).</p> <p>Due to the inherent uncertainty in forecasting the amount and timing of future taxable profits, this is one of the key judgmental areas that my audit is concentrated on.</p>	<p>My audit procedures in this area included, among others:</p> <ul style="list-style-type: none"> • understanding the method of the management's recognition of deferred tax assets and the assessment of assumptions used in projecting the Group's future taxable profits; • considering the reasonableness of the forecast of future taxable profits by comparing the past forecast to the actual operating results and the operation plans and evaluating assumption used by management by comparing to operation plan and external information; • assessing the accuracy of the calculation; and • evaluating the adequacy of disclosure in accordance with the related Thai Financial Reporting Standards.

Without modifying my opinion.

I draw attention to notes 31(2) and 31(4) to 31(7) to the financial statements, which described the uncertainty related to the outcome of lawsuits filed against the Company in relation to its operation of mining. The Civil Court issued a judgement as follows:

- 1) On 2 August 2019, the Civil Court had an order on the Black Case No. SorWor.5/2559, engaging the mining activity unlawfully (engaging in the mining restricted area), that the Company has to return the limestone for cement industry back to the area where the mining activity was done and restore the area into its previous condition or pay the compensation of Baht 1,603 million with interest at 7.5 percent per annum from the date of being notified of the land survey result until the date that payment is made in full. The Company filed the appeal. The Court of Appeal's judgement, announced a revision of the calculation of interest. The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court. On 14 September 2023, the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.
- 2) On 13 December 2019, the Civil Court had an order on the Black Case No. SorWor.4/2559, the Black Case No. SorWor.6/2559 and the Black Case No. SorWor.1/2560, engaging the limestone and shale mining activity in the area outside its concession area and engaging the mining activity unlawfully, that the Company has to return the limestone and shale for cement industry back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation of Baht 4,688 million with interest at 7.5 percent per annum from the discovery date of the unlawful of mining activity or the date of violation of mining until the date that payment is made in full. The Company filed the appeal. The Court of Appeal's judgement, announced a revision of the calculation of interest. The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court. On 15 and 22 November 2022, the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.
- 3) On 24 March 2020, the Civil Court issued a judgment on the Black Case No. SorWor.2/2561, the violation in relation to Company's operation of mining outside its concession area that the Company has to either make a restitution of shale and a specific performance of soil rehabilitation or pay damages totaling Baht 67 million with interest at 7.5 percent per annum from the date of violation of mining to the date that payment is made in full. The Company filed the appeal. The Court of Appeal's judgement, announced a revision of the calculation of interest. The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court. On 23 January 2023, the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The Company has an opinion that the outcome of lawsuit is not yet final and uncertain, the Company has not recorded the provision for liability of lawsuit. My conclusion is not modified in respect of these matters.

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

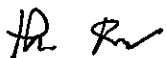
fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- 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, actions taken to eliminate threats or safeguards applied.

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.




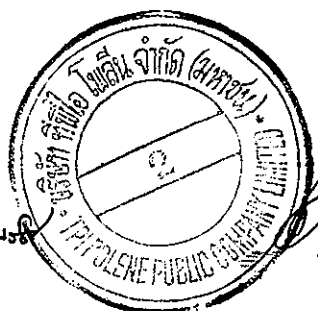

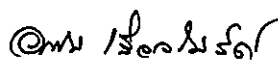
(Thanyalux Keadkeaw)
Certified Public Accountant
Registration No. 8179

KPMG Phoomchai Audit Ltd.
Bangkok
26 February 2024

Statement of financial position

TPI Polene Public Company Limited and its Subsidiaries

Assets	Note	Consolidated		Separate	
		financial statements		financial statements	
		31 December		31 December	
		2023	2022	2023	2022
		(in thousand Baht)			
<i>Current assets</i>					
Cash and cash equivalents	5	18,313,253	10,671,192	14,813,182	8,043,775
Other current financial assets	28	2,385,492	953,799	-	-
Trade accounts receivable	4, 6	5,444,628	5,559,513	3,075,528	3,900,175
Other receivables		892,383	893,332	543,875	574,258
Short-term loans to related parties	4	-	-	109	366,269
Receivables and advances to related parties	4	116,732	129,950	223,102	468,108
Inventories	7	17,864,171	19,355,015	14,606,837	15,757,810
Other current assets		652,097	1,102,979	366,930	726,285
Non-current assets classified as held for sale		181,529	465,338	-	260,244
Total current assets		45,850,285	39,131,118	33,629,563	30,096,924
<i>Non-current assets</i>					
Other non-current financial assets	28	513,762	513,274	14,290	14,309
Investments in associates	8	880,307	856,337	880,307	856,337
Investments in joint venture	8	253,158	249,894	-	-
Investments in subsidiaries	9	-	-	31,260,826	28,736,575
Long-term investments in related party	4, 11	45,653	45,653	45,653	45,653
Receivables and advances to related parties	4	-	-	421,195	421,075
Investment properties	12	531,181	532,187	74,044	74,044
Property, plant and equipment	13	109,156,852	100,473,740	57,841,032	55,448,812
Right-of-use assets	14	488,100	567,889	293,309	347,422
Intangible assets	15	4,278,989	713,564	4,271,655	710,635
Advances payment for plant, machinery and equipment		784,722	656,659	100,811	126,237
Deferred tax assets	25	407,543	521,401	214,511	285,077
Other non-current assets		224,126	237,712	145,469	173,181
Total non-current assets		117,564,393	105,368,310	95,563,102	87,239,357
Total assets		163,414,678	144,499,428	129,192,665	117,336,281

The accompanying notes form an integral part of the financial statements.

Statement of financial position

TPI Polene Public Company Limited and its Subsidiaries

Liabilities and equity	Note	Consolidated		Separate	
		financial statements		financial statements	
		31 December		31 December	
		2023	2022	2023	2022
(in thousand Baht)					
Current liabilities					
Short-term loans from financial institutions	16, 28	9,407,680	4,355,338	9,407,680	4,355,338
Trade accounts payable	4, 28	2,873,940	3,791,529	2,370,681	3,129,922
Other payables		4,802,401	3,582,420	2,388,566	2,266,396
Payables and advances from related parties	4	5,944	12,549	505,175	272,268
Current portion of lease liabilities	14, 16, 28	134,989	151,050	89,723	102,038
Current portion of debentures	16, 28	15,431,900	12,843,200	11,642,300	10,023,200
Interest payable		373,595	375,212	243,723	309,896
Current income tax payable		88,262	119,352	-	-
Other current liabilities		171,720	227,203	60,645	118,400
Total current liabilities		33,290,431	25,457,853	26,708,493	20,577,458
Non-current liabilities					
Lease liabilities	14, 16, 28	204,015	280,479	101,084	144,490
Debentures	16, 28	59,965,700	53,742,400	42,547,900	41,255,000
Deferred tax liabilities	25	29,009	37,370	-	-
Non-current provisions for employee benefits	17	1,925,018	2,041,884	1,609,963	1,709,848
Other non-current liabilities		3,374,100	125,205	3,489,520	238,344
Total non-current liabilities		65,497,842	56,227,338	47,748,467	43,347,682
Total liabilities		98,788,273	81,685,191	74,456,960	63,925,140

The accompanying notes form an integral part of the financial statements.

Statement of financial position

TPI Polene Public Company Limited and its Subsidiaries

Liabilities and equity	Note	Consolidated		Separate	
		financial statements		financial statements	
		31 December		31 December	
		2023	2022	2023	2022
(in thousand Baht)					
Equity					
Share capital:	18				
Authorised share capital		23,560,235	23,560,235	23,560,235	23,560,235
Issued and paid-up share capital		18,935,235	18,935,235	18,935,235	18,935,235
Share premium:					
Share premium on ordinary shares		60,600	60,600	60,600	60,600
Other surpluses		9,840,436	9,840,436	9,840,436	9,840,436
Share premium on treasury shares	19	220,536	220,536	220,536	220,536
Retained earnings					
Appropriated					
Legal reserve	20	1,720,566	1,559,673	1,720,566	1,559,673
Unappropriated		23,848,439	22,684,993	23,844,610	22,681,164
Other components of equity		109,893	109,668	113,722	113,497
Equity attributable to owners of the parent		54,735,705	53,411,141	54,735,705	53,411,141
Non-controlling interests	10	9,890,700	9,403,096	-	-
Total equity		64,626,405	62,814,237	54,735,705	53,411,141
Total liabilities and equity		163,414,678	144,499,428	129,192,665	117,336,281

The accompanying notes form an integral part of the financial statements.

Statement of comprehensive income

TPI Polene Public Company Limited and its Subsidiaries

	Note	Consolidated		Separate	
		financial statements		financial statements	
		Year ended 31 December		Year ended 31 December	
		2023	2022	2023	2022
(in thousand Baht)					
Income					
Revenue from sale of goods	21	42,807,456	48,132,999	32,100,772	37,719,377
Cost of sales of goods	7,23	(32,899,895)	(35,326,332)	(27,700,554)	(29,073,010)
Gross profit		9,907,561	12,806,667	4,400,218	8,646,367
Transportation income		1,186,595	1,453,474	1,383,138	1,423,617
Net foreign exchange gain		88,281	437,171	35,992	204,785
Investment income		374,380	70,890	293,446	69,553
Other income		506,081	868,466	326,362	689,294
Profit before expenses		12,062,898	15,636,668	6,439,156	11,033,616
Cost of distributions and transportations	23	(3,399,628)	(3,749,878)	(3,173,118)	(3,414,732)
Administrative expenses	23	(2,016,735)	(1,962,876)	(1,301,646)	(1,233,758)
Total expenses		(5,416,363)	(5,712,754)	(4,474,764)	(4,648,490)
Profit from operating activities		6,646,535	9,923,914	1,964,392	6,385,126
Finance costs	24	(2,075,958)	(1,934,590)	(1,980,667)	(1,890,541)
Share of profit of subsidiaries, joint venture and associates accounted for using equity method	8,9	26,975	21,280	3,304,716	2,492,661
Profit before income tax expense		4,597,552	8,010,604	3,288,441	6,987,246
Tax income (expense)	25	(292,414)	(165,828)	(70,578)	20,361
Profit for the year		4,305,138	7,844,776	3,217,863	7,007,607

The accompanying notes form an integral part of the financial statements.

Statement of comprehensive income

TPI Polene Public Company Limited and its Subsidiaries

	Note	Consolidated		Separate	
		financial statements		financial statements	
		Year ended 31 December		Year ended 31 December	
		2023	2022	2023	2022
(in thousand Baht)					
Other comprehensive income (expense)					
<i>Items that will be reclassified subsequently to profit or loss</i>					
Exchange differences on translating financial statements		-	(177)	-	-
Gain on measurement of financial assets	28	15	3	-	-
Share of other comprehensive income (expense) of subsidiaries accounted for using equity method	9	-	-	15	(174)
Share of other comprehensive income (expense) of associates accounted for using equity method	8	259	(7,588)	259	(7,588)
Income tax relating to items that will be reclassified subsequently to profit or loss	25	-	-	-	-
Total items that will be reclassified subsequently to profit or loss		274	(7,762)	274	(7,762)
<i>Items that will not be reclassified subsequently to profit or loss</i>					
Gain (loss) on investments in equity instruments designated at fair value through other comprehensive income	28	(61)	(50)	(61)	(50)
Gain on remeasurements of defined benefit plans	17	-	136,275	-	132,446
Share of other comprehensive income of subsidiaries accounted for using equity method	9	-	-	-	3,829
Income tax relating to items that will not be reclassified subsequently to profit or loss	25	12	(26,479)	12	(26,479)
Total items that will not be reclassified subsequently to profit or loss		(49)	109,746	(49)	109,746
Other comprehensive income (expense) for the year, net of tax		225	101,984	225	101,984
Total comprehensive income for the year		4,305,363	7,946,760	3,218,088	7,109,591
Profit (loss) attributable to:					
Owners of the parent		3,217,863	7,007,607	3,217,863	7,007,607
Non-controlling interests		1,087,275	837,169	-	-
Profit for the year		4,305,138	7,844,776	3,217,863	7,007,607
Total comprehensive income (expense) attributable to:					
Owners of the parent		3,218,088	7,109,591	3,218,088	7,109,591
Non-controlling interests		1,087,275	837,169	-	-
Total comprehensive income for the year		4,305,363	7,946,760	3,218,088	7,109,591
Basic earnings per share (in Baht)	26	0.170	0.370	0.170	0.370

The accompanying notes form an integral part of the financial statements.

Statement of changes in equity

TPI Polene Public Company Limited and its Subsidiaries

Consolidated financial statements															
Note	Other surpluses			Retained earnings			Other components of equity								
	Issued and paid-up share capital	Share premium on ordinary share	Shareholding changes in Group	Share premium on treasury share	Legal reserve	Treasury shares reserve	Unappropriated	Treasury shares	Translation reserve	Fair value reserve	Share of other comprehensive income of associates accounted for using equity method	Total other components of equity	Equity attributable to owners of the parent	Non-controlling interests	Total equity
(in thousand Baht)															
Year ended 31 December 2022															
Balance at 1 January 2022															
	19,126,500	60,600	9,840,436	220,536	1,209,292	-	17,796,425	-	177	(81)	117,374	117,470	48,371,259	9,190,584	57,561,843
Transactions with owners, recorded directly in equity															
Contributions by and distributions to owners															
19	(191,265)	-	-	-	-	(365,554)	191,265	365,554	-	-	-	-	-	-	-
19	-	-	-	-	-	365,554	(365,554)	(365,554)	-	-	-	-	(365,554)	-	(365,554)
10, 27	-	-	-	-	-	-	(1,704,155)	-	-	-	-	-	(1,704,155)	(624,657)	(2,328,812)
	(191,265)	-	-	-	-	-	(1,878,444)	-	-	-	-	-	(2,069,709)	(624,657)	(2,694,366)
Comprehensive income for the year															
Profit	-	-	-	-	-	-	7,007,607	-	-	-	-	-	7,007,607	837,169	7,844,776
Other comprehensive income (expense)	-	-	-	-	-	-	109,786	-	(177)	(37)	(7,588)	(7,802)	101,984	-	101,984
Total comprehensive income (expense) for the year	-	-	-	-	-	-	7,117,393	-	(177)	(37)	(7,588)	(7,802)	7,109,591	837,169	7,946,760
Transfer to legal reserve															
20	-	-	-	-	350,381	-	(350,381)	-	-	-	-	-	-	-	-
Balance at 31 December 2022															
	18,935,235	60,600	9,840,436	220,536	1,559,673	-	22,684,993	-	-	(118)	109,786	109,668	53,411,141	9,403,096	62,814,237

Statement of changes in equity

TPI Polene Public Company Limited and its Subsidiaries

Consolidated financial statements												
Other surpluses			Retained earnings									
			Other components of equity									
	Issued and paid-up share capital	Share premium on ordinary share	Shareholding changes in Group	Share premium on treasury share	Legal reserve	Unappropriated	Fair value reserve <i>(in thousand Baht)</i>	Share of other comprehensive income of associates accounted for using equity method	Total other components of equity	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Year ended 31 December 2023												
Balance at 1 January 2023	18,935,235	60,600	9,840,436	220,536	1,559,673	22,684,993	(118)	109,786	109,668	53,411,141	9,403,096	62,814,237
Transactions with owners, recorded directly in equity												
Contributions by and distributions to owners												
Dividends	-	-	-	-	-	(1,893,524)	-	-	-	(1,893,524)	(599,671)	(2,493,195)
Total transaction with owners, recorded directly in equity	-	-	-	-	-	(1,893,524)	-	-	-	(1,893,524)	(599,671)	(2,493,195)
Comprehensive income for the year												
Profit	-	-	-	-	-	3,217,863	-	-	-	3,217,863	1,087,275	4,305,138
Other comprehensive income (expense)	-	-	-	-	-	-	(34)	259	225	225	-	225
Total comprehensive income (expense) for the year	-	-	-	-	-	3,217,863	(34)	259	225	3,218,088	1,087,275	4,305,363
Transfer to legal reserve	-	-	-	-	160,893	(160,893)	-	-	-	-	-	-
Balance at 31 December 2023	18,935,235	60,600	9,840,436	220,536	1,720,566	23,848,439	(152)	110,045	109,893	54,735,705	9,890,700	64,626,405

Statement of changes in equity

TPI Polene Public Company Limited and its Subsidiaries

	Note	Other surplus				Separate financial statements				Other components of equity		
		Issued and paid-up share capital	Share premium on ordinary share	Shareholding change in Group	Share premium on treasury share	Legal reserve	Treasury shares reserve (in thousand Baht)	Unappropriated	Treasury shares	Fair value reserve	Share of other comprehensive income of subsidiaries and associates accounted for using equity method	Total other components of equity
Year ended 31 December 2022												
Balance at 1 January 2022		19,126,500	60,600	9,840,436	220,536	1,209,292	-	17,796,425	-	(246)	117,716	117,470
Transaction with owners, recorded directly in equity												
Contributions by and distributions to owners												
Reduction of ordinary shares	19	(191,265)	-	-	-	-	(365,554)	191,265	365,554	-	-	-
Treasury shares purchase	19	-	-	-	-	-	365,554	(365,554)	(365,554)	-	-	(365,554)
Dividends	27	-	-	-	-	-	-	(1,704,155)	-	-	-	(1,704,155)
Total transactions with owners, recorded directly in equity		(191,265)	-	-	-	-	-	(1,878,444)	-	-	-	(2,069,709)
Comprehensive income for the year												
Profit		-	-	-	-	-	-	7,007,607	-	-	-	7,007,607
Other comprehensive income (expense)		-	-	-	-	-	-	105,957	-	(40)	(3,933)	101,984
Total comprehensive income (expense) for the year		-	-	-	-	-	-	7,113,564	-	(40)	(3,933)	7,109,591
Transfer to legal reserve	20	-	-	-	-	350,381	-	(350,381)	-	-	-	-
Balance at 31 December 2022		18,935,235	60,600	9,840,436	220,536	1,559,673	-	22,681,164	-	(286)	113,783	113,497
												53,411,141

The accompanying notes form an integral part of the financial statements.

Statement of changes in equity

TPI Polene Public Company Limited and its Subsidiaries

	Note	Other surplus			Retained earnings			Other components of equity			Total equity
		Issued and paid-up share capital	Share premium on ordinary share	Shareholding change in Group	Share premium on treasury share (in thousand Baht)	Legal reserve	Unappropriated	Fair value reserve	Share of other comprehensive income of subsidiaries and associates accounted for using equity method	Total other components of equity	
Year ended 31 December 2023											
Balance at 1 January 2023		18,935,235	60,600	9,840,436	220,536	1,559,673	22,681,164	(286)	113,783	113,497	53,411,141
Transaction with owners, recorded directly in equity											
Dividends	27	-	-	-	-	-	(1,893,524)	-	-	-	(1,893,524)
Total transactions with owners, recorded directly in equity		-	-	-	-	-	(1,893,524)	-	-	-	(1,893,524)
Comprehensive income for the year											
Profit		-	-	-	-	-	3,217,863	-	-	-	3,217,863
Other comprehensive income (expense)		-	-	-	-	-	-	(49)	274	225	225
Total comprehensive income (expense) for the year		-	-	-	-	-	3,217,863	(49)	274	225	3,218,088
Transfer to legal reserve	20	-	-	-	-	160,893	(160,893)	-	-	-	-
Balance at 31 December 2023		18,935,235	60,600	9,840,436	220,536	1,720,566	23,844,610	(335)	114,057	113,722	54,735,705

The accompanying notes form an integral part of the financial statements.

Statement of cash flows

TPI Polene Public Company Limited and its Subsidiaries

	Consolidated		Separate	
	financial statements		financial statements	
	Year ended 31 December		Year ended 31 December	
	2023	2022	2023	2022
	(in thousand Baht)			
<i>Cash flows from operating activities</i>				
Profit for the year	4,305,138	7,844,776	3,217,863	7,007,607
<i>Adjustments to reconcile profit (loss) to cash receipts (payments)</i>				
Depreciation and amortisation	3,315,814	3,292,473	2,027,877	2,012,833
Interest income	(361,678)	(52,782)	(236,463)	(34,107)
Finance costs	2,075,958	1,934,590	1,980,667	1,890,541
Dividend income	(2)	(9)	(2)	(9)
Unrealised loss on foreign exchange	171,606	606	209,211	16,854
(Reversal of) expected credit losses	(14)	(15,588)	-	868
Reversal of losses on decline in value of inventories	(22,923)	(16,915)	(21,640)	(6,129)
Provision for employees benefits	11,829	3,829	-	-
(Gain) loss on sale and write-off of plant and equipment	12,264	16,634	4,528	(53,795)
Reversal of cancellation of provision for decommissioning	-	(77,111)	-	-
Gain on fair value adjusted	(663)	-	-	-
Share of profit of subsidiaries and associates				
accounted for using equity method	(26,975)	(21,280)	(3,304,716)	(2,492,661)
Tax expense (income)	292,414	165,828	70,578	(20,361)
	9,772,768	13,075,051	3,947,903	8,321,641
<i>Changes in operating assets and liabilities</i>				
Trade accounts receivable	88,287	386,303	797,532	4,720,402
Other receivables	(25,329)	11,957	26,743	16,027
Receivable and advances to related parties	13,218	(35,061)	245,006	2,723
Inventories	1,513,767	(3,622,720)	1,172,613	(3,097,752)
Other current assets	(33,472)	(434,303)	(130,439)	(500,665)
Other non-current assets	(241,309)	(14,548)	27,712	(9,444)
Trade accounts payable	(915,689)	229,647	(758,075)	28,978
Other payables	1,618,300	673,274	(109,998)	(18,299)
Payable and advances from related parties	(6,605)	5,036	232,907	(712,179)
Other current liabilities	(55,483)	(23,949)	(57,755)	24,495
Provision for employee benefits	(128,695)	(83,374)	(99,885)	(76,880)
Other non-current liabilities	(325,760)	(16,597)	4,811	(7,917)
Net cash generated from operations	11,273,998	10,150,716	5,299,075	8,691,130
Taxes received (paid)	266,374	(158,327)	489,794	(22,346)
Net cash from operating activities	11,540,372	9,992,389	5,788,869	8,668,784

The accompanying notes form an integral part of the financial statements.

Statement of cash flows

TPI Polene Public Company Limited and its Subsidiaries

	Consolidated		Separate	
	financial statements		financial statements	
	Year ended 31 December		Year ended 31 December	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>Cash flows from investing activities</i>				
Interest received	340,413	101,867	241,342	33,966
Dividend received	2	9	1,716,001	1,526,571
(Increase) decrease in equity and debt instruments	(1,384,036)	5,047,001	-	2,502,208
Acquisition of property, plant and equipment	(9,727,317)	(6,794,668)	(3,722,364)	(3,064,591)
Acquisition of intangible assets	(118,619)	(37,650)	(118,119)	(37,650)
Proceeds from sale of plant and equipment	4,487	8,163	3,954	637,120
Proceeds from sale of intangible asset	-	-	4,728	-
Advance payment for plant, machinery and equipment	(1,089,745)	(889,509)	(169,692)	(223,044)
Acquisition of subsidiary, net of cash acquired	-	-	(959,350)	(1,700,000)
Acquisition of interest in joint venture	-	(250,000)	-	-
Cash outflow on loans to related parties	-	-	(114,983)	-
Proceeds from repayment of loans to related parties	-	-	479,862	52,153
Cash outflow for decommissioning	(459)	(2,278)	-	-
Net cash used in investing activities	(11,975,274)	(2,817,065)	(2,638,621)	(273,267)

The accompanying notes form an integral part of the financial statements.

Statement of cash flows

TPI Polene Public Company Limited and its Subsidiaries

	Consolidated		Separate	
	financial statements		financial statements	
	Year ended 31 December		Year ended 31 December	
	2023	2022	2023	2022
	(in thousand Baht)			
<i>Cash flows from financing activities</i>				
Finance cost paid	(2,911,770)	(2,562,699)	(2,139,003)	(1,993,846)
Dividend paid to owners of the Company	(1,893,524)	(1,704,155)	(1,893,524)	(1,704,155)
Dividends paid to non-controlling interests	(599,671)	(624,657)	-	-
Payment of lease liabilities	(199,188)	(182,439)	(129,394)	(117,807)
Increase in short-term loans from financial institutions	5,052,342	963,664	5,052,342	963,664
Proceeds from short-term loan from related parties	-	-	1,800,000	950,000
Repayment of short-term loans from related parties	-	-	(1,800,000)	(950,000)
Repayment of long-term loans from financial institutions	-	(1,000,000)	-	(1,000,000)
Proceeds from issue of debentures	21,655,200	15,909,000	12,935,200	11,314,000
Repayment of debentures	(12,843,200)	(12,567,000)	(10,023,200)	(8,567,000)
Payment of treasury shares	-	(365,554)	-	(365,554)
Net cash from (used in) financing activities	8,260,189	(2,133,840)	3,802,421	(1,470,698)
Net increase (decrease) in cash and cash equivalents, before effect of exchange rates	7,825,287	5,041,484	6,952,669	6,924,819
Effect of exchange rate changes	(183,226)	(38,900)	(183,262)	(38,918)
Net increase (decrease) in cash and cash equivalents	7,642,061	5,002,584	6,769,407	6,885,901
Cash and cash equivalents at 1 January	10,671,192	5,668,608	8,043,775	1,157,874
Cash and cash equivalents at 31 December	18,313,253	10,671,192	14,813,182	8,043,775
<i>Non-cash transactions</i>				
Advances of plant, machinery and equipment	784,722	656,659	100,811	126,237
Other payable - plant and equipment	1,601,633	679,726	59,472	157,916
Other non-current liabilities - intangible assets	3,320,989	69,813	3,320,989	69,813
Acquisitions of right-use-assets under lease agreements	106,663	106,039	73,673	117,058

The accompanying notes form an integral part of the financial statements.

Notes to the financial statements

TPI Polene Public Company Limited and its Subsidiaries
For the year ended 31 December 2023

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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 authorised for issue by the audit committee, as appointed by the Board of Directors of the Company, on 26 February 2024.

1 General information

TPI Polene 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 in November 1990.

The Company operates in 3 major industries and has 16 distribution terminals around the country. It operates in the cement industry at Kang-Khoi, Saraburi and has 8 plants consisting of 4 cement manufacturing plants and 4 dry mortar manufacturing plants. It operates in the construction materials industry at Amphur Chalermprakiet, Saraburi and has cement roof tiles and fibre cement board manufacturing plants. It operates in the plastic industry at Amphur Muang, Rayong and has 2 LDPE and EVA plastic manufacturing plants. Details of the Company’s subsidiaries as at 31 December 2023 and 2022 are given in note 9.

2 Basis of preparation of the financial statements

The financial statements are prepared in accordance with Thai Financial Reporting Standards (“TFRS”), guidelines promulgated by the Federation of Accounting Professions and applicable rules and regulations of the Thai Securities and Exchange Commission. The financial statements are presented in Thai Baht, which is the Company’s functional currency. The accounting policies, described in note 3 have been applied consistently to all periods presented in these financial statements.

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 that are described in each note are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

3 Significant accounting policies

(a) Basis of consolidation

The consolidated financial statements relate to the Company and its subsidiaries (together referred to as the “Group”) and the Group’s interests in associates and joint ventures.

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

When the Group loses control over a subsidiary, it derecognises the assets and liabilities, any related non-controlling interests and other components of equity of the subsidiary. Any resulting gain or loss

is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

The Group recognised investments in associates and joint venture using the equity method in the consolidated financial statements in which the equity method is applied. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements in which the equity method is applied include the Group's dividend income and share of the profit or loss and other comprehensive income of equity-accounted investees, until the date on which significant influence or joint control ceases.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, when the group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset.

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

Business combinations

The Group applies the acquisition method when the Group assess that the acquired set of activities and assets include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. The acquisition date is the date on which control is transferred to the Group, other than business combinations with entities under common control. Expenses in connection with a business combination are recognised as incurred.

The Group elect to apply a 'concentration test' that permits a simplified assessment of whether an acquired set of activities and assets is an assets rather than a business acquisition when substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

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

Consideration transferred includes assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, any contingent consideration and equity interests issued by the Group. 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.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group estimates 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 recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

(b) *Investments in subsidiaries, associates and joint ventures*

Investments in subsidiaries, associates and joint ventures in the separate financial statements of the Company are accounted for using the equity method.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

The Group recognised investments in associates and joint ventures using the equity method in the consolidated financial statements. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's dividend income and share of the profit or loss and other comprehensive income of equity-accounted investees, until the date on which significant influence or joint control ceases.

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*

Transactions in foreign currencies are translated to the respective functional currencies at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate at the reporting date.

Foreign currency differences are generally recognised in profit or loss. However, foreign currency differences arising from the translation of the following items are recognised in other comprehensive income:

- an investment in equity securities designated as at FVOCI (except on impairment, in which case foreign currency differences that have been recognised in other comprehensive income are reclassified to 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 until disposal of the investment, except to the extent that the translation difference is allocated to non-controlling interests.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. 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

(d.1) Classification and measurement

Debt securities issued by the Group are initially recognised when they are originated. Other financial assets and financial liabilities (except trade accounts receivables (see note 3(f))) are initially recognised when the Group becomes a party to the contractual provisions of the instrument, and measured at fair value plus or minus, for an item not at fair value through profit or loss (FVTPL), transaction costs that are directly attributable to its acquisition or issue.

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income (FVOCI); or FVTPL. Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified prospectively from the reclassification date.

On initial recognition, financial liabilities are classified as measured at amortised cost using the effective interest method. Interest expense, foreign exchange gains and losses and any gain or loss on derecognition are recognised in profit or loss.

Financial assets measured at amortised costs are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by expected credit losses. Interest income, foreign exchange gains and losses, expected credit loss and any gain or loss on derecognition are recognised in profit or loss.

Debt investments measured at FVOCI are subsequently measured at fair value. Interest income, calculated using the effective interest method, foreign exchange gains and losses and expected credit loss 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 measured at FVOCI are subsequently measured at fair value. Dividend income is recognised as income in profit or loss on the date on which the Group's right to receive payment is established, 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.

(d.2) Derecognition and offset

The Group derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

The difference between the carrying amount extinguished and the consideration received or paid is recognised in profit or loss.

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and the Group intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(d.3) Write offs

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering. Subsequent recoveries of an asset that was previously written off, are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

(d.4) Interest

Interest income and expense is recognised in profit or loss using the effective interest method. In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. 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.

(e) Cash and cash equivalents

Cash and cash equivalents comprise cash balances, call deposits and highly liquid short-term investments which have maturities of three months or less from the date of acquisition. Bank overdrafts that are repayable on demand are a component of cash and cash equivalents for the purpose of the statement of cash flows.

(f) Trade accounts receivable

A trade receivable is recognised when the Group has an unconditional right to receive consideration. A trade receivable is measured at transaction price less allowance for expected credit loss. Bad debts are written off when incurred.

The Group estimates lifetime expected credit losses (ECLs), using a provision matrix to find the ECLs rates. This method groups the debtors based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date.

(g) *Inventories*

Inventories are measured at the lower of cost and net realisable value. Cost of finished goods, diesel and natural gas, is calculated using the first in first out principle. Cost of other inventories are calculated using the weighted average cost principle. Cost includes direct costs incurred in acquiring the inventories. In the case of manufactured inventories and work-in-progress, cost includes an appropriate share of production overheads based on normal operating capacity. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

A right to recover returned products is recognised when the products are expected to be returned by customers and measured by reference to the former carrying amount of the sold inventories less any expected costs to recover those products.

(h) *Non-current assets classified as held for sale*

Non-current assets are classified as held for sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use. Such assets are measured at the lower of their carrying amount and fair value less cost to sell. Impairment losses on initial classification as held for sale and subsequent gains and losses on remeasurement are recognised in profit or loss.

Once classified as held for sale, intangible assets, plant and equipment are no longer amortised or depreciated, and any equity-accounted investee is no longer equity accounted.

(i) *Investment properties*

Investment properties are measured at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the investment property. The cost of self-constructed assets includes capitalised borrowing costs.

Depreciation is calculated on a straight-line basis over the estimated useful lives of buildings of 20 years and recognised in profit or loss. No depreciation is charged on freehold land and assets under construction.

Differences between the proceeds from disposal and the carrying amount of investment property are recognised in profit or loss.

(j) *Property, plant and equipment*

Property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes capitalised borrowing costs, and the costs of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Differences between the proceeds from disposal and the carrying amount of property, plant and equipment are recognised in profit or loss.

Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item when the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Depreciation

Depreciation is calculated on a straight-line basis over the estimated useful lives of each component of an asset or on unit of production method of relevant assets and recognised in profit or loss. No depreciation is provided on freehold land, assets under construction and major spare parts have not been issued.

The estimated useful lives are as follows:

Land improvement	5 - 10 years
Leasehold improvement	8 - 10 years
Buildings and structures	10 - 40 years and per lease period
Machinery and equipment for production (concrete)	3 - 10 years
Other machinery and equipment for production	5 - 40 years
Tools and factory equipment	3 - 30 years
Furniture, fixtures and office equipment	3, 5 and 10 years
Vehicles	5 - 25 years

Machinery and equipment for production of construction materials, cement roof tiles and fibre cement board, LDPE and EVA and machine for melt sheets calculate depreciation based on units of production.

(k) Intangible assets

Concession

Cost of concessions on mining limestone and shale are include acquisition, exploration and development costs and are measured at cost less accumulated amortisation and accumulated impairment losses.

Research and development

Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditure and expenditure on research activities are recognised in profit or loss as incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and impairment losses. The expenditure cost includes the cost of materials, direct labour, overhead costs that are directly attributable to preparing the asset for its intended use, and borrowing costs.

Other intangible assets

Other intangible assets that have indefinite useful lives are measured at cost less impairment losses. Other intangible assets are measured at cost less accumulated amortisation and impairment losses. Subsequent expenditure is capitalised only when it will generate the future economic benefits. Amortisation is calculated on a straight-line basis over the estimated useful lives of intangible assets and recognised in profit or loss.

The estimated useful lives are as follows:

Cost of raw material resources and cost of concessions	Units of extracted for the year
Software licenses	12 years
Capitalised development costs	12 years

(l) Leases

At inception of a contract, the Group assesses that a contract is, or contains, a lease when it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

As a lessee

At commencement or on modification of a contract, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices of each component. For the leases of property, the Group has elected not to separate non-lease components and accounted for the lease and non-lease components wholly 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 are recognised as expenses on a straight-line basis over the respective lease terms.

Right-of-use asset is measured at cost, less any accumulated depreciation and impairment loss, and adjusted for any remeasurements of lease liability. The cost of right-of-use asset includes the initial amount of the lease liability adjusted for any prepaid lease payments, plus any initial direct costs incurred and an estimate of restoration costs, less any lease incentives received. Depreciation is charged to profit or loss on a straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

The lease liability is initially measured at the present value of all lease payments that shall be paid under the lease. The Group uses the Group's incremental borrowing rate to discount the lease payments to the present value. The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a lease modification, or a change in the assessment of options specified in the lease. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

As a lessor

At inception or on modification of a contract, the Group allocates the consideration in the contract to each component on the basis of their relative standalone selling prices.

At lease inception, the Group considers to classify a lease that transfers substantially all of the risks and rewards incidental to ownership of the underlying asset to lessees as a finance lease. A lease that does not meet this criteria is classified as an operating lease.

The Group recognises lease payments received under operating leases in profit or loss on a straight-line basis over the lease term as part of other income. Initial direct costs incurred in arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as other income in the accounting period in which they are earned.

(m) *Impairment of non-financial asset*

The carrying amounts of the Group's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill and intangible assets that have indefinite useful lives or are not yet available for use, the recoverable amount is estimated each year at the same time.

An impairment loss is recognised in profit or loss if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount, unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.

The recoverable amount is the greater of the asset's value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss of asset recognised in prior periods 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.

(n) *Employee benefits*

Defined contribution plans

Obligations for contributions to the Group's provident funds are expensed as the related service is provided.

Defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in the current and prior periods. The defined benefit obligations is discounted to the present value, which performed annually by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognised immediately in OCI. The Group determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Termination benefits are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(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 a finance cost.

(p) Fair values measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which the Group has access at that date. The fair value of a liability reflects its non-performance risk.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: inputs for the asset or liability that are based on unobservable input.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Group measures assets and asset positions at a bid price and liabilities and liability positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price - i.e. the fair value of the consideration given or received.

(q) Treasury shares

When share capital recognised as equity is repurchased, the amount of consideration paid, including directly attributable costs, is classified as treasury shares and recognised as a deduction from equity. An equal amount is appropriated from retained earnings and taken to a reserve for treasury shares within equity. When treasury shares are sold, the amount received is recognised as an increase in equity by crediting the cost of the treasury shares sold, calculated using the weighted average method, to the treasury shares account and transferring the equivalent amount back from reserve for treasury shares to retained earnings. Surpluses on the sale of treasury shares are taken directly to a separate category within equity, 'Share premium on treasury shares'. Net deficits on sale or cancellation of treasury shares are debited to retained earnings after setting off against any remaining balance of surplus on treasury shares.

(r) Revenue from contracts with customers

Revenue recognition

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax and is after deduction of any trade discounts and volume rebates.

Revenue from sales of goods is recognised on the date on which the goods are delivered to the customers. For the sales that permit the customers to return the goods, the Group estimates the returns based on the historical return data, does not recognise revenue and cost of sale for the estimated products to be returned.

Revenue for rendering of services is recognised over time as the services are provided. The stage of completion is assessed based on surveys of work performed. The related costs are recognised in profit or loss when they are incurred.

For bundled packages, the Group recognises revenue from sales of products and rendering of services separately if a product or service is separately identifiable from other items and a customer can benefit from it or the multiple services are rendered in different reporting periods. The consideration received is allocated based on their relative stand-alone selling prices.

Long-term advances received from customers

Long-term advances received from customers is recognised as revenue when the Group transferred control over the goods to the customers. For the advances that contain a significant financing component, they include the interest expense accreted on the contract liability under the effective interest method. The Group uses practical expedient which is not adjust the consideration for any effects of a significant financing component for the contract for which the period is 12 months or less.

Customer loyalty programme

For customer loyalty programmes that the Group offers to customers, the consideration received is allocated based on the relative stand-alone selling price of the products and the loyalty points. The amount allocated to the loyalty points is recognised as contract liabilities and revenue is recognised when loyalty points are redeemed or the likelihood of the customer redeeming the loyalty points becomes remote. The stand-alone selling prices of the points is estimated based on the discount provided to customers and the likelihood that the customers will redeem the points. The estimate is reviewed at the end of the reporting period.

(s) *Income tax*

Income tax expense for the year comprises current and deferred tax, which is recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is recognised in respect of the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries and joint ventures to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities, using tax rates enacted or substantively enacted at the reporting date. Current deferred tax assets and liabilities are offset in the separate financial statements.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(t) *Earnings per share*

Basic earnings per share is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

(u) *Related parties*

A related party is a person or entity that has direct or indirect control or joint control, or has significant influence over the financial and managerial decision-making of the Group; a person or entity that is under common control or under the same significant influence as the Group; or a person or entity over which the Group has direct or indirect control or joint control or has significant influence over the financial and managerial decision-making.

(v) *Segment reporting*

Segment results that are reported to the Group's 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 insert unallocated items, e.g. corporate assets.

4 Related parties

Relationships with subsidiaries, associates and joint venture are described in notes 8 and 9. Other related parties that the Group had significant transactions with during the year were as follows:

Name of entities	Country of incorporation	Nature of relationships
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 Group.
Pornchai Enterprise Co., Ltd.	Thailand	Co-director
TPI Holding Co., Ltd.	Thailand	Co-director
Leophairatana Enterprise Co., Ltd.	Thailand	Co-director
Bangkok Union Insurance Public Co., Ltd.	Thailand	Co-director
Lampang Food Products Co., Ltd.	Thailand	Co-director
Hong Yiah Seng Co., Ltd.	Thailand	Co-director
Saraburi Ginning Mill Co., Ltd.	Thailand	Co-director
Thai Petrochemical Industry Co., Ltd.	Thailand	Co-director
Rayong Forest Co., Ltd.	Thailand	Co-director
Hong Yiah Seng Real Estates and Investment Co., Ltd.	Thailand	Co-director
TPI EOEG Co., Ltd.	Thailand	Co-director
E&T Renewable Energy Co., Ltd.	Thailand	Co-director

**Significant transactions with
related parties**
Year ended 31 December

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Subsidiaries				
Sales of goods	-	-	5,314,327	10,534,733
Transportation income	-	-	214,717	192,518
Purchase of raw materials and spare parts	-	-	474,746	553,417
Purchase of electricity	-	-	2,552,370	1,568,251
Purchase of steam	-	-	37,322	34,974
Purchase of goods for sales promotion	-	-	75,531	115,104
Dividend income	-	-	1,715,999	1,526,562
Interest income	-	-	3,695	14,967
Interest expense	-	-	4,731	4,589
Other income	-	-	170,273	434,567
Administrative expenses	-	-	30,358	32,351
Associates				
Sale of goods	339	4,501	45	4,197
Purchase of raw materials	546,415	566,349	517,707	529,358
Interest expense	5,909	3,564	199	182
Other income	3	-	3	-
Insurance premium	23,210	17,527	18,018	13,584
Joint Venture				
Other income	96	15	96	15
Other related parties				
Sales of goods	4,725	1,789	1,924	260
Transportation income	143	76	61	4
Interest expense	2,789	7,028	1,814	4,705
Other income	300	303	300	300
Insurance premium	304,150	284,022	135,761	129,995
Administrative expenses	59,987	61,993	54,366	57,186
Key management personnel				
Key management personnel compensation				
Short-term employee benefits	465,621	411,429	348,005	310,723
Post-employment benefits	8,481	4,001	-	-
Total key management personnel compensation	474,102	415,430	348,005	310,723

Balances with related parties At 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Trade accounts receivable				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	379,084	219,228
TPI Polene Power Public Co., Ltd.	-	-	12,459	385,558
TPI All Seasons Co., Ltd.	-	-	37,486	319,237
Polene Silicon Co., Ltd.	-	-	-	157,605
TPI Polene Bio Organics Co., Ltd.	-	-	255	10,426
TPI Commercial Co., Ltd.	-	-	3,280	4,364
Thai Nitrate Co., Ltd.	-	-	72	95
Associates				
BUI Life Insurance Public Co., Ltd.	3	-	-	-
United Grain Industry Co., Ltd.	89	217	21	36
Other related parties				
Bangkok Union Insurance Public Co., Ltd.	28	37	14	4
Pornchai Enterprise Co., Ltd.	20	164	5	11
Lampang Food Products Co., Ltd.	15	9	15	9
Rayong Forest Co., Ltd.	328	410	-	-
Hong Yiah Seng Co., Ltd.	697	76	697	-
	1,180	913	433,388	1,096,573
Less allowance for expected credit loss	-	-	-	-
Net	1,180	913	433,388	1,096,573

	Interest rate		Separate financial statements			
	Year ended		1			31
	31 December	2023	January	Increase	Decrease	December
	2022	2023	2023	<i>(in thousand Baht)</i>		2023
	<i>(% per annum)</i>					
Short-term loans to related parties						
Subsidiaries						
TPI Polene Bio Organics Co., Ltd.	MLR - 1.5	2.125	251,096	-	(251,096)	-
TPI Bio Pharmaceuticals Co., Ltd.	-	2.125	-	40,100	(40,100)	-
TPI Commercial Co., Ltd.	MLR - 1.5	2.125	93,993	33,093	(127,086)	-
Master Achieve (Thailand) Co., Ltd.	MLR - 1.5	2.125	19,790	19,790	(39,580)	-
TPI Healthcare Co., Ltd.	-	2.125	-	22,000	(22,000)	-
			364,879	114,983	(479,862)	
Accrued interest receivable			1,390	3,695	(4,976)	109
Total			366,269	118,678	(484,838)	109
Less allowance for expected credit loss			-			-
Net			366,269			109

<i>Balances with related parties</i> <i>At 31 December</i>	Consolidated		Separate	
	financial statements		financial statements	
	2023	2022	2023	2022
	(in thousand Baht)			
<i>Receivables and advances to related parties - current</i>				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	4,290	973
TPI Polene Power Public Co., Ltd.	-	-	163,569	197,435
TPI All Seasons Co., Ltd.	-	-	3,323	13,473
Polene Silicon Co., Ltd.	-	-	65	72,062
TPI Polene Bio Organics Co., Ltd.	-	-	6,907	110,757
TPI Commercial Co., Ltd.	-	-	664	256
TPI Service Co., Ltd.	-	-	439	76
Thai Nitrate Co., Ltd.	-	-	192	186
Thai Propoxide Co., Ltd.	-	-	65	64
TPI Healthcare Co., Ltd.	-	-	502	28,093
TPI Bio Pharmaceuticals Co., Ltd.	-	-	1,642	121
Master Achieve (Thailand) Co., Ltd.	-	-	691	1,876
TPI Polene Power (International) Co., Ltd.	-	-	64	65
TPI Biomass Power Co., Ltd.	-	-	64	-
TPI Distribution Center Co., Ltd.	-	-	-	1
TPI Solar Power Co., Ltd.	-	-	64	1
TPI Wind Power Co., Ltd.	-	-	-	1
Mondo Thai Co., Ltd.	-	-	65	-
TPI Deep Sea Port Co., Ltd.	-	-	64	-
Associates				
BUI Life Insurance Public Co., Ltd.	4,812	5,317	4,038	4,581
United Grain Industry Co., Ltd.	11	8	11	8
Joint Venture				
E&T Renewable Energy Co., Ltd.	25	164	25	16
Other related parties				
Bangkok Union Insurance Public Co., Ltd.	107,495	123,875	35,967	37,933
Pornchai Enterprise Co., Ltd.	4,068	521	70	65
Rayong Forest Co., Ltd.	125	65	125	65
TPI Holding Co., Ltd.	66	-	66	-
TPI EOEG Co., Ltd.	65	-	65	-
Thai Petrochemical Industry Co., Ltd.	65	-	65	-
Total	116,732	129,950	223,102	468,108
Less allowance for expected credit loss	-	-	-	-
Net	116,732	129,950	223,102	468,108

	Consolidated		Separate	
<i>Balances with related parties</i>	financial statements		financial statements	
<i>At 31 December</i>	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>Long-term investments in related parties</i>				
Related parties				
Pornchai Enterprise Co., Ltd.	45,653	45,653	45,653	45,653

Balances with related parties At 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Receivables and advances to related parties - non-current				
Subsidiary				
Thai Propoxide Co., Ltd.	-	-	421,984	421,984
Less losses recognised using the equity method in excess of the investment	-	-	(789)	(909)
Net	<u>-</u>	<u>-</u>	<u>421,195</u>	<u>421,075</u>

In 1997, the Company entered into an agreement to sell land to Thai Propoxide Co., Ltd. (a subsidiary) at the price of Baht 477 million, in consideration for a loan payable by August 2000, with interest of 16%. No payments of principal or interest were subsequently made by the subsidiary and consequently the Company deferred recording the gain on the sale land of Baht 40 million and interest income of Baht 155 million in income and ceased accrued interest. The deferred gain and interest income are disclosed as non-current liabilities in the statement of financial position of the separate financial statements.

The subsidiary used the land as collateral for a bank loan, the proceeds of which were subsequently loaned to the Company. In 2000, the subsidiary's bank loan was assigned to the Company. Subsequently, in 2011, the land has been released by the bank as collateral and the subsidiary has sold a part of land to the Company and repaid a part of the land loan to the Company of Baht 68 million.

At 31 December 2023, the outstanding amount of accounts receivable from the subsidiary from the sale of land total Baht 422 million (2022: Baht 422 million) and the deferred gain on the sale of Baht 35 million (2022: Baht 35 million) and deferred interest income of Baht 134 million (2022: Baht 134 million) in the statement of financial position of the separate financial statements.

Balances with related parties At 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Trade accounts payable				
Subsidiaries				
TPI Polene Power Public Co., Ltd.	-	-	31,016	36,343
TPI All Seasons Co., Ltd.	-	-	14,290	20,069
TPI Polene Bio Organics Co., Ltd.	-	-	7	-
Thai Nitrate Co., Ltd.	-	-	7,790	8,694
TPI Healthcare Co., Ltd.	-	-	5,313	18,051
TPI Bio Pharmaceuticals Co., Ltd.	-	-	2	-
Associate				
United Grain Industry Co., Ltd.	2,871	2,424	511	-
Thai Plastic Film Co., Ltd.	129,282	137,187	129,029	136,967
Thai Plastic Products Co., Ltd.	225,583	226,358	222,220	221,512
Total	357,736	365,969	410,178	441,636

	Interest rate		Separate financial statements			
	Year ended		1			31
	2022	2023	January	Increase	Decrease	December
	<i>(% per annum)</i>		2023	<i>(in thousand Baht)</i>		2023
Short-term loans from related parties						
Subsidiaries						
TPI Polene Power Public Co., Ltd.	1.45	1.60 - 2.45	-	1,600,000	(1,600,000)	-
Thai Nitrate Co., Ltd.	1.60	1.60	-	200,000	(200,000)	-
			-	1,800,000	(1,800,000)	-
Accrued interest			-	3,645	(3,645)	-
Total			-	1,803,645	(1,803,645)	-

<i>Balances with related parties</i> <i>At 31 December</i>	Consolidated		Separate	
	financial statements		financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>Payables and advances from related parties</i>				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	2,089	1,630
TPI Polene Power Public Co., Ltd.	-	-	480,049	244,179
TPI All Seasons Co., Ltd.	-	-	2,140	2,140
TPI Polene Bio Organics Co., Ltd.	-	-	4,810	6,170
TPI Healthcare Co., Ltd.	-	-	5,938	4,099
TPI Bio Pharmaceuticals Co., Ltd.	-	-	992	1,187
Master Achieve (Thailand) Co., Ltd.	-	-	4,159	1,987
Associates				
BUI Life Insurance Public Co., Ltd.	57	97	51	97
United Grain Industry Co., Ltd.	12	10	-	-
Thai Plastic Film Co., Ltd.	2,252	1,944	2,252	1,821
Other related parties				
Pornchai Enterprise Co., Ltd.	1,462	9,757	1,312	8,245
Bangkok Union Insurance Public Co., Ltd.	1,916	105	1,212	77
Hong Yiah Seng Co., Ltd.	220	629	146	629
Rayong Forest Co., Ltd.	25	7	25	7
Total	5,944	12,549	505,175	272,268

<i>Balances with related parties</i> <i>At 31 December</i>	Consolidated		Separate	
	financial statements		financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>Current portion of lease liabilities</i>				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	5,288	5,086
TPI Polene Bio Organics Co., Ltd.	-	-	3,290	3,165
Mondo Thai Co., Ltd.	-	-	239	230
Thai Nitrate Co., Ltd.	-	-	-	771
Associates				
United Grain Industry Co., Ltd.	12,610	11,903	3,052	3,741
Other related parties				
Pornchai Enterprise Co., Ltd.	27,605	36,591	22,715	30,747
Hong Yiah Seng Co., Ltd.	1,555	3,069	537	2,095
Rayong Forest Co., Ltd.	25	24	25	24
Saraburi Ginning Mill Co., Ltd.	2,231	1,678	963	459
Leophairatana Enterprise Co., Ltd.	4,471	4,180	-	-
Hong Yiah Seng Real Estates and Investment Co., Ltd.	1,268	1,219	-	-
Total	49,765	58,664	36,109	46,318

Balances with related parties At 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Lease liabilities				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	-	5,288
TPI Polene Bio Organics Co., Ltd.	-	-	-	3,290
Mondo Thai Co., Ltd.	-	-	14,408	14,648
Associates				
United Grain Industry Co., Ltd.	81,495	107,147	-	3,052
Other related parties				
Pornchai Enterprise Co., Ltd.	15,540	36,262	11,504	28,522
Hong Yiah Seng Co., Ltd.	795	2,351	-	537
Rayong Forest Co., Ltd.	936	961	936	961
Saraburi Ginning Mill Co., Ltd.	2,138	1,920	1,485	-
Leophairatana Enterprise Co., Ltd.	3,030	6,013	-	-
Hong Yiah Seng Real Estates and Investment Co., Ltd.	653	1,920	-	-
Total	104,587	156,574	28,333	56,298

Significant agreements with related parties

(a) Office building lease agreements

The Company and its subsidiary have long-term office building lease agreements with a related company. Previously, the initial lease term for each lease agreement was for 3 years, with the lease being renewable. In July 1999, the Company and a subsidiary entered into a 90 years office building lease agreement with a related company to replace the expired original office building lease agreements in which the Company and a subsidiary made one payment for the whole lease period (*the total rental for the 90 years term of the lease is Baht 40,000 per square meter, equivalent to a monthly rental, before discounting cash flows, of Baht 37 per square meter*). The annual rental is deducted from the prepaid rentals. Subsequently, on 24 July 2001, the Company and its subsidiary agreed to sign the amendments in addition to the existing office building lease agreements with a related company. The initial period of the lease is for 30 years, commencing from the original date on which the rentals of each respective agreement were prepaid. The related party warranted that the lease would be renewable for another 2 subsequent periods of 30 years under the same conditions, including rental fee as set out in the original agreements.

On 25 August 2006, the Company and its subsidiary registered the lease with the Land Department.

Should either party terminate the lease agreement, the unused prepaid rentals are refundable to the Companies. Both parties agreed in principle to execute a mortgage on the office building as security for the unused prepaid rentals. As at 31 December 2023, there was no mortgage agreement as security for the unused prepaid rentals, so the recoverability of prepaid rentals depends on the ability of the related company to repay.

(b) Electricity supply agreement

The Company entered into an electricity supply contract with a subsidiary company, to provide the waste heat to the subsidiary that will be used in the manufacturing process for electricity. The subsidiary company shall supply the electricity to the 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.

(c) Office building services agreements

The Company and its subsidiaries entered into office building services agreements with related parties for 3 years. The details were as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>Non-cancellable service contract commitments</i>				
Within one year	41,579	50,058	34,569	41,316
After one year but within five years	19,253	43,563	17,275	39,436
Total	60,832	93,621	51,844	80,752

The subsidiary had made several land rental agreements with its related parties which specified that lessee has to decommission the assets from rental area at the end of contract, causing lessee to set up the decommissioning costs as at 31 December 2023 in amount of Baht 1.8 million *(31 December 2022:*

Baht 1.7 million).

The subsidiary had made several land rental agreements with its related parties which specified that lessee has to decommission the assets from rental area at the end of contract, causing lessee to set up the decommissioning costs as at 31 December 2021 in amount of Baht 269.6 million. Subsequently, on 30 September 2022, both parties agreed to cancel the terms of the delivery of the leased assets and decommission of the agreements.

On 1 October 2023, the Company entered into land lease agreements with the subsidiary for operate “Electricity production project from solar energy, Kaeng Khoi District, TPI Polene Power” for the period of 30 years from 1 October 2023 to 30 September 2053 whereby the subsidiary agree to pay annually fee as specified in agreement.

5 Cash and cash equivalents

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Cash on hand	1,627	2,292	1,162	1,675
Cash at banks - current accounts	28,347	78,171	14,178	14,088
Cash at banks - savings accounts	13,086,661	6,390,424	11,100,240	3,828,012
Highly liquid short-term investments	5,196,618	4,200,305	3,697,602	4,200,000
Total	18,313,253	10,671,192	14,813,182	8,043,775

6 Trade account receivables

<i>At 31 December</i>	<i>Note</i>	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
		<i>(in thousand Baht)</i>			
Related parties	4	1,180	913	433,388	1,096,573
Other parties		5,477,411	5,592,549	2,675,515	2,836,977
Total		5,478,591	5,593,462	3,108,903	3,933,550
Less allowance for expected credit loss		(33,963)	(33,949)	(33,375)	(33,375)
Net		5,444,628	5,559,513	3,075,528	3,900,175

Aging analyses for trade accounts receivable were as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Related parties				
Within credit terms	1,140	723	433,377	766,006
Overdue:				
1 - 30 days	9	39	2	45,648
31 - 60 days	12	4	2	64,260
61 - 90 days	14	18	2	60,961
More than 90 days	5	129	5	159,698
Total	1,180	913	433,388	1,096,573
Less allowance for expected credit loss	-	-	-	-
Net	1,180	913	433,388	1,096,573
Other parties				
Within credit terms	4,721,748	4,927,888	2,391,074	2,587,836
Overdue:				
1 - 30 days	312,605	290,725	155,977	137,986
31 - 60 days	104,353	110,362	26,529	26,428
61 - 90 days	100,418	70,214	22,275	12,866
More than 90 days	238,287	193,360	79,660	71,861
Total	5,477,411	5,592,549	2,675,515	2,836,977
Less allowance for expected credit loss	(33,963)	(33,949)	(33,375)	(33,375)
Net	5,443,448	5,558,600	2,642,140	2,803,602
Net total	5,444,628	5,559,513	3,075,528	3,900,175

<i>Allowance for expected credit loss</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
		<i>(in thousand Baht)</i>		
At 1 January	(33,949)	(49,537)	(33,375)	(32,507)
Addition	(14)	(1,683)	-	(1,666)
Reversal	-	15,242	-	-
Write-off	-	2,029	-	798
At 31 December	<u>(33,963)</u>	<u>(33,949)</u>	<u>(33,375)</u>	<u>(33,375)</u>

The Group requires various customers to provide cash, bank and personal guarantees as collateral.

The normal credit term granted by the Group ranges from 30 days to 120 days.

Information of credit risk is disclosed in note 29 (b.1).

7 Inventories

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
		<i>(in thousand Baht)</i>		
Finished goods	1,712,486	2,111,902	1,996,224	2,323,165
Work in process	6,977,078	6,926,370	4,824,473	4,657,256
Raw materials and chemicals	1,728,865	2,250,291	1,495,872	1,893,293
Packages	555,509	525,996	470,717	426,911
Oil and coal	2,096,128	2,964,500	1,893,633	2,798,918
Spare parts and general supplies	4,967,643	4,658,435	3,815,350	3,428,114
Goods in transit	156,761	270,743	124,270	265,495
Total	18,194,470	19,708,237	14,620,539	15,793,152
<i>Less allowance for decline in value</i>	<i>(330,299)</i>	<i>(353,222)</i>	<i>(13,702)</i>	<i>(35,342)</i>
Net	<u>17,864,171</u>	<u>19,355,015</u>	<u>14,606,837</u>	<u>15,757,810</u>
Inventories recognised in cost of sales of goods				
- Cost	32,922,818	35,343,247	27,722,194	29,079,139
- Write-down to net realisable value	-	3,768	-	-
- Reversal of net realisable value	(22,923)	(20,683)	(21,640)	(6,129)
Net	<u>32,899,895</u>	<u>35,326,332</u>	<u>27,700,554</u>	<u>29,073,010</u>

8 Investments in associates and joint venture

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	(in thousand Baht)			
Associates				
At 1 January	856,337	842,539	856,337	842,539
Share of profit of associates accounted for using equity method	23,711	21,386	23,711	21,386
Share of other comprehensive income (expense) of associates accounted for using equity method	259	(7,588)	259	(7,588)
At 31 December	880,307	856,337	880,307	856,337
Joint venture				
At 1 January	249,894	-	-	-
Acquisition	-	250,000	-	-
Share of profit (loss) of joint venture accounted for using equity method	3,264	(106)	-	-
At 31 December	253,158	249,894	-	-

The Group has not recognised loss relating to an investment in an indirect associate accounted for using the equity method where its share of loss exceeds the carrying amount of its investment. As at 31 December 2023, the Group's cumulative share of unrecognised loss was Baht 985 million (2022: Baht 985 million). The Group has no obligation in respect of this loss.

On 1 December 2022, the subsidiary entered into a memorandum of understanding with Electricity Generating Public Co., Ltd. ("EGCO") are incorporated in Thailand, in order to invest in E&T Renewable Energy Co., Ltd., a new joint venture established in Thailand. The purpose of the joint venture are manufacturing and distributing electricity. The subsidiary and EGCO equally invested 49.99% in the joint venture and paid an initial authorised share capital in 25% of the authorised share capital of Baht 500 million.

Investments in associates and joint venture as at 31 December were as follows:

	Type of business	Ownership interest 2023 (%)	Paid-up capital 2023	2022	Consolidated financial statements			
					Cost (in thousand Baht)	2023	2022	At equity method 2023
Associates								
BUI Life Insurance Public Co., Ltd.	Life insurance	25.00	500,000	500,000	125,000	125,000	116,427	119,991
United Grain Industry Co., Ltd.	Manufacture and sale of packaging	19.00	550,000	550,000	104,500	104,500	763,880	736,346
					229,500	229,500	880,307	856,337
Indirect associates								
Thai Special Steel Industry Public Co., Ltd.	Manufacture and sale of steel (in the process of registering the dissolution)	29.53	4,220,000	4,220,000	1,246,200	1,246,200	-	-
Thai Plastic Film Co., Ltd.	Manufacture and sale of packaging	19.00	40,000	40,000	-	-	-	-
Thai Plastic Products Co., Ltd.	Manufacture and sale of packaging	19.00	60,000	60,000	-	-	-	-
Total					1,475,700	1,475,700	880,307	856,337
Indirect joint venture								
E&T Renewable Energy Co., Ltd.	Generate electricity from renewable energy	35.11	250,000	250,000	250,000	250,000	253,158	249,894
Total					250,000	250,000	253,158	249,894

Separate financial statements

Type of business	Ownership interest		Paid-up capital		Cost		At equity method	
	2023	2022 (%)	2023	2022	2023 (in thousand Baht)	2022	2023	2022
Associates								
BUI Life Insurance Public Co., Ltd.	25.00	25.00	500,000	500,000	125,000	125,000	116,427	119,991
United Grain Industry Co., Ltd.	19.00	19.00	550,000	550,000	104,500	104,500	763,880	736,346
Total					229,500	229,500	880,307	856,337

No dividend distribution from investments in associates held by the Group and the Company during years ended 31 December 2023 and 2022.

None of the Group's and the Company's associates are publicly listed and consequently do not have published price quotations.

All associates were incorporated in Thailand.

Immaterial associates

The following is summarised financial information for the Group's interest in immaterial associates based on the amounts reported in the Group's consolidated financial statements:

	2023 (in thousand Baht)	2022 (in thousand Baht)
Carrying amount of interests in immaterial associates	880,307	856,337
Group's share of:		
- Profit (loss) from continuing operations	26,975	21,280
- Other comprehensive income (expense)	259	(7,588)
- Total comprehensive income (expense)	27,234	13,692

9 Investments in subsidiaries

		Separate financial statements	
	Note	2023 (in thousand Baht)	2022 (in thousand Baht)
Subsidiaries			
At 1 January		28,736,575	26,088,167
Increase capital of TPI Concrete Co., Ltd.		-	1,700,000
Increase capital of TPI Commercial Co., Ltd.		99,900	-
Increase capital of TPI Polene Bio Organics Co., Ltd.		200,000	-
Increase capital of TPI Bio Pharmaceuticals Co., Ltd.		204,500	-
Increase capital of TPI All Seasons Co., Ltd.		320,000	-
Increase capital of TPI Healthcare Co., Ltd.		54,950	-
Increase capital of Master Achieve (Thailand) Co., Ltd.		80,000	-
Share of profit of subsidiaries		3,281,005	2,471,275
Dividends income	4	(1,715,999)	(1,526,562)
(Reversal of) losses recognised using the equity method in excess of the investment	4	(120)	40
Share of other comprehensive income (expense) of subsidiaries		15	3,655
At 31 December		31,260,826	28,736,575

None of the Company's subsidiaries are publicly listed and consequently do not have published price quotations, except for TPI Polene Power Public Co., Ltd. which is listed on the Stock Exchange of Thailand. Based on the closing price of Baht 3.40 at 31 December 2023 (31 December 2022: Baht 3.40), the fair value of the Company's investment in TPI Polene Power Public Co., Ltd. was Baht 20,060 million (31 December 2022: Baht 20,060 million).

On 9 February 2023, the Company paid for the newly issued ordinary shares of TPI Commercial Company Limited, a subsidiary, amounting to 5.99 million shares with the par value of Baht 10 per share, amounting to Baht 59.90 million.

On 13 February 2023, the Company paid for the newly issued ordinary shares of TPI Polene Bio Organics Company Limited, a subsidiary, amounting to 2 million shares with the par value of Baht 100 per share, amounting to Baht 200 million.

On 10 March 2023, the Company paid for the newly issued ordinary shares of TPI Bio Pharmaceuticals Company Limited, a subsidiary, amounting to 9 million shares with the par value of Baht 10 per share, amounting to Baht 90 million. On 19 December 2023, the Company paid for the remaining called-up ordinary shares amounting to 0.90 million shares with the par value of Baht 5 per share, amounting to Baht 4.50 million and paid for the newly issued ordinary shares amounting to 11 million shares with the par value of Baht 10 per share, amounting to Baht 110 million.

On 19 December 2023, the Company paid for the newly issued ordinary shares of TPI All Seasons Company Limited, a subsidiary, amounting to 32 million shares with the par value of Baht 10 per share, amounting to Baht 320 million.

On 19 December 2023, the Company paid for the newly issued ordinary shares of TPI Commercial Company Limited, a subsidiary, amounting to 4 million shares with the par value of Baht 10 per share, amounting to Baht 40 million.

On 19 December 2023, the Company paid for the remaining called-up ordinary shares of TPI Healthcare Company Limited, a subsidiary, amounting to 0.99 million shares with the par value of Baht 5 per share, amounting to Baht 4.95 million and paid for the newly issued ordinary shares amounting to 5 million shares with the par value of Baht 10 per share, amounting to Baht 50 million.

On 19 December 2023, the Company paid for the newly issued ordinary shares of Master Achieve (Thailand) Company Limited, a subsidiary, amounting to 0.80 million shares with the par value of Baht 100 per share, amounting to Baht 80 million.

Investments in subsidiaries as at 31 December 2023 and 2022, dividend income from those investments for the years then ended, were as follows:

Separate financial statements										
Type of business	Ownership interest	Paid-up capital		Cost		At equity method		Dividend Income for the year		
		2023	2022	2023	2022	2023	2022	2023	2022	
		(in thousand Baht)								
Direct subsidiaries										
TPI Concrete Co., Ltd.	Manufacturing and distributing ready mixed concrete	99.99	99.99	3,700,000	3,700,000	3,699,999	3,699,999	2,950,662	3,029,428	-
TPI Polene Power Public Co., Ltd.	Distributing gasoline, diesel and natural gas / Manufacturing and distributing electricity and refuse derived fuel (RDF) and organics waste	70.24	70.24	8,400,000	8,400,000	5,899,999	5,899,999	22,836,812	21,686,754	1,416,000
TPI All Seasons Co., Ltd.	Manufacturing and distributing melt sheets	99.99	99.99	770,000	450,000	770,000	450,000	733,303	400,143	-
TPI Polene Bio Organics Co., Ltd.	Manufacturing and distributing organic fertilizer	99.99	99.99	3,500,000	3,300,000	2,854,400	2,654,400	1,722,133	1,555,664	-
Thai Propoxide Co., Ltd.	Manufacturing electricity (dormant)	99.99	99.99	250	250	250	250	-	-	-
Thai Nitrate Co., Ltd.	Manufacturing and distributing nitric acids and ammonium nitrate	99.99	99.99	468,750	468,750	784,409	784,409	2,434,374	1,903,853	299,999
TPI Healthcare Co., Ltd.	Manufacturing and distributing products for humans	99.99	99.99	60,000	5,050	59,900	4,950	63,562	8,626	-
TPI Commercial Co., Ltd.	Retailing business	99.99	99.94	100,000	100	99,900	-	107,146	6,000	-

Direct subsidiaries (continue)										
TPI Service Co., Ltd.										
Master Achieve (Thailand) Co., Ltd.	95.10	95.10	4,600	4,600	4,600	4,457	4,457	15,362	12,151	-
	99.99	99.99	180,000	100,000	179,931	99,931	99,931	164,158	95,573	-
TPI Bio Pharmaceuticals Co., Ltd.	99.99	99.99	210,000	5,500	210,147	5,647	205,210	9,198		-
Indirect subsidiaries										
Mondo Thai Co., Ltd.	83.27	83.27	36,000	36,000	10,350	10,350	9,743	9,623		-
Polene Silicon Co., Ltd.	99.98	99.93	10,000	10,000	-	-	18,361	19,562		-
TPI Biomass Power Co., Ltd.	70.23	70.23	187,500	187,500	-	-	-	-		-
TPI Polene Power (International) Co., Ltd.	70.23	70.23	100,000	100,000	-	-	-	-		-
TPI Deep Sea Port Co., Ltd.	70.23	70.23	25,000	25,000	-	-	-	-		-

Indirect subsidiaries (continue)

TPI Distribution Center Co., Ltd.	Operate business about collecting, storing, and distributing products to consumer (dormant)	70.23	70.23	1,000	1,000	-	-	-	-
TPI Smart City Co., Ltd.	Operate all types of communities and industrial estate (dormant)	70.22	70.22	1,000	1,000	-	-	-	-
TPI Solar Power Co., Ltd.	Generate electricity from solar energy (dormant)	70.23	70.22	100,000	1,000	-	-	-	-
TPI Wind Power Co., Ltd.	Generate electricity from wind energy (dormant)	70.22	70.22	1,000	1,000	-	-	-	-
Total		14,573,742	13,614,392	31,260,826	28,736,575	1,715,999	1,526,562		

10 Non-controlling interests

The following table summarises the information relating to each of the Group's subsidiaries that has a material non-controlling interest, before any intra-group eliminations:

<i>As at 31 December</i>	TPI Polene Power Public Co., Ltd.	
	2023	2022
	<i>(in thousand Baht)</i>	
Non-controlling interest percentage	29.75%	29.75%
Current assets	8,482,294	7,001,514
Non-current assets	51,284,881	43,577,859
Current liabilities	(6,791,053)	(5,115,055)
Non-current liabilities	(19,774,533)	(13,899,890)
Net assets	33,201,589	31,564,428
Carrying amount of non-controlling interest	9,877,473	9,390,417
Other individually immaterial subsidiaries	13,227	12,679
Total	9,890,700	9,403,096
<i>For the year ended 31 December</i>	TPI Polene Power Public Co., Ltd.	
	2023	2022
	<i>(in thousand Baht)</i>	
Revenue	11,330,528	10,625,495
Profit	3,653,161	2,812,784
Other comprehensive income	-	(177)
Total comprehensive income	3,653,161	2,812,607
Total comprehensive income allocated to non-controlling interest	1,086,815	836,751
Other individually immaterial subsidiaries	460	418
Total	1,087,275	837,169
Dividends to non-controlling interest	(599,671)	(624,657)
Cash flows from operating activities	1,514,470	1,608,807
Cash flows from investing activities	(2,380,411)	(679,687)
Cash flows from financing activities	845,785	(609,698)
Others	(2)	(49)

11 Long-term investments in related parties

Consolidated and Separate financial statements						
	Type of business	Relationship	Ownership interest		Paid-up capital	
			2023	2022	2023	2022
			(in thousand Baht)			
Related parties						
Pomchai Enterprise Co., Ltd.	Real estate and service rental	Shareholder	0.65	0.65	4,599,920	45,653
Total					45,653	45,653

12 Investment properties

	Consolidated financial statements			Separate financial statements	
	Land	Buildings	Total	Land	Total
	<i>(in thousand Baht)</i>				
Cost					
At 1 January 2022	585,484	4,500	589,984	130,516	130,516
Transfers	(30,436)	30,436	-	-	-
Transfer from property, plant and equipment	-	3,575	3,575	-	-
Transfer to property, plant and equipment	(56,472)	-	(56,472)	(56,472)	(56,472)
At 31 December 2022 and 1 January 2023	498,576	38,511	537,087	74,044	74,044
At 31 December 2023	498,576	38,511	537,087	74,044	74,044
Depreciation and impairment losses					
At 1 January 2022	-	4,244	4,244	-	-
Depreciation charge for the year	-	656	656	-	-
At 31 December 2022 and 1 January 2023	-	4,900	4,900	-	-
Depreciation charge for the year	-	1,006	1,006	-	-
At 31 December 2023	-	5,906	5,906	-	-
Net book value					
At 31 December 2022	498,576	33,611	532,187	74,044	74,044
At 31 December 2023	498,576	32,605	531,181	74,044	74,044

The fair value of investment properties of the Group and the Company as at 31 December 2023 of Baht 1,105 million and Baht 83 million, respectively (2022: Baht 967 million and Baht 74 million, respectively) was determined by independent professional valuers, at open market values on an existing use basis. The fair value of measurement for investment property has been categorised as a Level 3 fair value.

13 Property, plant and equipment

Consolidated financial statements

	Land and land improvement	Buildings and structures	Machinery and equipment for production	Tools and factory equipment	Office furniture, fixture and equipment <i>(in thousand Baht)</i>	Vehicle	Major spare parts	Assets under construction and installation	Total
Cost									
At 1 January 2022	14,635,999	18,487,779	89,207,142	9,503,383	728,985	2,371,213	371,195	8,302,196	143,607,892
Additions	780,613	3,101	116,026	390,762	37,622	7,163	40,503	6,426,589	7,802,379
Transfers - net	3,189	224,038	3,450,377	16,713	10,148	1,839	(1,780)	(3,704,524)	-
Transfer from investment property	56,472	-	-	-	-	-	-	-	56,472
Transfer to investment property	-	(3,575)	-	-	-	-	-	-	(3,575)
Transfer to assets held for sale	-	-	(1,013,650)	-	-	-	-	-	(1,013,650)
Disposals / write - off	-	(36,366)	(271,502)	(8,955)	(2,873)	(62,308)	-	(188)	(382,192)
At 31 December 2022 and 1 January 2023	15,476,273	18,674,977	91,488,393	9,901,903	773,882	2,317,907	409,918	11,024,073	150,067,326
Additions	301,536	136,007	81,039	510,183	38,727	65,988	82,931	10,206,476	11,422,887
Transfers - net	81,983	154,514	4,743,081	192,654	3,751	5,455	(950)	(4,905,327)	45,161
Disposals / write - off	-	(12,528)	(21,122)	(3,105)	(7,854)	(12,390)	-	-	(56,999)
At 31 December 2023	15,859,792	18,952,970	96,291,391	10,601,635	808,506	2,376,960	491,899	16,325,222	161,708,375

Consolidated financial statements

Depreciation and impairment losses

At 1 January 2022	812	7,587,959	30,760,159	6,362,384	574,766	1,951,228	-	4,532	47,241,840
Depreciation charge for the year	284	509,999	2,031,057	422,586	41,081	54,477	-	-	3,059,484
Transfer to assets held for sale	-	-	(548,312)	-	-	-	-	-	(548,312)
Disposals / write - off	-	(22,253)	(66,611)	(5,521)	(2,839)	(62,202)	-	-	(159,426)
At 31 December 2022 and 1 January 2023	1,096	8,075,705	32,176,293	6,779,449	613,008	1,943,503	-	4,532	49,593,586
Depreciation charge for the year	468	402,064	2,064,991	432,302	44,608	53,752	-	-	2,998,185
Disposals / write - off	-	(9,222)	(10,294)	(3,040)	(7,814)	(9,878)	-	-	40,248
At 31 December 2023	1,564	8,468,547	34,230,990	7,208,711	649,802	1,987,377	-	4,532	52,551,523
Net book value									
At 31 December 2022	15,475,177	10,599,272	59,312,100	3,122,454	160,874	374,404	409,918	11,019,541	100,473,740
At 31 December 2023	15,858,228	10,484,423	62,060,401	3,392,924	158,704	389,583	491,899	16,320,690	109,156,852

Separate financial statements

	Land and land improvement	Buildings and structures	Machinery and equipment for production	Tools and factory equipment	Office furniture, fixture and equipment <i>(in thousand Baht)</i>	Vehicle	Major spare parts	Assets under construction and installation	Total
Cost									
At 1 January 2022	3,095,438	15,859,187	55,548,359	9,073,270	577,609	2,334,330	272,539	5,755,824	92,516,556
Additions	54,634	-	-	343,726	23,825	7,416	32,735	2,813,996	3,276,332
Transfers – net	-	197,889	3,040,757	676	9,967	1,661	-	(3,250,950)	-
Transfer from investment property	56,472	-	-	-	-	-	-	-	56,472
Transfer to asset held for sale	-	-	(448,402)	-	-	-	-	-	(448,402)
Disposals	-	-	(13,627)	(6,547)	(2,309)	(65,093)	-	(573,097)	(660,673)
At 31 December 2022 and 1 January 2023	3,206,544	16,057,076	58,127,087	9,411,125	609,092	2,278,314	305,274	4,745,773	94,740,285
Additions	18,741	129,050	73,866	427,139	25,921	53,530	73,903	3,109,051	3,911,201
Transfers - net	-	36,910	4,022,867	183,373	1,967	5,455	-	(3,990,328)	260,244
Disposals	-	-	(9,211)	(1,763)	(4,643)	(12,390)	-	-	(28,007)
At 31 December 2023	3,225,285	16,223,036	62,214,609	10,019,874	632,337	2,324,909	379,177	3,864,496	98,883,723

Separate financial statements

	Land and land improvement	Buildings and structures	Machinery and equipment for production	Tools and factory equipment	Office furniture, fixture and equipment <i>(in thousand Baht)</i>	Vehicle	Major spare parts	Assets under construction and installation	Total
Depreciation and impairment losses									
At 1 January 2022	-	6,724,936	22,480,975	6,128,285	470,170	1,909,797	-	-	37,714,163
Depreciation charge for the year	-	411,144	955,833	391,051	29,520	55,266	-	-	1,842,814
Transfer to asset held for sale	-	-	(188,158)	-	-	-	-	-	(188,158)
Disposals	-	-	(6,930)	(3,156)	(2,274)	(64,986)	-	-	(77,346)
At 31 December 2022 and 1 January 2023	-	7,136,080	23,241,720	6,516,180	497,416	1,900,077	-	-	39,291,473
Depreciation charge for the year	-	304,808	985,719	394,406	31,393	54,357	-	-	1,770,743
Disposals	-	-	(3,332)	(1,737)	(4,577)	(9,879)	-	-	(19,525)
At 31 December 2023	-	7,440,888	24,224,167	6,908,849	524,232	1,944,555	-	-	41,042,691
Net book value									
At 31 December 2022	3,206,544	8,920,996	34,885,367	2,894,945	111,676	378,237	305,274	4,745,773	55,448,812
At 31 December 2023	3,225,285	8,782,148	37,990,442	3,111,025	108,105	380,354	379,177	3,864,496	57,841,032

Security

At 31 December 2023 the Company's land, buildings, machinery and equipment with a net book value of Baht 5,459 million. (2022: Baht 5,740 million) are mortgaged or pledged as collateral for credit limit.

Capitalised borrowing costs relating to the acquisition of the construction of new factory of the Group and the Company as at 31 December 2023 are Baht 823 million and Baht 92 million, respectively (2022: Baht 624 million and Baht 89 million, respectively), with capitalisation in the consolidated and separate financial statements of 1.59% - 4.90% (2022: 1.59% - 4.90%).

14 Lease

Right-of-use assets At 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Land	160,497	180,425	47,333	48,708
Buildings	206,383	240,050	154,246	185,286
Equipment	4,897	5,915	4,897	5,915
Vehicles	116,323	141,499	86,833	107,513
Total	488,100	567,889	293,309	347,422

In 2023, additions to the right-of-use assets of the Group and the Company were Baht 105 million and Baht 74 million, respectively (2022: Baht 106 million and Baht 117 million, respectively).

The Group lease 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

The Group has extension options on property leases exercisable up to one year before the end of the contract period. The Group assesses at lease commencement date whether it is reasonably certain to exercise the extension options and will regularly reassess.

For the year ended 31 December	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Amounts recognised in profit or loss				
Depreciation of right-of-use assets:				
- Land	47,578	50,688	9,233	6,062
- Buildings	53,274	51,833	46,156	47,720
- Equipment	7,288	8,956	6,579	8,956
- Vehicles	78,312	79,626	65,818	66,381
Interest on lease liabilities	8,407	23,633	992	15,264
Expenses relating to short-term leases	36,340	42,943	24,348	30,130

In 2023, total cash outflow for leases of the Group and the Company were Baht 218 million and Baht 143 million, respectively (2022: Baht 205.05 million and Baht 132.69 million, respectively).

15 Intangible assets

	Consolidated financial statements				
	Cost of raw material resources and cost of concessions	Software licenses	Development assets (in thousand Baht)	Others	Total
Cost					
At 1 January 2022	1,015,221	59,383	103,524	259,750	1,437,878
Additions	32,938	-	57,721	4,712	95,371
Transfers	225,573	-	-	(225,573)	-
Disposals	(24,687)	-	-	-	(24,687)
At 31 December 2022 and 1 January 2023					
Additions	1,249,045	59,383	161,245	38,889	1,508,562
Transfers	3,665,359	2,928	26,809	500	3,695,596
At 31 December 2023	26,572	-	-	(26,572)	-
	4,940,976	62,311	188,054	12,817	5,204,158
Amortisation					
At 1 January 2022	684,389	50,648	42,686	-	777,723
Amortisation for the year	29,889	1,734	9,607	-	41,230
Disposals	(23,955)	-	-	-	(23,955)
At 31 December 2022 and 1 January 2023					
Amortisation for the year	690,323	52,382	52,293	-	794,998
At 31 December 2023	113,928	1,734	14,509	-	130,171
	804,251	54,116	66,802	-	925,169
Net book value					
At 31 December 2022	558,722	7,001	108,952	38,889	713,564
At 31 December 2023	4,136,725	8,195	121,252	12,817	4,278,989

Separate financial statements

	Cost of raw material resources and cost of concessions	Software licenses	Development assets (in thousand Baht)	Others	Total
Cost					
At 1 January 2022	1,015,221	59,383	100,865	259,750	1,435,219
Additions	32,938	-	56,905	4,712	94,555
Transfers	225,573	-	-	(225,573)	-
Disposals	(24,687)	-	-	-	(24,687)
At 31 December 2022					
and 1 January 2023	1,249,045	59,383	157,770	38,889	1,505,087
Additions	3,665,359	2,928	26,809	-	3,695,096
Transfers	26,572	-	-	(26,572)	-
Disposals	-	-	(4,728)	-	(4,728)
At 31 December 2023	4,940,976	62,311	179,851	12,317	5,195,455
Amortisation					
At 1 January 2022	684,389	50,648	42,470	-	777,507
Amortisation for the year	29,889	1,734	9,277	-	40,900
Disposals	(23,955)	-	-	-	(23,955)
At 31 December 2022					
and 1 January 2023	690,323	52,382	51,747	-	794,452
Amortisation for the year	113,928	1,734	13,686	-	129,348
At 31 December 2023	804,251	54,116	65,433	-	923,800
Net book value					
At 31 December 2022	558,722	7,001	106,023	38,889	710,635
At 31 December 2023	4,136,725	8,195	114,418	12,317	4,271,655

16 Interest-bearing liabilities

Consolidated financial statements						
	Secured	2023 Unsecured	Total (in thousand Baht)	Secured	2022 Unsecured	Total
Current						
Short-term loans from financial institution	-	9,407,680	9,407,680	-	4,355,338	4,355,338
Current portion of lease liabilities	-	134,989	134,989	-	151,050	151,050
Current portion of debentures	-	15,431,900	15,431,900	-	12,843,200	12,843,200
Non-current						
Lease liabilities	-	204,015	204,015	-	280,479	280,479
Debentures	-	59,965,700	59,965,700	-	53,742,400	53,742,400
Total interest-bearing liabilities	-	85,144,284	85,144,284	-	71,372,467	71,372,467
Separate financial statements						
	Secured	2023 Unsecured	Total (in thousand Baht)	Secured	2022 Unsecured	Total
Current						
Short-term loans from financial institution	-	9,407,680	9,407,680	-	4,355,338	4,355,338
Current portion of lease liabilities	-	89,723	89,723	-	102,038	102,038
Current portion of debentures	-	11,642,300	11,642,300	-	10,023,200	10,023,200
Non-current						
Lease liabilities	-	101,084	101,084	-	144,490	144,490
Debentures	-	42,547,900	42,547,900	-	41,255,000	41,255,000
Total interest-bearing liabilities	-	63,788,687	63,788,687	-	55,880,066	55,880,066

The periods to maturity of interest-bearing liabilities as at 31 December were as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	(in thousand Baht)			
Within 1 year	24,974,569	17,349,588	21,139,703	14,480,576
1-5 years	60,082,158	53,919,850	42,617,936	41,366,921
After 5 years	87,557	103,029	31,048	32,569
Total	85,144,284	71,372,467	63,788,687	55,880,066

Secured interest-bearing liabilities as at 31 December were secured on the following net book value assets:

<i>Assets pledged as security for liabilities as at 31 December</i>	<i>Note</i>	Consolidated and Separate financial statements	
		2023	2022
		<i>(in thousand Baht)</i>	
Land and buildings		1,096,978	1,220,231
Machinery and equipment		4,361,797	4,519,680
Total	<i>13</i>	<u>5,458,775</u>	<u>5,739,911</u>

As at 31 December 2023 the Group and the Company had unutilised credit facilities totalling Baht 153 million and Baht 108 million, respectively (2022: Baht 153 million and Baht 108 million, respectively).

Debentures

As at 31 December 2023, the Group and the Company had the unsecured, unsubordinated debentures in registered form with debentures holders' representative, payable quarterly totalling Baht 75,398 million and Baht 54,190 million, respectively (2022: Baht 66,586 million and Baht 51,278 million, respectively) as follows:

Debentures no.	Consolidated financial statements							Interest rate (% p.a.)	Term	Maturity date
	The period to maturity within one year			The period to maturity over one year			Total			
	31 December 2023	31 December 2022	31 December 2023	31 December 2022	31 December 2023	31 December 2022				
	(in thousand Baht)									
1/2016 tranche 3	-	2,640,500	-	-	-	2,640,500	4.80	7 years	1 April 2023	
3/2019 tranche 1	-	2,820,000	-	-	-	2,820,000	3.90	3 years 6 months	11 January 2023	
3/2019 tranche 2	-	-	2,888,000	2,888,000	2,888,000	2,888,000	4.90	5 years 6 months	11 January 2025	
1/2020	-	4,382,700	-	-	-	4,382,700	3.50	3 years	16 January 2023	
2/2020	4,127,000	-	-	4,127,000	4,127,000	4,127,000	4.25	3 years 9 months	2 April 2024	
1/2020	3,789,600	-	-	3,789,600	3,789,600	3,789,600	3.90	3 years 11 months	19 July 2024	
3/2020 tranche 1	3,515,300	-	-	3,515,300	3,515,300	3,515,300	4.25	4 years	5 November 2024	
3/2020 tranche 2	-	-	3,410,700	3,410,700	3,410,700	3,410,700	4.50	5 years	5 November 2025	
1/2021	-	-	4,000,000	4,000,000	4,000,000	4,000,000	4.15	4 years 3 months	4 June 2025	
2/2021	4,000,000	-	-	4,000,000	4,000,000	4,000,000	3.50	2 years 9 months	30 January 2024	
1/2021	-	3,000,000	-	-	-	3,000,000	3.00	2 years 6 months	10 December 2023	
3/2021 tranche 1	-	-	3,581,200	3,581,200	3,581,200	3,581,200	3.55	4 years 6 months	8 April 2026	
3/2021 tranche 2	-	-	4,000,000	4,000,000	4,000,000	4,000,000	3.70	4 years 11 months	8 September 2026	
2/2021	-	-	4,523,600	4,523,600	4,523,600	4,523,600	3.55	4 years 3 months	12 February 2026	

Consolidated financial statements

Debentures no.	The period to maturity within one year		The period to maturity over one year		Total		Interest rate (% p.a.)	Term	Maturity date
	31 December 2023	31 December 2022	31 December 2023	31 December 2022	31 December 2023	31 December 2022			
	(in thousand Baht)								
1/2022	-	-	3,745,000	3,745,000	3,745,000	3,745,000	4.10	5 years	30 June 2027
1/2022	-	-	4,593,000	4,593,000	4,593,000	4,593,000	4.10	5 years	11 August 2027
2/2022 tranche 1	-	-	2,532,800	2,532,800	2,532,800	2,532,800	4.25	4 years	15 November 2026
2/2022 tranche 2	-	-	2,042,200	2,042,200	2,042,200	2,042,200	4.32	4 years 3 months	15 February 2027
2/2022 tranche 3	-	-	2,994,000	2,994,000	2,994,000	2,994,000	4.50	5 years	15 November 2027
1/2023 tranche 1	-	-	2,860,000	-	2,860,000	-	4.15	3 years 6 months	18 July 2026
1/2023 tranche 2	-	-	2,860,000	-	2,860,000	-	4.60	5 years	18 January 2028
1/2023	-	-	5,000,000	-	5,000,000	-	3.90	5 years	30 March 2028
2/2023	-	-	3,000,000	-	3,000,000	-	4.10	4 years 9 months	13 August 2028
2/2023 tranche 1	-	-	3,215,800	-	3,215,800	-	4.10	3 years 4 months	15 April 2027
2/2023 tranche 2	-	-	4,719,400	-	4,719,400	-	4.40	4 years 6 months	15 June 2028
Total	15,431,900	12,843,200	59,965,700	53,742,400	75,397,600	66,585,600			

Separate financial statements

Debentures no.	The period to maturity within one year		The period to maturity over one year		Total	Interest rate (% p.a.)	Term	Maturity date
	31 December 2023	31 December 2022	31 December 2023	31 December 2022				
			(in thousand Baht)					
1/2016 tranche 3	-	2,640,500	-	-	2,640,500	4.80	7 years	1 April 2023
3/2019 tranche 1	-	3,000,000	-	-	3,000,000	3.90	3 years 6 months	11 January 2023
3/2019 tranche 2	-	-	2,888,000	2,888,000	2,888,000	4.90	5 years 6 months	11 January 2025
1/2020	-	4,382,700	-	-	4,382,700	3.50	3 years	16 January 2023
2/2020	4,127,000	-	-	4,127,000	4,127,000	4.25	3 years 9 months	2 April 2024
3/2020 tranche 1	3,515,300	-	-	3,515,300	3,515,300	4.25	4 years	5 November 2024
3/2020 tranche 2	-	-	3,410,700	3,410,700	3,410,700	4.50	5 years	5 November 2025
1/2021	-	-	4,000,000	4,000,000	4,000,000	4.15	4 years 3 months	4 June 2025
2/2021	4,000,000	-	-	4,000,000	4,000,000	3.50	2 years 9 months	30 January 2024
3/2021 tranche 1	-	-	4,000,000	4,000,000	4,000,000	3.55	4 years 6 months	8 April 2026
3/2021 tranche 2	-	-	4,000,000	4,000,000	4,000,000	3.70	4 years 11 months	8 September 2026
1/2022	-	-	3,745,000	3,745,000	3,745,000	4.10	5 years	30 June 2027
2/2022 tranche 1	-	-	2,532,800	2,532,800	2,532,800	4.25	4 years	15 November 2026
2/2022 tranche 2	-	-	2,042,200	2,042,200	2,042,200	4.32	4 years 3 months	15 February 2027
2/2022 tranche 3	-	-	2,994,000	2,994,000	2,994,000	4.50	5 years	15 November 2027
1/2023	-	-	5,000,000	-	5,000,000	3.90	5 years	30 March 2028
2/2023 tranche 1	-	-	3,215,800	-	3,215,800	4.10	3 years 4 months	15 April 2027
2/2023 tranche 2	-	-	4,719,400	-	4,719,400	4.40	4 years 6 months	15 June 2028
Total	11,642,300	10,023,200	42,547,900	41,255,000	54,190,200			
					51,278,200			

17 Non-current provisions for employee benefits

<i>At 31 December</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Post-employment benefits				
Defined benefit plan	<u>1,925,018</u>	<u>2,041,884</u>	<u>1,609,963</u>	<u>1,709,848</u>

Defined benefit plan

The Group and the Company operate a defined benefit plan based on the requirement of Thai Labour Protection Act B.E. 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service. The defined benefit plans expose the Group to actuarial risks, such as longevity risk, interest rate risk and market (investment) risk.

<i>Present value of the defined benefit obligations</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
At 1 January	2,041,884	2,257,704	1,709,848	1,919,174
Recognised in profit or loss:				
Current service cost and interest on obligation	10,660	3,829	-	-
Loss from benefit payments	1,267	-	-	-
Recognised in other comprehensive income:				
Actuarial gain	-	(136,275)	-	(132,446)
Other				
Benefit paid	(128,793)	(83,374)	(99,885)	(76,880)
At 31 December	<u>1,925,018</u>	<u>2,041,884</u>	<u>1,609,963</u>	<u>1,709,848</u>

<i>Principal actuarial assumptions</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(%)</i>			
Discount rate	3.08 - 3.76	3.33 - 3.78	3.08 - 3.49	3.33 - 3.72
Future salary growth	2.50 - 4.50	2.50 - 4.50	2.50	3.50

Assumptions regarding future mortality have been based on published statistics and mortality tables.

At 31 December 2023, the weighted-average duration of the defined benefit obligation was 22 years (2022: 23 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.

<i>Effect to the defined benefit obligation At 31 December</i>	Consolidated financial statements			
	1% increase in assumption		1% decrease in assumption	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Discount rate	(150,332)	(161,993)	173,851	186,597
Future salary growth	149,201	160,651	(131,747)	(142,780)
<i>Effect to the defined benefit obligation At 31 December</i>	Separate financial statements			
	1% increase in assumption		1% decrease in assumption	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Discount rate	(118,290)	(129,445)	136,603	150,151
Future salary growth	117,308	129,342	(103,739)	(114,040)

18 Share capital

	Par value per share (in Baht)	Consolidated and Separate financial statements			
		2023		2022	
		Number	Amount (thousand shares / in thousand Baht)	Number	Amount
Authorised					
At 1 January	1	23,560,235	23,560,235	23,751,500	23,751,500
- ordinary shares					
Reduction of shares	1	-	-	(191,265)	(191,265)
At 31 December					
- ordinary shares	1	23,560,235	23,560,235	23,560,235	23,560,235
Issued and paid-up					
At 1 January	1	18,935,235	18,935,235	19,126,500	19,126,500
- ordinary shares					
Reduction of shares	1	-	-	(191,265)	(191,265)
At 31 December					
- ordinary shares	1	18,935,235	18,935,235	18,935,235	18,935,235

19 Treasury shares

At the Board of Directors meeting held on 23 December 2021, it approved the Company's share repurchase for financial management purposes scheme, the maximum amount for the share repurchase is not greater than Baht 450 million, number of shares repurchased 191.27 million shares, at par value Baht 1 per share, or representing 1% of the total paid-up capital. The repurchase period has started from 10 January 2022 to 10 April 2022.

On 21 January 2022, the Company has completely repurchased the shares under the program of 191.27 million shares at a total cost of Baht 365.55 million.

On 27 July 2022, the Company registered to decrease capital totalling 191.27 million shares, at par value Baht 1 per share, totalling Baht 191.27 million and registered with the Department of Business Development, the Ministry of Commerce and write-off all treasury shares and treasury shares reserve from equity.

20 Reserves

Reserves comprise:

Appropriations of profit and retained earnings

Legal reserve

Section 116 of the Public Companies Act B.E. 2535 requires that a public company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward, to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

Treasury shares reserve

The treasury shares reserve represents the amount appropriated from retained earnings equal to the cost of the Company's own shares held by the Company. The treasury shares reserve is not available for dividend distribution.

21 Segment information and disaggregation of revenue

Management determined that the Group has four reportable segments which are the Group's strategic divisions for different products and services, and are managed separately because they require different technology and marketing strategies. The following summary describes the operations in each of the Group's reportable segments.

- Construction Materials
- Petrochemical & Chemicals
- Energy & Utilities
- Agriculture

Each segment's 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

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	Revenue from external customers		Inter-segment revenue		Total reportable segment revenue		Reportable segment profit (loss) before interest, tax, depreciation, and amortisation	
	2023	2022	2023	2022	2023	2022	2023	2022
	<i>(in thousand Baht)</i>							
Construction Materials	24,092,370	22,999,991	5,122,224	6,028,419	29,214,594	29,028,410	2,604,275	2,978,515
Petrochemical & Chemicals	10,542,023	16,766,659	433,945	4,757,551	10,975,968	21,524,210	2,634,736	6,455,803
Energy & Utilities	8,055,942	8,234,425	2,933,873	1,965,549	10,989,815	10,199,974	4,821,561	3,913,956
Agriculture	117,121	131,924	100,377	149,418	217,498	281,342	(6,471)	20,098
Total	42,807,456	48,132,999	8,590,419	12,900,937	51,397,875	61,033,936	10,054,101	13,368,372
Other gain (loss)							829	3,058
							10,054,930	13,371,430
Finance costs							(2,075,958)	(1,934,590)
Depreciation and amortisation							(3,315,814)	(3,292,473)
Share of profit (loss) of associates and joint venture accounted for using equity method							26,975	21,280
Elimination of inter-segment (profit) loss							(92,581)	(155,043)
Profit before income tax expense for the year							4,597,552	8,010,604

Timing of reportable segment revenue recognition of the Group is at a point in time.

<i>For the year ended 31 December</i>	Consolidated financial statements	
	Reportable segment	
	profit (loss) before tax	
	2023	2022
	<i>(in thousand Baht)</i>	
Construction Materials	(262,462)	(312,106)
Petrochemical & Chemicals	2,430,080	6,230,390
Energy & Utilities	3,670,108	2,826,835
Agriculture	(42,439)	(28,084)
Total	5,795,287	8,717,035
Other gains (losses)	(2,994)	1,926
Finance costs for investment	(1,147,280)	(620,647)
Elimination of inter-segment (profit) loss	(47,461)	(87,710)
Profit (loss) before income tax expense for the year	4,597,552	8,010,604

(b) Reportable segment financial position

	Consolidated financial statements	
	Segment assets	
	2023	2022
	<i>(in thousand Baht)</i>	
Construction Materials	94,628,314	84,542,431
Petrochemical & Chemicals	10,374,972	10,452,895
Energy & Utilities	54,545,705	46,571,295
Agriculture	2,104,168	2,108,930
Others	460,437	587,747
	162,113,596	144,263,298
Unallocated assets	5,280,806	4,286,799
Total	167,394,402	148,550,097
Elimination of inter-segment assets	(3,979,724)	(4,050,669)
Total assets	163,414,678	144,499,428

(c) Disaggregation of revenue

	Separate financial statement	
	Revenue from sale of goods	
	2023	2022
	<i>(in thousand Baht)</i>	
Construction Materials	23,984,697	23,330,546
Petrochemical & Chemicals	8,116,075	14,388,831
Total	32,100,772	37,719,377

Timing of revenue recognition of the Company is at a point in time.

Geographical segments

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment assets are based on the geographical location of the assets.

<i>Geographical information</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Thailand	31,148,604	29,301,215	21,332,762	24,889,630
China	6,167,132	9,348,358	6,167,132	6,061,270
Bangladesh	1,976,315	548,642	1,976,315	274,799
Australia	1,125,613	912,155	563,348	424,834
India	390,726	1,579,077	363,660	1,145,110
Others	1,999,066	6,443,552	1,697,555	5,348,568
Total	42,807,456	48,132,999	32,100,772	37,719,377

The Group is managed and operates principally in Thailand.

(d) Disaggregation of finance cost

	Separate financial statements	
	Finance cost	
	2023	2022
	<i>(in thousand Baht)</i>	
Construction Materials	759,331	1,175,785
Petrochemical & Chemicals	74,056	94,109
Investing	1,147,280	620,647
Total	1,980,667	1,890,541

22 Employee benefit expenses

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Management				
Wages and salaries	390,567	349,848	301,556	276,640
Defined benefit plan	8,481	4,001	-	-
Others	75,054	61,581	46,449	34,083
	474,102	415,430	348,005	310,723
Other employees				
Wages and salaries	6,429,638	5,958,508	4,939,770	4,628,090
Defined benefit plan	7,840	4,303	-	-
Others	388,107	370,422	274,242	271,119
	6,825,585	6,333,233	5,214,012	4,899,209
Total	7,299,687	6,748,663	5,562,017	5,209,932

Defined contribution plans

The defined contribution plans comprise provident funds established by some companies of the Group for its employees. Membership to the funds is on a voluntary basis. Contributions are made monthly by the employees at rates ranging from 3% to 10% of their basic salaries and by the Company at rates ranging from 3% to 10% 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.

23 Expenses by nature

The statements of comprehensive income include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>Included in cost of sales of goods:</i>				
Changes in inventories of finished goods and work in progress	348,708	(1,868,651)	159,724	(1,602,960)
Raw materials and consumables used	17,930,296	19,445,547	8,617,476	9,880,376
Reversal of loss on decline in value of inventories	(22,923)	(16,915)	(21,640)	(6,129)
Depreciation of plant and equipment	2,886,076	2,916,137	1,609,852	1,663,852
Amortisation of intangible assets	94,292	6,411	94,292	6,411
<i>Included in distribution costs:</i>				
Depreciation of plant and equipment	162,712	164,275	172,748	185,720
Amortisation of intangible assets	14,509	9,607	13,686	9,277
<i>Included in administrative expenses:</i>				
Depreciation of plant and equipment	136,854	170,831	115,929	122,361
Amortisation of intangible assets	21,370	25,212	21,370	25,212

24 Finance costs

		Consolidated		Separate	
		financial statements		financial statements	
	Note	2023	2022	2023	2022
		(in thousand Baht)			
Interest expense :					
Loans from related party		-	-	3,645	3,168
Loans from financial institutions		162,885	95,462	162,885	95,462
Debentures		2,727,149	2,435,727	1,904,868	1,865,181
Leases	15	8,407	23,633	992	15,264
Total interest expense		2,898,441	2,554,822	2,072,390	1,979,075
Others		165	4,126	-	-
		2,898,606	2,558,948	2,072,390	1,979,075
Less: amounts included in the cost of qualifying assets:					
- Construction contracts work in progress		(822,648)	(624,358)	(91,723)	(88,534)
Net		2,075,958	1,934,590	1,980,667	1,890,541

25 Income tax

<i>Income tax recognised in profit or loss</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Current tax expense				
Current year	186,707	172,388	-	-
Adjustment for prior years	198	2,530	-	-
	<u>186,905</u>	<u>174,918</u>	<u>-</u>	<u>-</u>
Deferred tax expense				
Movements in temporary differences	105,509	(9,090)	70,578	(20,361)
Total tax (income) expense	<u>292,414</u>	<u>165,828</u>	<u>70,578</u>	<u>(20,361)</u>

Consolidated financial statements						
<i>Income tax</i>	Before tax	2023	Net of tax	Before tax	2022	Net of tax
		Tax (expense) benefit			Tax (expense) benefit	
<i>Recognised in other comprehensive income</i>						
Foreign currency translation differences for foreign operations	-	-	-	(177)	-	(177)
Financial assets at FVOCI	(46)	12	(34)	(47)	10	(37)
Defined benefit plan actuarial gains	-	-	-	136,275	(26,489)	109,786
Share of other comprehensive income (expense) of associates	259	-	259	(7,588)	-	(7,588)
Total	<u>213</u>	<u>12</u>	<u>225</u>	<u>128,463</u>	<u>(26,479)</u>	<u>101,984</u>

Separate financial statements						
	Before tax	2023 Tax (expense) benefit	Net of tax (in thousand Baht)	Before tax	2022 Tax (expense) benefit	Net of tax
Income tax						
Recognised in other comprehensive income						
Financial assets at FVOCI	(61)	12	(49)	(50)	10	(40)
Defined benefit plan						
actuarial gains	-	-	-	132,446	(26,489)	105,957
Share of other						
comprehensive income						
(expense) of						
subsidiaries accounted						
for using equity method	15	-	15	3,655	-	3,655
Share of other						
comprehensive income						
(expense) of associates						
accounted for using						
equity method	259	-	259	(7,588)	-	(7,588)
Total	213	12	225	128,463	(26,479)	101,984

Reconciliation of effective tax rate

Consolidated financial statements				
	2023		2022	
	Rate (%)	(in thousand Baht)	Rate (%)	(in thousand Baht)
Profit before income tax expense		4,597,552		8,010,604
Income tax using the Thai corporation tax rate	20	919,510	20	1,602,121
Income not subject to tax		(114,027)		(117,776)
Profit was derived from promoted activities		(703,363)		(541,197)
Expenses not deductible for tax purposes		28,623		58,568
Deferred tax asset from tax loss expired		181,938		45,709
Prior year losses recognised as deferred tax asset in current year		-		(367,816)
Recognition of previously unrecognised tax losses		(32,332)		(558,246)
Current year losses for which no deferred tax asset was recognised		11,867		41,935
Under provided in prior years		198		2,530
Total	6	292,414	2	165,828

Reconciliation of effective tax rate

	Separate financial statements			
	2023	2022		
	Rate (%)	(in thousand Baht)	Rate (%)	(in thousand Baht)
Profit before income tax expense		<u>3,288,441</u>		<u>6,987,246</u>
Income tax using the Thai corporation tax rate	20	657,688	20	1,397,449
Income not subject to tax		(700,395)		(529,586)
Expenses not deductible for tax purposes		19,435		25,776
Deferred tax asset from tax loss expired		124,264		-
Prior year losses recognised as deferred tax assets in current year		-		(367,816)
Recognition of previously unrecognised tax losses		(30,414)		(546,184)
Total	2	70,578	(0.29)	(20,361)

**Deferred tax
At 31 December**

	Consolidated financial statements			
	Assets		Liabilities	
	2023	2022	2023	2022
		(in thousand Baht)		
Total	1,175,187	1,246,516	(796,653)	(762,485)
Set off of tax	(767,644)	(725,115)	767,644	725,115
Net deferred tax assets (liabilities)	407,543	521,401	(29,009)	(37,370)

**Deferred tax
At 31 December**

	Separate financial statements			
	Assets		Liabilities	
	2023	2022	2023	2022
		(in thousand Baht)		
Total	993,119	1,021,635	(778,608)	(736,558)
Set off of tax	(778,608)	(736,558)	778,608	736,558
Net deferred tax assets (liabilities)	214,511	285,077	-	-

Movements in total deferred tax assets and liabilities during the year were as follows:

	At 1 January 2023	Consolidated financial statements (Charged) / Credited to		At 31 December 2023
		Profit or loss (in thousand Baht)	Other comprehensive income	
<i>Deferred tax assets</i>				
Allowance for expected credit loss	11,962	-	-	11,962
Allowance for decline in value of inventories	754	(257)	-	497
Allowance for impairment of assets	1,806	-	-	1,806
Provision for sales discount and sales promotional	38,613	(20,529)	-	18,084
Provision for employee benefit	399,689	(23,133)	-	376,556
Loss carry forward	793,531	(27,422)	-	766,109
Others	161	-	12	173
Total	1,246,516	(71,341)	12	1,175,187
<i>Deferred tax liabilities</i>				
Amortisation gap of concessions	(3,095)	171	-	(2,924)
Lease liabilities	(182,710)	(21,625)	-	(204,335)
Depreciation gap of assets	(529,421)	(21,384)	-	(550,805)
Property, plant and equipment	(47,259)	8,670	-	(38,589)
Total	(762,485)	(34,168)	-	(796,653)
Net	484,031	(105,509)	12	378,534

	At 1 January 2022	Consolidated financial statements (Charged) / Credited to		At 31 December 2022
		Profit or loss (in thousand Baht)	Other comprehensive income	
<i>Deferred tax assets</i>				
Allowance for expected credit loss	15,398	(3,436)	-	11,962
Allowance for decline in value of inventories	2,911	(2,157)	-	754
Allowance for impairment of assets	1,806	-	-	1,806
Provision for sales discount and sales promotional	13,249	25,364	-	38,613
Provision for employee benefit	442,853	(16,675)	(26,489)	399,689
Loss carry forward	772,307	21,224	-	793,531
Provision for decommissioning costs	13,125	(13,125)	-	-
Others	132	19	10	161
Total	1,261,781	11,214	(26,479)	1,246,516
<i>Deferred tax liabilities</i>				
Amortisation gap of concessions	(3,275)	180	-	(3,095)
Lease liabilities	(166,633)	(16,077)	-	(182,710)
Depreciation gap of assets	(534,524)	5,103	-	(529,421)
Property, plant and equipment	(55,929)	8,670	-	(47,259)
Total	(760,361)	(2,124)	-	(762,485)
Net	501,420	9,090	(26,479)	484,031

		Separate financial statements (Charged) / Credited to		
	At 1 January 2023	Profit or loss (in thousand Baht)	Other comprehensive income	At 31 December 2023
Deferred tax assets				
Allowance for expected credit loss	11,962	-	-	11,962
Allowance for impairment of assets	900	-	-	900
Provision for sales discount and sales promotional	37,833	(20,421)	-	17,412
Provision for employee benefit	341,970	(19,977)	-	321,993
Loss carry forward	628,810	11,870	-	640,680
Others	160	-	12	172
Total	1,021,635	(28,528)	12	993,119
Deferred tax liabilities				
Amortisation gap of concessions	(3,095)	172	-	(2,923)
Lease liabilities	(149,922)	(27,962)	-	(177,884)
Depreciation gap of assets	(583,541)	(14,260)	-	(597,801)
Total	(736,558)	(42,050)	-	(778,608)
Net	285,077	(70,578)	12	214,511

	At 1 January 2022	Separate financial statements (Charged) / Credited to		At 31 December 2022
		Profit or loss <i>(in thousand Baht)</i>	Other comprehensive income	
<i>Deferred tax assets</i>				
Allowance for expected credit loss	12,122	(160)	-	11,962
Allowance for impairment of assets	900	-	-	900
Provision for sales discount and sales promotional	12,437	25,396	-	37,833
Provision for employee benefit	383,835	(15,376)	(26,489)	341,970
Loss carry forward	599,173	29,637	-	628,810
Others	150	-	10	160
Total	1,008,617	39,497	(26,479)	1,021,635
<i>Deferred tax liabilities</i>				
Amortisation gap of concessions	(3,275)	180	-	(3,095)
Lease liabilities	(126,436)	(23,486)	-	(149,922)
Depreciation gap of assets	(587,711)	4,170	-	(583,541)
Total	(717,422)	(19,136)	-	(736,558)
Net	291,195	20,361	(26,479)	285,077

As at 31 December 2022, the Group has deferred tax arising from loss carry forward has not been recognised in the consolidated financial statements amounting to Baht 267 million. The tax losses expire in 2023 to 2027. The deductible temporary differences do not expire under current tax legislation. The Group has not recognised these items as deferred tax assets because it is not probable that the Group will have sufficient future taxable profit to utilise the benefits therefrom.

Recognition of deferred tax asset from tax loss

In 2023, management estimates future taxable profits and, as at 31 December 2023, the Group recognised deferred tax assets from tax losses in the consolidated and separate financial statements amounting to Baht 159 million and Baht 136 million, respectively (2022: Baht 794 million and Baht 629 million, respectively) because management considered it is probable that future taxable profits would be available against which such losses can be used.

Deferred tax asset from loss carry forward in the consolidated and separate financial statements will expire as detail shown below.

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
Deferred tax assets from loss carry forward expiring in year				
- 2023	-	395,853	-	338,180
- 2024	21,161	50,797	-	29,637
- 2025	257,225	260,993	257,225	260,993
- 2026	48,592	48,592	-	-
- 2027	284,722	37,296	247,426	-
- 2028	154,409	-	136,029	-
Total	766,109	793,531	640,680	628,810

26 Basic earnings per share

The calculations of basic earnings per share for the years ended 31 December 2023 and 2022 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, after adjusting the own shares held by subsidiaries. The calculations are as follows:

	Consolidated and Separate financial statements	
	2023	2022
	<i>(in thousand Baht / thousand shares)</i>	
Profit attributable to ordinary shareholders of the Company (Basic)	3,217,863	7,007,607
Number of ordinary shares outstanding at 1 January	18,935,235	19,126,500
Effect of treasury shares	-	(182,992)
Weighted average number of ordinary shares outstanding (basic)	18,935,235	18,943,508
Earnings per share (basic) <i>(in Baht)</i>	0.170	0.370

27 Dividends

	Approval date	Payment schedule	Dividend rate per share (in Baht)	Amount (in million Baht)
2023				
2022 Annual dividend	25 April 2023	18 May 2023	0.07	1,325
2023 Interim dividend	31 August 2023	29 September 2023	0.03	568
2022				
2021 Annual dividend	20 April 2022	17 May 2022	0.06	1,136
2022 Interim dividend	24 November 2022	22 December 2022	0.03	568

28 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, but 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.

Consolidated financial statements									
		Carrying amount			Fair value				
		Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortised cost	(in thousand Baht)				
	Note				Total	Level 1	Level 2	Level 3	Total
<i>At 31 December 2023</i>									
<i>Financial assets</i>									
Other financial assets									
Investment in equity instruments		-	122	-	122	122	-	-	122
Investment in debt instruments		300,663	1,224	510,819	812,706	-	776,678	-	776,678
Total financial assets		<u>300,663</u>	<u>1,346</u>	<u>510,819</u>	<u>812,828</u>				
<i>Financial liabilities</i>									
Promissory Note	16	-	-	9,407,680	9,407,680	-	9,408,074	-	9,408,074
Debentures	16	-	-	75,397,600	75,397,600	-	75,932,177	-	75,932,177
Total financial liabilities		<u>-</u>	<u>-</u>	<u>84,805,280</u>	<u>84,805,280</u>				

Consolidated financial statements

	Note	Carrying amount		Fair value					
		Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortised cost	Total	Level 1	Level 2	Level 3	Total
		(in thousand Baht)							
At 31 December 2022									
Financial assets									
Other financial assets									
Investment in equity instruments		-	183	-	183	183	-	-	183
Investment in debt instruments		-	1,210	515,301	516,511	-	470,610	-	470,610
Total financial assets		-	1,393	515,301	516,694				
Financial liabilities									
Promissory Note	16	-	-	4,355,338	4,355,338	-	4,356,344	-	4,356,344
Debentures	16	-	-	66,585,600	66,585,600	-	66,929,768	-	66,929,768
Total financial liabilities		-	-	70,940,938	70,940,938				

	Note	Separate financial statements								
		Carrying amount		Fair value						
		Financial instruments measured at FVTPL	Financial instruments measured at FVOCI	Financial instruments measured at amortised cost	Total (in thousand Baht)	Level 1	Level 2	Level 3	Total	
At 31 December 2023										
Financial assets										
Other financial assets										
Investment in equity instruments		-	122	-		122	122	-	-	122
Investment in debt instruments		-	-	12,571		12,571	-	12,623	-	12,623
Total financial assets		<u>-</u>	<u>122</u>	<u>12,571</u>		<u>12,693</u>				
Financial liabilities										
Promissary Note	16	-	-	9,407,680		9,407,680	-	9,408,074	-	9,408,074
Debentures	16	-	-	54,190,200		54,190,200	-	54,557,944	-	54,557,944
Total financial liabilities		<u>-</u>	<u>-</u>	<u>63,597,880</u>		<u>63,597,880</u>				

Separate financial statements

	Note	Carrying amount			Fair value			
		Financial instruments measured at FV/TPL	Financial instruments measured at FVOCI	Financial instruments measured at amortised cost	Total (in thousand Baht)	Level 1	Level 2	Level 3
At 31 December 2022								
Financial assets								
Other financial assets								
Investment in equity instruments		-	183	-	183	183	-	183
Investment in debt instruments		-	-	12,529	12,529	-	12,872	12,872
Total financial assets		-	183	12,529	12,712			
Financial liabilities								
Promissory Note	16	-	-	4,355,338	4,355,338	-	4,356,344	4,356,344
Debentures	16	-	-	51,278,200	51,278,200	-	51,659,611	51,659,611
Total financial liabilities		-	-	55,633,538	55,633,538			

The following tables present valuation technique of financial instruments measured at fair value in the statements of financial position:

Type	Valuation technique
Investments in government bonds guaranteed by the government, classified as financial assets measured at amortised cost	Thai Bond Market Association Government Bond Yield Curve as of the reporting date.
Investments in marketable unit trusts classified as financial assets measured at FVTPL or FVOCI	The net asset value as of the reporting date.
Debentures	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) 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.

(b.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.

(b.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 note 22(c).

The risk management committee has established a credit policy under which each new customer is analysed individually for creditworthiness before the Group's commercial terms and conditions are offered. The Group's review financial statements, industry information and in some cases bank references. Sale limits are established for each customer and reviewed regularly. Any sales exceeding those limits require approval from the risk management committee.

The Group limits its exposure to credit risk from trade accounts receivables by establishing a maximum payment period of 360 days. Outstanding trade receivables are regularly monitored by the Group. An impairment analysis is performed by the Group at each reporting date. The provision rates of expected credit loss are based on days past due for groupings of various customer segments with similar credit risks to reflect differences between economic conditions in the past, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

Information relevant to trade accounts receivables and contract assets are disclosed in note 6 and 22, respectively.

(b.1.2) Investment in debt securities

The Group considers that all debt investments measured at amortised cost and FVOCI have low credit risk. Then the credit loss allowance assessed during the year was therefore limited to 12 months expected losses or 'low credit risk'. Marketable bonds are considered to be an investment grade credit rating published by external credit rating agencies. The credit risk of other instruments are considered to be low when the risk of default is low and the issuer has a strong capacity to meet its contractual cash flow obligations.

(b.1.3) Cash and cash equivalent and derivatives

The Group's exposure to credit risk arising from cash and cash equivalents is limited because the counterparties are banks and financial institutions which the Group considers to have low credit risk.

(b.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 shows the remaining contractual maturities of financial liabilities at the reporting date.

Consolidated financial statements					
Contractual cash flows					
<i>At 31 December 2023</i>	Carrying amount	1 year or less	After 1 year but within 5 years	More than 5 years	Total
<i>(in thousand Baht)</i>					
Non-derivative financial liabilities					
Short-term loans from financial institutions	9,407,680	9,407,680	-	-	9,407,680
Trade payables	2,873,940	2,864,183	3,482	6,275	2,873,940
Lease liabilities	339,004	145,866	139,591	131,502	416,959
Debentures	75,397,600	15,431,900	59,965,700	-	75,397,600
Total	88,018,224	27,849,629	60,108,773	137,777	88,096,179
At 31 December 2022					
Non-derivative financial liabilities					
Short-term loans from financial institutions	4,355,338	4,355,338	-	-	4,355,338
Trade payables	3,791,529	3,751,996	35,212	4,321	3,791,529
Lease liabilities	431,529	181,368	217,364	140,055	538,787
Debentures	66,585,600	12,843,200	53,742,400	-	66,585,600
Total	75,163,996	21,131,902	53,994,976	144,376	75,271,254
Separate financial statements					
Contractual cash flows					
<i>At 31 December 2023</i>	Carrying amount	1 year or less	After 1 year but within 5 years	More than 5 years	Total
<i>(in thousand Baht)</i>					
Non-derivative financial liabilities					
Short-term loans from financial institutions	9,407,680	9,407,680	-	-	9,407,680
Trade payables	2,370,681	2,363,003	3,024	4,654	2,370,681
Lease liabilities	190,807	94,005	76,773	39,900	210,678
Debentures	54,190,200	11,642,300	42,547,900	-	54,190,200
Total	66,159,368	23,506,988	42,627,697	44,554	66,179,239
At 31 December 2022					
Non-derivative financial liabilities					
Short-term loans from financial institutions	4,355,338	4,355,338	-	-	4,355,338
Trade payables	3,129,922	3,114,876	11,030	4,016	3,129,922
Lease liabilities	246,528	122,502	134,943	42,648	300,093
Debentures	51,278,200	10,023,200	41,255,000	-	51,278,200
Total	59,009,988	17,615,916	41,400,973	46,664	59,063,553

(b.3) Market risk

The Group is exposed to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk is as follows:

(b.3.1) Foreign currency risk

The Group is exposed to foreign currency risk relating to purchases and sales of goods, purchases of machine and equipment and loans which are denominated in foreign currencies.

<i>Exposure to foreign currency at At 31 December</i>	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	<i>(in thousand Baht)</i>			
<i>United States Dollars</i>				
Cash and cash equivalents	6,236,014	2,441,951	6,232,329	2,431,049
Trade accounts receivable	1,155,360	1,192,951	1,129,071	1,171,381
Trade accounts payable	(63,842)	(642,653)	(63,513)	(642,320)
Other payables - machines	(1,539,644)	(507,970)	(9,882)	(23,418)
	<u>5,787,888</u>	<u>2,484,279</u>	<u>7,288,005</u>	<u>2,936,692</u>
<i>Euro</i>				
Cash and cash equivalents	591	6,491	42	214
Trade accounts receivable	4,070	7,676	-	-
Trade accounts payable	(14,063)	(14,098)	(14,063)	(14,098)
Other payables - machines	(60,721)	(167,868)	(49,590)	(134,498)
	<u>(70,123)</u>	<u>(167,799)</u>	<u>(63,611)</u>	<u>(148,382)</u>
<i>Others</i>				
Cash and cash equivalents	184	1,273	113	836
Trade accounts receivable	128,381	121,571	128,381	121,571
Trade accounts payable	(42,933)	(68,268)	(42,933)	(68,268)
Other payables - machines	(1,269)	(2,035)	-	-
	<u>84,363</u>	<u>52,541</u>	<u>85,561</u>	<u>54,139</u>
Net exposure	<u>5,802,128</u>	<u>2,369,021</u>	<u>7,309,955</u>	<u>2,842,449</u>

(b.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 borrowings (see note 16). The Group mitigates this risk by ensuring that the majority of its debt securities and borrowings are at fixed interest rates.

29 Capital management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board regularly monitors the return on capital, by evaluating result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

30 Commitments with non-related parties

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
	(in thousand Baht)			
Capital commitments				
Agreements for construction, machine and equipment	<u>7,567,462</u>	<u>9,041,368</u>	<u>1,061,570</u>	<u>1,396,171</u>
Other commitments				
Short-term lease and services commitments	1,633	1,628	-	-
Unused letters of credit	234,926	306,244	232,004	306,244
Purchase agreement for raw material	157,667	99,001	152,704	99,001
Bank guarantees	718,572	1,093,476	300,221	263,169
Total	<u>1,112,798</u>	<u>1,500,349</u>	<u>684,929</u>	<u>668,414</u>

31 Contingent liabilities

As at 31 December 2023, the Company had the major lawsuits as follows:

- 1) Due to on 20 February 2017, Tham Phra Phothisat Temple (the “Plaintiff”) filed a complaint with the Central Administrative Court (the “Court”) being the Black Case No. Sor. 3/2560, and claimed that Plaintiff is authorized by the Fine Arts Department to be the caretaker of the Phothisat cave (Tham Phra Phothisat), but did not have a written power of attorney, and alleged that the Company’s mining activity caused damage to the engraved images in Phothisat cave. Later, on 2 June 2017, the Court called the Company to be a party (as an interpleader) in the case where the Plaintiff filed a lawsuit against the Minister of the Ministry of Industry, 1st Defendant, the Director-General of Department of Primary Industries and Mines, 2nd Defendant, Department of Mineral Resources, 3rd Defendant and Saraburi Provincial Industry Office, 4th Defendant (collectively “Defendants”); claiming that the Defendants’ issuance of Prathanabat to the Company is done in contradiction to regulation of Ministry of Interior on the Conditions and Means of Prathanabat Issuance, under Section 9 of the Land Code B.E. 2497, which such regulation of Ministry of Interior was issued in B.E. 2535; thus, the Plaintiff requested that such Prathanabat issued by the Defendants to “Petrochemical Industry Company Limited” which such Prathanabat was later assigned to the Company, be revoked. Further, the Plaintiff filed a request for an emergency interim measure demanding that the Court orders the Company to stop the blasting of rocks for mining activity, until the decision of this case is reached.

On 3 August 2017, the Court, together with the parties of this case went to examine the location at Phothisat cave and found the Bas-relief art images of Buddha, Shiva god, Narai god, Hermit, etc. located at the front area of the cave; and during the examination at the location, the officer of Fine Arts Department informed that according to the evidences which are the photographed pictures of the art images which were taken in B.E. 2507, B.E. 2508, B.E. 2534, B.E. 2535, B.E. 2559 and B.E. 2560, there is no traces of any changes to the art images based on comparison with those pictures. Further, the Court, together with the parties of this case, examined the area of the Company (interpleader) which was granted with Prathanabat by witnessing the rock blasting activity of the interpleader around 15.30 o’clock, standing approximately 300-400 metres from the area of blasting activity; which at the time of blasting, it made a slightly loud sound, but no vibration was detected. Later, on 8 September 2017, Court denied the Plaintiff’s request for an emergency interim measure for the Company to comply with the order of the 4th Defendant.

The 1st Defendant submitted a written statement dated 8 May 2017 to the Court, which stated that the 1st Defendant is authorized with the power to issue Prathanabat to each applicant in accordance with the Minerals Act, B.E. 2510. The 2nd Defendant submitted a written statement dated 4 May 2017 to the Court, which stated that the 2nd Defendant was assigned with the administration power from Department of Mineral Resources according to the Reorganization of Ministry, Sub-Ministry, and Department Act, B.E. 2545 and is authorized with the duty to consider the application for Prathanabat which have been submitted to the officials at the local Industry Office, and the 2nd Defendant is authorized with the power to grant Prathanabat in accordance with Section 54 of the Minerals Act, B.E. 2510; and after Prathanabat is granted, the 2nd Defendant has the duty to control, monitor and inspect that the person whom has been granted with Prathanabat, shall comply with the Minerals Act, B.E. 2510 and the conditions set forth in the annex of Prathanabat. The 3rd Defendant submitted a written statement dated 28 March 2017 to the Court, which stated that the presently, the 3rd Defendant is not authorized by the laws related to the issuance of Prathanabat, which is due to the Royal Decree on transfer of administration duty and power of the administrative agencies issued according to the Reorganization of Ministry, Sub-Ministry, and Department Act, B.E. 2545, Section 151 which transferred the said duty, power and asset to Department of Primary Industries and Mines (2nd Defendant). The Fine Arts Department also submitted a written statement dated 5 April 2017 to the Court, which stated that the Phothisat cave is deemed as ancient monument under Section 4 of Act on ancient monuments, antiques, objects of art and national museum, B.E. 2504 and the Fine Arts Department had already announced the registration of Phothisat cave as ancient monuments in the government gazette since 6 April 1965; and the Fine Arts Department authorized the director of Regional Office of the Arts Department, No.3, Ayutthaya, with the authority to file any complaint to the inquiry officer who has authority in the area, against any wrongdoer. The statement further clarified that on 14 December 2016, the Fine Arts Department had inspected the Phothisat cave and there appeared to be no traces of any damage, nor any damage to the Bas-relief art images from Dvaravati era, e.g. images of Buddha, Narai god, Shiva god or other persons; which are in good order and it was found that the conditions of the other areas within the cave are normal without traces of any damage being caused by the mining activity of the Company.

The fact-finding procedure of the case had ended and the Court had set the first trial date to be 9 September 2020 together with submission of summary of facts from the Judge who presided over this case dated 11 August 2020 and scheduled the date of rendering the Court's decision to be on 30 September 2020.

The Court ruled that the Defendants lawfully issued Prathanabat to "Petrochemical Industry Company Limited" and in accordance with the Land Code and Minerals Act, B.E. 2510, which such Prathanabat was later transferred to the Company, which were done lawfully and legitimately; the mining activity of the Company which is the blasting of rocks according to Prathanabat and using the explosives not exceeding the rate of 130 kilograms, further, the result of vibration or compression level inspection are according to the safety standard, when compared with the standard set forth by the Ministry of Natural Resources and Environment. Additional, the Fine Arts Department also stated that according to the inspection result, there is no additional damage, the Bas-relief art images are in good condition and there is no damage to the area within the cave; thus, the Court has no reason nor cause to issue the order according to the Plaintiff's request and the Court has ruled that the case is dismissed and the Court's order relating to the emergency interim measure dated 8 September 2017 shall be revoked starting from the first day of which the appeal submission period has expired (in case there is no appeal submission) or starting from the date on which the Court has ordered its decision to accept or not accept the appeal (in case there is submission of an appeal), as the case maybe.

The Plaintiff submitted the appeal to the Court on 27 October 2020 and the Court accepted the appeal of the Plaintiff. Therefore, the Court's order dated 8 September 2017 relating to the emergency interim measure ceased to be in effect. The Court allowed the date to submit the answer to the appeal to be within 21 February 2021. The interpleader submitted the answer to the

appeal on 5 February 2021.

On 22 March 2023, the Supreme Administrative Court issued a notice advising the parties of the Court's order that 28 April 2023 shall be the date of fact inquiry termination. At the moment, a judge of the Supreme Administrative Court who is the judge rapporteur is in the process of preparing the statement of this case.

- 2) This case is due to the Company received permit to dig the water-well, from Mittraphap Subdistrict Administration Organization and the Company dig the water-well in the Company's own land, in order to preserve the environment and to be used for prevention of fire (the Black Case No. SorWor.2/2561). Later, on 21 June 2018, the Department of Primary Industry and Mines, Ministry of Industry, by representation of the district attorney, the Office of Attorney General (the "Plaintiff"), filed a lawsuit against the Company (the "Defendant") at the Civil Court (the "Court"), claiming the violation in mining activity with the principal amount of claim of Baht 71,566,889.42. The Plaintiff claimed that the Company conducted its shale mining unlawfully in the area in which Prathanabat for such area has not been granted, totaling 2 locations; thus, requesting that the Court to order the Company to return the shale totaling of 249,159.96 metric tons back to the original area and restore the area into its previous condition or pay the compensation consisting of the value of the shale and royalty fee to the government in the amount of Baht 66,650,289.31 together with interest.

The Company plead in its defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence, the Plaintiff claimed that the Company conducted unlawful mining activity, however, the claim is fault, the Company did not commit any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim. The hearing was finished and the Court ordered the date to render the Court's decision to be on 24 March 2020.

On 24 March 2020, the Court ordered the Company to return the shale totaling 249,159.96 metric tons back to the original area and restore the area to its previous condition or pay the compensation consisting of the value of the shale and royalty fee to the government in the amount of Baht 66,650,289.31 together with interest at the rate of 7.5 percent per annum on the said amount, starting from the date of the violation (28 June 2017) until the date of the complaint filing (359 days) making the interest to be Baht 4,916,600.11. Total amount of combined principal and interest is Baht 71,566,889.31. The Court also ordered that the interest on the principal amount of Baht 66,650,289.31, in the rate of 7.5 percent per annum would be paid calculating from the next day after the date of filing of the complaint until the payment is received in full together with the court fees in behalf of the Plaintiff and attorney fee of Baht 80,000.

The Company filed the appeal together with the request for delay of judgement execution on 19 August 2020.

On 20 October 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 18 February 2022.

On 23 January 2023, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and Mines' filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

- 3) On 20 June 2019, Tham Phra Phothisat Temple (the "Plaintiff") filed a lawsuit against the Ministry of Industry, as 1st defendant and other related persons as co-defendants, totaling 31 persons, in a Black Case No. Sor. 17/2562, which the Company is the 30th Defendant in the lawsuit and the Plaintiff also filed request for the Court to order an emergency interim measure, until the decision of this case is reached. Later on, the Court also ordered the Committee of Professional on Environmental Impact Assessment Report (the "Committee"), as the 32nd Defendant. The Court has considered and issued the order dated 17 September 2019, to accept the complaint against some of the respondents and denied to accept the complaint against some respondents and some claims (the Court only accept the followings as defendants: Ministry of Industry, as 1st Defendant, Minister of Ministry of Industry, as 2nd Defendant, Department of Primary Industry and Mines, as 3rd Defendant, Director-General of Department of Primary Industry and Mines, as 4th Defendant, the Company, as the 30th Defendant and the Committee, as the 32nd Defendant, respectively). The Court also issued order dated 17 September 2019 which denied the Plaintiff's request for an emergency interim measure. The Plaintiff claimed to be the authorized person from the Fine Arts Department as caretaker of the Phothisat Cave, but did not have a written power of attorney, but requested to the Court to order that the application for Prathanabat of the Company is unlawful, the Plaintiff also claimed that the resolution of the 32nd Defendant which approved the Company's Environmental Impact Assessment Report for the Company's mining activity, concealed the facts, thus, unlawful. The Plaintiff requested the Court to order the revocation of the Company's application for Prathanabat of limestone mining, in which the Company has submitted for approval.

The Defendant submitted written statement of defense which informed the Court that the Plaintiff has no authority to file the complaint and this complaint repeated the complaint filed in Black Case No. Sor.3/2560, and the Company's application for Prathanabat of limestone mining is lawful and in accordance with the rules, procedures and methods as prescribed by the laws, further, the applied area for Prathanabat is not the restricted area under the laws in respect of Mineral and Forest; and there is an Environmental Impact Assessment Report which have been prepared correctly and completely in accordance with the law in relation to Enhancement and Conservation of National Environmental Quality and law related to Mineral, for application for Prathanabat which have been submitted for approval from the authority. The application for Prathanabat is pending the consideration for approval of the authority and the Company's application for Prathanabat did not cause any damage or grievance to the Plaintiff, thus, the Defendant requested the Court to dismiss the complaint.

The Company have made and submitted the additional statement of defense to the Court on 14 January 2021, the case is under the process of the Court's fact finding procedure.

- 4) On 8 July 2015, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the Saraburi Office of District Attorney (the “Plaintiff”) filed a civil lawsuit (the Black Case No. SorWor.4/2559) against the Company (the “Defendant”) with the principle amount of claim in total of Baht 4,066,535,823. The Plaintiff later amended the complaint to increase the amount of claim to be the total of Baht 4,338,558,231.54; claiming that the Company engaged its limestone mining activity in the area outside the designated area under the Prathanabat and requested that the Company returned the limestone ore in total of 31,522,374.26 metric tons and restore the area to be in its previous condition or pay the compensation together with the 7.5 per annum interest.

The Company plead in its statement of defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

The case was requested to be transferred to the Environmental Law Division of the Civil Court to be jointly considered with other related cases and the Court granted the said request.

On 13 December 2019, the Civil Court ordered the Company to return the limestone ore in total of 31,522,374.26 metric tons back to the area where the mining activity was done and to restore such area to the previous condition or pay the compensation of Baht 4,047,472,854.98 together with the 7.5 percent per annum interest on the said principle amount, calculating from the discovery date of the unlawful mining activity (24 July 2014) until the date of the filing of complaint (350 days) totaling Baht 291,085,376.56 making it Baht 4,338,558,231.54 in total. The Court also ordered the Defendant to pay 7.5 percent per annum interest on the principal of Baht 4,047,472,854.98 counting from the day after the complaint filing date until the payment is made in full.

The Company filed an appeal with the request for a delay of judgement execution on 8 May 2020.

On 17 November 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgement of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 17 March 2022.

On 22 November 2022, the Civil Court made the announcement of the Supreme Court’s order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company’s appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and Mines's filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

- 5) On 24 March 2016, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the Saraburi Office of District Attorney (the "Plaintiff") filed a civil lawsuit (the Black Case No. SorWor.6/2559) against the Company (the "Defendant") claiming that the Company engaged its limestone mining activity in the area outside the designated area under the Prathanabat. The complaint requested the Company to return the limestone ore of 2,447,906.76 metric tons and restore the area into the previous condition or pay the compensation of Baht 327,680,219.25 together with 7.5 percent per annum interest.

The Company plead in its defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

The case was requested to be jointly considered with other related cases and the Court granted the said request.

On 13 December 2019, the Civil Court ordered the Company to return the limestone ore for cement industry, in total of 2,447,906.76 metric tons back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation of Baht 314,311,227.98 together with the 7.5 percent per annum interest, calculating from the discovery date of the unlawful mining activity (31 August 2015) until the date of the filing of complaint (207 days) totaling Baht 13,368,991.27 making it Baht 327,680,219.25 in total. The Court also ordered the Defendant to pay 7.5 percent per annum interest on the principal of Baht 314,311,227.98 counting from the day after the complaint filing date until the payment is made in full and ordered that the Defendant pay the court fees on the Plaintiff's behalf (court fee shall be calculated from the amount of claim ordered in favour of the Plaintiff) and to pay the attorney fee of Baht 100,000.

The Company filed an appeal with the request for a delay of judgement execution on 8 May 2020.

On 17 November 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgement of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 17 March 2022.

On 22 November 2022, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and Mines' filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

- 6) On 24 March 2016, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the Saraburi Office of District Attorney (the "Plaintiff") filed a civil lawsuit (the Black Case No. SorWor.5/2559) against the Company (the "Defendant") in the civil case claiming for compensation totaling Baht 1,671,128,829.14 stating that the Company engaged its limestone mining activity unlawfully (engaged in the mining restricted area) demanding that the ore totaling 12,484,023.50 metric tons be returned and the area be restored into its previous condition or pay the compensation together with the 7.5 percent per annum interest.

The Company plead in its statement of defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

On 2 August 2019, the Court ordered the Company to return the limestone for cement industry totaling 12,484,023.50 metric tons back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation of Baht 1,602,948,617.40 together with the interest of 7.5 percent per annum of such amount calculating from the date of being notified of the land survey result (31 August 2015) until the date of the filing of complaint (207 days) making the interest to be Baht 68,180,211.74, making it Baht 1,671,128,829.14 in total, together with payment of 7.5 percent per annum interest on the principle amount of Baht 1,602,948,617.40 counting from the day after the complaint filing date until the payment is made in full and ordered that the Defendant pay the court fees on the Plaintiff's behalf (court fee shall be calculated from the amount of claim ordered in favour of the Plaintiff) and to pay the attorney fee of Baht 200,000.

The Company does not agree with the decision of the Court of the First Instance and filed the appeal together with the request for a delay of judgement execution on 3 December 2019. The case is pending the consideration of the Court of Appeal. The Court makes an appointment for the hearing of a judgement or order of the Court of Appeal on 10 May 2022.

On 10 May 2022, The Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level. The future court fee on entry of a complaint of Baht 100 baht shall be paid back to the defendant. The defendant shall be required to pay for the appellate fees on behalf of the plaintiff together with an attorney fee imposed at Baht 200,000.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgement of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 12 October 2022.

On 14 September 2023, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

- 7) On 2 March 2017, the Department of Primary Industries and Mines, Ministry of Industry by the representation of the district attorney of the Office of the Attorney General (the "Plaintiff"), filed a complaint against the Company (the "Defendant") at the Civil Court, Environmental Law Department (the Black Case No. SorWor.1/2560) with the lawsuit amount of Baht 344,882,135.15 claiming that the Company partially engaged its mining activity in the area designated in the Prathanabat unlawfully requesting that the shale totaling 1,220,559.82 metric tons be returned to the area and the area be restored into its previous condition or to pay compensation together with the 7.5 percent per annum interest.

The Company plead in its statement of defense that the Plaintiff does not have any authority to file such lawsuit according to the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the lawsuit is vague, delusive without any evidence and is already time-barred by prescription period; further, the lawsuit is a civil claim in connection with criminal offence relating to unlawful mining activity, however, the Company has not committed any criminal offence and did not infringe any rights of the Plaintiff, thus, the civil claim does not exist due to non-existence of infringement, the Company has not committed any wrongdoing according to the complaint and is not liable to any claim, therefore, the Company denied all claims under the complaint. Additionally, the Company also has, in reserve pursuant to the Prathanabat, several hundred million tons of limestone and the said reserves, if not used before the expiration of the Prathanabat, would not be usable after the expiration date, therefore, the Defendant does not have any cause or necessity to the engage in mining activity outside the designated area.

On 13 December 2019, the Civil Court ordered the Company to return the shale for cement production industry totaling 1,220,559.82 metric tons back to the area where the mining activity was done and restore such area to the previous condition or pay the compensation consisting of the value of the shale and royalty fee to the government in the amount totaling Baht 326,499,751.86 together with 7.5 percent per annum interest calculating from the date of the violation (2 June 2016) until the date of the complaint filing (274 days) making the interest to be Baht 18,382,383.29. The total amount from combining the principal and interest, is the amount of Baht 344,882,135.15. The Court also ordered that the interest on the principal amount of Baht 326,499,751.86 in the rate of 7.5 percent per annum be paid counting from the day after the complaint filing date until the

payment is made in full together with the court fees in behalf of the Plaintiff and attorney fee of Baht 200,000.

The Company filed the appeal with the request for delay of judgement execution to Court on 5 June 2020. On 24 June 2021, the Civil Court pronounced the judgment of the Court of Appeal in which the Court of Appeal modified the judgment by charging interest at a rate of 5 percent per annum pursuant to the judgment of the Court of First Instance from 11 April 2021 onwards until payment to the Plaintiff in full or by making an adjustment to decrease or increase the interest in accordance with the Royal Decree enacted under newly amended Section 7 of the Civil Procedure Code plus an increasing rate of 2 percent per annum but not exceeding the rate of 7.5 percent per annum as requested by the Plaintiff. Other than the amendment, the judgment of Court of Appeal shall govern. There is no court cost at the appellate level.

The Company has applied for permission to lodge an appeal to the Supreme Court challenging the judgment of the Court of Appeal together with a stay of execution pending the appeal to the Supreme Court on 9 November 2021.

On 15 November 2022, the Civil Court made the announcement of the Supreme Court's order, whereby the Supreme Court allowed the Company to submit an appeal to the Supreme Court and accepted the said Company's appeal for consideration. The case is pending a judgement of the Supreme Court.

The complaint of this case described that the lawsuit is a civil claim in connection with the criminal offence for the part concerning the Department of Primary Industry and Mines' filling of report to the inquiry official requesting the inquiry official to commence the criminal proceeding against the Company for unlawful mining activity without permit; and the inquiry official issued the opinion that this case shall not be prosecuted and later on, the District Attorney also concurred and issued the final order that the criminal case will not be prosecuted against the Company, thus, the criminal case is final.

Incidentally, the information regarding cases 1) - 7) above are under the consideration of the court, the above cases are not final. The Company and the legal advisors hereby opines that based on the evidence and information the Company possesses, the Company did not commit any wrongful acts against the plaintiff as detailed in the complaints; the plaintiff claimed that the defendant committed wrongful action against the plaintiff, therefore, the plaintiff has the burden of proof to prove that the defendant had committed such act as the plaintiff claimed and since the plaintiff had not presented the evidences which show that in fact, the defendant had committed wrongful act against the plaintiff, the, the court could consider to dismiss the case. However, the judgment depends on the consideration and discretion of the court. As at 30 September 2023, the outcome of lawsuit is not yet final, the Company has not recorded a provision for liability of lawsuit in the financial statements.

- 8) On 16 December 2019, individuals in total of 222 people sued Energy Regulatory Commission (ERC) et al to the Central Administrative Court which a subsidiary 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 subsidiary 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 due to the lack of reason to believe that the license to operate electricity generating business of the subsidiary is unlawful.

On 31 January 2020, the Court issued an order accepting the compliant and requesting the subsidiary to file the answer. The lawyer submitted the answer to Court on 1 July 2020.

On 7 December 2020, the Court sent the objection to the answer of the 5th Defendant and requested the subsidiary to submit additional answer to the Court within the prescribed period. The subsidiary submitted the additional answer to the Court on 12 March 2021, the case is under the Court consideration.

The subsidiary's legal consultant considered the complaint and its appendixes and hereby opines that the subsidiary lawfully and transparently received the license to operate the electricity generating business and the construction approval from the competent authorities, in accordance with the applicable laws and that the relevant public official have lawfully and honestly performed their duties without any conflict of interest in issuing the said license. The complaint of the Plaintiffs is untrue. As the case is in the preparation for answer, the subsidiary has causes to relieve itself of any liability generated from the complaint depending on the Central Administrative Court Decision. Moreover, the subsidiary 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.

For all above lawsuit, the Group's legal consultant opines that, based on the Company's evidences and information, the Company has a chance to defend itself in the court trial depending on the consideration of each courts.

32 Others

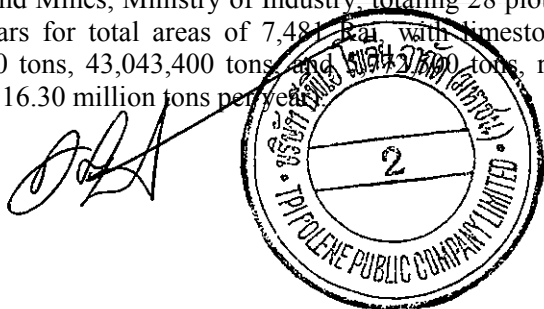
- 1) The subsidiary is a power company that produces electricity by turning community municipal solid waste to energy, which is clean and green energy. The subsidiary has participated in the Thailand Voluntary Emission Reduction Program, according to Thai standards, which is a waste management project ("T-VER"), with the Thailand Greenhouse Gas Management Organization ("TGO").

At the end of year 2021, the subsidiary registered with the TGO to apply for the reduction of greenhouse gases, which subsequently TGO has certified the reduction of greenhouse gases (carbon credit) for the subsidiary's project of 82,056 tons of carbon dioxide equivalent, and after sale of 34,690 tons of carbon dioxide equivalent, the subsidiary has the balance of 47,366 tons of carbon dioxide equivalent.

Subsequently, on 24 May 2022, TGO has certified the reduction of greenhouse gases (carbon credit) for the subsidiary's project for the period from 1 May 2017 to 31 December 2020, increased by 717,931 tons of carbon dioxide equivalent. As a result, the subsidiary has the balance of 765,297 tons of carbon dioxide equivalent.

On 28 April 2023 and 26 September 2023, TGO has certified carbon credit for the subsidiary increased by 462,797 tons of carbon dioxide equivalents and 331,135 tons of carbon dioxide equivalents, respectively. As a result, the subsidiary has the balance of 1,559,229 tons of carbon dioxide equivalent.

- 2) From December 2021 until the end of the year 2023, the Company has been granted limestone and shale concession for the manufacturing of cement industry from the Department of Primary Industries and Mines, Ministry of Industry, totaling 28 plots, with long-term concession period of 25 - 30 years for total areas of 7,481 Rai, with limestone, shale and soil-cement reserves of 399,539,500 tons, 43,043,400 tons and 54,270 tons, respectively, totaling 448,355,400 tons (average of 16.30 million tons per year).





Attachments

Attachment 1

Board of Directors and Corporate Secretary as at 31 December 2023

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Khantachai Vichakkhana 76 years of age • no relationship	Master of Political Science, (Public Administration), Thammasat University	0.000	Jun 25, 2018- Present Jan 2016-Present	Chairman and Independent Director Independent Director	TPI Polene Plc. TPI Polene Power Plc.
	Bachelor of Law, Thammasat University		Aug 8, 2014- Present	Independent Director, Director, Audit Committee, the Nomination, Remuneration and Corporate Governance committee	L.P.N. Development Plc.
	Directors Accreditation Program (DAP no.112/2014) Thai Institute of Directors (IOD)		2022-Present	Vice Chairman, Chairman of the Audit Committee and Independent Director	Tong Hua Holding Plc.
	Role of Compensation Committee (RCC No.19/2014) Thai Institute of Directors (IOD)		2002-2008	Deputy Director-General	Department of Lands
			2000-2002	Directors : Land Registry Standard Bureau	Department of Lands
			2000	Staff Plan & Policy Analysis (Land)	Department of Lands
	Directors Certification Program (DCP No.119/2015) Thai Institute of Directors (IOD)		1999-2000 1998-1999	Inspector-General Director of Bureau Authority Land	Department of Lands Department of Lands
			1995-1998 1992-1995	Land Management Division Department of Important Book	Department of Lands Department of Lands
	Guest Speaker Training Program Land Class 2: Department of Land (1979)		1990-1992 1989-1990 1988-1989	Land Officer- Chonburi Land Officer- Phuket Land Officer- Nonthaburi and Bangyai District	Department of Lands Department of Lands Department of Lands
	Internal Security Operations Command Program (ISOC) : Royal Thai Army (1979)		1986-1988 1986	Land Officer- Nakhornnayok Land Officer- Uttaradit	Department of Lands Department of Lands
	Advance Land Management School Program Class 3: Department of Lands (1984)		Extracurricular	• Assets Management Committee • Committee	Triamudomsuksa Alumni Foundation Retired Government Officials' Pension
	Advance administration Program: Class 30, Institute of Administration Development, Department of Provincial Administration (1993)			• Committee	EPA Thammasat University Foundation
				• Committee	Hospital & Phrapiya School Foundation
				• Assets Management Committee • Assets Management Committee • Committee	Srisavarindhira Thai Red Cross Institute of Nursing Chaipattana Foundation Environment for Life Foundation
	High Level Information Technology Executives (CIO) Seminar (2003)				
	Political Development in Democratic Governance for Executives Program Class 8, King Prajadhipok's Institute (2004)				
	Role of the Chairman Program (RCP) Class 54/2023, Thai Institute of Directors Association (IOD)				

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Prachai Leophairatana 79 years of age <ul style="list-style-type: none">Younger brother of Miss Malinee Leophairatana, elder brother of Mr. Prateep Leopairut, Dr. Pramuan Leophairatana, and Mr. Prayad Liewphairatana	Honorary Doctorate Degree in Industrial Engineering , Rajamangala University of Technology Krungthep	0.001	2001-Present 1991 -Present Jan 2016-Present April 2012-Present	Chief Executive Officer Chairman Chairman of the Management Committee	TPI Polene Plc. TPI Polene Power Plc. TPI Polene Power Plc. Bangkok Union Insurance Plc.
	M.S. (EE) University of California (Berkeley) U.S.A.		Oct 2019-Present	Director	TPI Deep Sea Port Co., Ltd.
	B.E. (EE) (1st Class Hons.) University of Canterbury, New Zealand		Oct 2019-Present	Executive Director	TPI Smart City Co., Ltd.
	Directors Accreditation Program (DAP No.35/2005) Thai Institute of Directors (IOD)		Oct 2019-Present	Executive Director	TPI Wind Power Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Solar Power Co., Ltd.
			2000-2006	Executive Director	Bangkok Union Insurance Plc.
			1978-2006	Chairman Executive Director	Thai Petrochemical Industry Plc. and TPI Polene Group of Companies.
			1992-2000	Senator	Parliamentary Commission
			1969-1997	Chairman	Cathay Finance & Securities Plc.
			1973-present	Executive Director	Leophairatana Enterprise Co., Ltd.
				Executive Director	Mondo Thai Co., Ltd.
				Executive Director	TPI Concrete Co., Ltd.
				Executive Director	TPI Polene Bio Organics Co., Ltd.
			Executive Director	TPI All Seasons Co., Ltd.	
			Executive Director	TPI Commercial Co., Ltd.	
			Executive Director	TPI Service Co., Ltd	
			Executive Director	Thai Nitrate Co., Ltd.	
			Executive Director	Master Achieve Co., Ltd.	
			Executive Director	TPI Bio Pharmaceuticals Co., Ltd.	
			Executive Director	TPI Healthcare Co., Ltd.	
Executive Director		Thai Proproxide Co., Ltd.			
Executive Director		Polene Silicon Co., Ltd.			
Executive Director		TPI Biomass Power Co., Ltd.			
Executive Director	TPI Polene Power (International) Co., Ltd.				
Executive Director	TPI Distribution Center Co., Ltd.				
Executive Director	United Grain Industry Co., Ltd.				
Executive Director	Pornchai Enterprise Co., Ltd.				

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Prateep Leopairut 77 years old • Younger brother of Ms. Malinee, Mr. Prachai and brother of Dr. Pramuan, Mr. Prayart Leophairatana	Honorary Doctorate Degree in Engineering Department Chulalongkorn University	0.001	2022-Present	President	TPI Polene Plc.
			1987-2019	President	TPI Polene Plc.
			1991-2019	Executive Director	TPI Concrete Co., Ltd.
	2002-Present		Executive Director	Polene Silicon Co., Ltd.	
	2007- Jan 2015		President	Thai Nitrate Co., Ltd.	
	2007-2019		President	Thai Nitrate Co., Ltd.	
	2022- Present		President	Thai Nitrate Co., Ltd.	
	2016-2017		Vice Chairman	TPI Polene Power Plc.	
	2011-Present		President	TPI Polene Bio Organics Co., Ltd.	
	1978-Present		Director	United Grain Industry Co., Ltd.	
	1989-Present		Director	Thai Plastic Film Co., Ltd.	
	1988-Present		Director	Thai Plastic Product Co., Ltd.	
	1994-2019		Vice Chairman	Bangkok Union Insurance Plc.	
	1981-2006		President	International Plastic Trading Co., Ltd.	
	1978-2006		President	Thai Petrochemical Industry Plc.	
	1973-Present		Executive Director	Leophairatana Enterprises Co., Ltd.	
	1996-Present		Executive Director	Pornchai Enterprises Co., Ltd.	
	1996-Present		Director	Mondo Thai Co., Ltd.	
	1987-2021		President	Thai Petrochemical Industry and Trade Association	
	1987-1993		Director	Bangkok Union Insurance Plc.	
	1990-1992		President	The Thai Packaging Association	
	1996-1997		Director	Industrial Engineering, Engineering Institute of Thailand	
	2009-2011		Commission of Central Asia	Thai Chamber of Commerce	
	2009-2011		Committee of International Trade	Thai Chamber of Commerce	
	2009-2011		Committee of International Negotiation Trade	Thai Chamber of Commerce	
	2009-Present		Specialist on the examination of working professionals with engineering diploma in industrial engineering field	Council of Engineers	
	2009-Present		Expert on the examination of corporate engineering level of working professionals industrial engineering field	Council of Engineers	
	2012-2014		Chairman	ASEAN Federation of Cement Manufacturers (AFCM)	
	2012-Present		Committee of the Examination of Working professionals with Engineering diploma in industrial engineering field	Council of Engineers	
	2012-2016		President	Thai Cement Manufacturers Association (TCMA)	
	2012-2016		President of Cement Group	The Federation of Thai Industries	
	2012-2016		Committee	The Federation of Thai Industries	
	2012-2016		Committee of Logistics Economic Division	The Federation of Thai Industries	
	2012-2016		Executive Committee Logistics Economic Line Logistics and Infrastructure Development	The Federation of Thai Industries	

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
	• Advanced Trade Negotiations Simulation Skills Course 2011		2012-2016	Committee Trade Logistics Committee	The Federation of Thai Industries
			2012-2014	Development Committee Cooperation of neighboring economic partnerships in the Mekong sub -region (GMS/ACMECS/MJ/ Burmese-Laos-Cambodian- Vietnam Council)	The Federation of Thai Industries
	• Global Trade Impact on Thai Economy: Preparing Thai Businesses for ASEAN no.1/2012		2012-2014	Committee	The Federation of Thai Industries
				Trade convenience Import-export And performing customs	
	• The 6th EFEE World Conference on Explosives and Blasting 2011 by European Federation of Explosives Engineers		2012-2016	Committee of Industrial Environment Institute	The Federation of Thai Industries
			2012-present	Committee for Industrial Energy Institute	The Federation of Thai Industries
	• China International Water Soluble Fertilizer Conference and Exhibition 2013 by China National Chemical Information Center		2012-2014	Cluster Group President Construction material	The Federation of Thai Industries
				Honorary members and consultant	The Thai Packaging Association
	• MBA for Oil and Gas Executives 2013, Singapore by Universal Network Intelligence		2013-present	The working group prepared guidelines for the examination of the license to be ordinary engineers, Industrial Engineering	Council of Engineers
	• ASEAN Outstanding Engineering Achievement Award for Year 2013		2013	Advisor to the Rice Industry Education Subcommittee	Committee on Economics, Commerce and Industrial of the Senate
	• Asia Pacific Chemical Industry Meeting (APCIM), 8-10 February 1998, Singapore		2013-2014	Honorary Advisor	Committee on Economics, Commerce and Industrial of the Senate
			2015-present	President of the Association	Thai Organic Fertilizer Industry Foundation Trade Association
	• The Premier Meeting Place for the Oil Industry, 9-11 September 1996, Singapore		1996-Present	Director	TPI Distribution Center Co., Ltd.
			2019-Present	Director	TPI Smart City Company Limited.
	• Executive Seminar Partner for International Competitiveness, Harvard University, USA, 1991		1993-Present	Director	TPI All Seasons Co., Ltd.
			2010-Present	Director	TPI Service Co., ltd
			1996-Present	Director	TPI Bio Pharmaceuticals Co., Ltd.
			1998-Present	Director	TPI Healthcare Co., ltd.
1995-Present			Director	Thai Proproxide Co., Ltd.	
2023-Present			Director	Industrial Engineering, Engineering Institute of Thailand	

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Dr. Pramuan Leophairatana 74 years of age <ul style="list-style-type: none"> Younger brother of Miss Malinee Leophairatana, Mr. Prachai Leophairatana and Mr. Prateep Leopairut, elder brother of Mr. Prayad Liewphairatana 	M.S., SC.D. Massachusetts Institute of Technology (MIT), U.S.A. B.S. (Honors) University of California (Berkeley), U.S.A. Directors Accreditation Program (DAP- No.39/2005) Thai Institute of Directors (IOD) National Defense College No.41 and National Defense College in cooperation with the private sector No.11, King Prajadhipok's Institute	2.278	2001-Present	President	TPI Polene Plc.
			1973-Present	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	Vice Chairman	TPI Polene Power Plc.
			1991-Present	Executive Director	TPI Concrete Co., Ltd.
			1997-Present	Executive Director	Bangkok Union Life Insurance Plc.
			2002-Present	Chairman	Polene Silicon Co., Ltd.
			2010-Present	Executive Director	TPI Polene Bio Organics Co., Ltd.
			Jul 2014-Present	Executive Director	Mondo Thai Co., Ltd.
			Aug 2016-Present	Executive Director	Thai Nitrate Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Polene Power (Songkhla)
			Oct 2019-Present	Executive Director	TPI Solar Power Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Wind Power Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Deep Sea Port Co., Ltd.
			Oct 2013-Jan 2015	Executive Director	Thai Nitrate Co., Ltd.
			1996-Jul 2014	Executive Director	Mondo Thai Co., Ltd.
			1990-Aug 2013	Executive Director	Thai Nitrate Co., Ltd.
			1978-2006	President	Thai Petrochemical Industry Plc.
Miss Malinee Leophairatana 81 years of age <ul style="list-style-type: none"> Elder sister of Mr. Prachai Leophairatana, Mr. Prateep Leopairut, Dr. Pramuan Leophairatana and Mr. Prayad Liewphairatana 	<ul style="list-style-type: none"> Master's degree in actuarial science Georgia State University, U.S.A. Bachelor of Commerce and Accounting Major in Statistics (Second Honor), Chulalongkorn University Directors Certification Program (DCP) No.22/2002 Thai Institute of Directors (IOD) Certified as Actuary under Section 78/2 of The Non-Life Insurance Act B.E.1992 as Amended by Non-Life Insurance Act(No.2), B.E.2008 	0.043	Apr 2016-Present	Director	TPI Polene Plc.
			Jan-Present	Director	TPI Polene Power Plc.
			Present		
			2011-Present	Director	Leophairatana Enterprises Co., Ltd.
			1997-Present	Chairman Executive	Bangkok Union Insurance Plc.
			1978-1989	Director	Bangkok Union Life Insurance Plc.
			Present	President	Thai General Insurance Association
			Present	Executive Director	United Grain Industry Co., Ltd.
				Executive Director	Pornchai Enterprises Co., Ltd.

NAME / AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE			
			DURATION	POSITION	COMPANY/ BUSINESS	
Mr. Prayad Liewphairatana 72 years of age <ul style="list-style-type: none">Younger brother of Miss Malinee Leophairatana, Mr. Prachai Leophairatana, Mr. Prateep Leopairut, and Dr. Pramuan Leophairatana	M.S.C.E. University of Michigan (ANN ARBOR) U.S.A.	3.185	1987-Present	President	TPI Polene Plc.	
			1991-Present	Executive Director	TPI Polene Power Plc.	
			Jan 2016-Present	Executive Director	TPI Polene Power Plc.	
			Directors Accreditation Program (DAP- No.29/2004)	1973-Present	Director	Leophairatana Enterprises Co., Ltd.
	Thai Institute of Directors (IOD)		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 Silicon Co., Ltd.
				2010-Present	Executive Director	TPI Polene Bio Organics Co., Ltd.
				Present	Director	TPI Polene Power (International) Co., Ltd.
				Aug 2, 2016-Present	Executive Director	Thai Nitrate Co., Ltd.
				Present	Executive Director	TPI All Seasons Co., Ltd.
				Present	Executive Director	Thai Proproxide Co., Ltd.
				Present	Executive Director	Polene Silicon Co., Ltd.
				Present	Executive Director	TPI Service Co., Ltd.
				Present	Executive Director	TPI Distribution Center Co., Ltd.
				Present	Executive Director	Pornchai Enterprises Co., Ltd.
				Present	Executive Director	TPI Healthcare Co., Ltd.
				Present	Executive Director	TPI Bio Pharmaceuticals Co., Ltd.

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mrs. Orapin Leophairatana 76 years of age • Mr. Prachai Leophairatana's wife	Political Science (2 nd Class Honors) Chulalongkorn University Directors Accreditation Program (DAP- No.35/2005) Thai Institute of Directors (IOD)	5.153	1998-2003,	Director/ Senior	TPI Polene Plc.
			2005-Present	Executive Vice President	
			1998-Present	Executive Director	TPI Concrete Co., Ltd.
			2002-Present	Executive Director	Polene Silicon Co., Ltd.
			2007-Present	Vice Chairman	TPI Polene Power 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.
			Oct 2019-Present	Executive Director	TPI Smart City Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Solar Power Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Wind Power Co., Ltd.
			Oct 2019-Present	Executive Director	TPI Deep Sea Port Co., Ltd.
			Present	Executive Director	Thai Propoxide Co., Ltd.
			Present	Executive Director	TPI Commercial Co., Ltd.
			Present	Executive Director	TPI Service Co., Ltd.
			Present	Executive Director	TPI Healthcare Co., Ltd.
			Present	Executive Director	TPI Bio Pharmaceuticals Co., Ltd.
			Present	Executive Director	Master Achieve Co., Ltd.
			Present	Executive Director	TPI Biomass Power Co., Ltd.
			Present	Executive Director	TPI Distribution Center Co., Ltd.
			Present	Executive Director	Pornchai Enterprises Co., Ltd
			Present	Executive Director	TPI Polene Power (International) Co., Ltd.
			Oct 2013-Jan 2015	Executive Director	Thai Nitrate Co., Ltd.
			2009- Aug 2013	Executive Director	Thai Nitrate Co., Ltd.
			2001-2011	Director	Thai Listed Company Association
			April-Dec 1997	Director	Association of Finance Companies
			1986-1997	Director	Bangkok Stock Trading Center
			1995-1997	Chairman	Association of the Securities Brokerage
			1995-1997	Managing Director	Cathay Finance & Securities Plc.
			1977- 1982	Third Secretary	Ministry of Foreign Affairs

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Supoj Singsanei 75 years of age • no relationship	M.B.A. Finance, Michigan State University, U.S.A.	-	Jun 25, 2018-Present	Chairman of the Audit Committee and Independent Director	TPI Polene Plc.
	Bachelor of Accounting (Honor), Thammasat University		Apr 25, 2018-Jun 2018	Independent Director and Audit Committee	TPI Polene Plc.
	Directors Certification Program (DCP- No.90/2007) Thai Institute of Directors (IOD)		Sep 15,2021- Present	Chairman	The Star Co., Ltd.
			2016- Present	Director	Marui Real Estate Co., Ltd.
			1988- Present	Director	Pisant Co., Ltd.
			2018-Present	Chairman and Chairman of the Audit Committee	Saksiam Leasing Plc.
	The Role of Chairman Program (RCP No.18/2008 Thai Institute of Directors (IOD)		2018-Present	Chairman and Chairman of the Audit Committee	Samart Aviation Solutions Plc.
Mr. Pises Iamsakulrat 59 years of age • no relationship	Successful Formulation & Execution of Strategy (SFE) No.4/2009 Thai Institute of Directors (IOD)		1995-2015	Audit Partner and Senior Consultant	KPMG Phoomchai Audit Co., Ltd.
	Master of International Trade, Golden Gate University, U.S.A.	0.043	Mar 1,2018- Present	Independent Director and Audit Committee	TPI Polene Plc.
			2008-Present	Director	TPI Polene Plc.
	Bachelor's degree, Business Administration, Menlo College, California, U.S.A		1987- Present	Managing Director	Iamsakulrat Co., Ltd.
			1990- Present	Managing Director	Lampang Food Products Co., Ltd.
			1995- Present	Vice President	Laos Industrial-Agriculture Co., Ltd.
	Directors Accreditation Program (DAP- No. 140/2017) Thai Institute of Directors (IOD)		1997- Present	Director	K. Cotton & Gloss Co., Ltd.
			1997- Present	Director	TPI Holding Co., Ltd.
			2004- Present	Managing Director	Maekong Inter Trade Co., Ltd.

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Thavich Taychanavakul 74 years of age • no relationship	Bachelor's degree, Business Administration Kinki University, Japan National Defense College No. 366 Directors Accreditation Program (DAP- No. 6/2003) Thai Institute of Directors (IOD) Finance for Non-finance Director (FND) No.30/2006 Thai Institute of Directors (IOD)	0.002	Mar 1,2018-Present	Audit Committee	TPI Polene Plc.
			2008- Present		
			2013-Present	Independent Director	TPI Polene Plc.
				Chairman Executive	Mae Fah Luang University
			2012-Present	Director	Council
				Advisor	Thai Industrial Estate Association
			2012-Present		
				Chairman Executive	
			1999- Present	Director	Hi-Tech Kabin Logistics Co., Ltd.
				Chairman Executive	
Mr. Tayuth Sriyuksiri 69 years of age • no relationship	Master of Business Administration, Boston University, U.S.A. Bachelor's Degree, Engineering, Mechanic, Worcester University, U.S.A. Director Accreditation Program (DAP- No.29/2004) Thai Institute of Directors (IOD)	0.492	2008-Present	Executive Director	TPI Polene Plc.
			1982- Present	Managing Director	K. Cotton & Gloss Co., Ltd.
			1994- Present	Director	TPI Holding Co., Ltd.
			1999- Present	Director	Micro Fiber Industry Co., Ltd.
			2005- Present	Director	Hua Thai Manufacturing Plc.
Miss Tanyaratt Iamsopana 46 years of age • no relationship	Master of Science, Technical University Berlin, Germany. • Bachelor's Degree, Engineering, Thammasat University • MMP, Class52, Faculty of Commerce and Accountancy Chulalongkorn University • Director Accreditation Program (DAP- No.58/2006) • Thai Institute of Directors (IOD) • The Executive Program for Young Professionals (EYP) 2/2016 Ministry of Finance • Sasin Graduate Institute of Business Administration Certificate • Global Executive Program (GEP) No. 1/2022 • Motor Insurance Committee	0.071	Present	Executive Director	TPI Polene Plc.
				Managing Director	Bangkok Union Insurance Plc.
				Director	Bangkok Union Life Insurance Plc.
				Director, Property Insurance committee	Thai General Insurance Association 2023

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Pakorn Leopairut 43 years of age • no relationship	Master of Public and Private Management NIDA	3.151	2007-Present Jan 2016- Present	Executive Director Member of the Management Committee	TPI Polene Power Plc. TPI Polene Power Plc.
	CEDI-BABSON ENTREPRENEURIAL LEADERSHIP PROGRAM No. 1/2556		Feb 2016- Present 2019- Present 2008- Present 2009- Present 2010- Present	President Executive Director Assistant Vice President Executive Director	TPI Polene Power Plc. TPI Polene Plc. TPI Polene Plc. TPI All Seasons Co., Ltd. TPI Polene Bio Organics Co., Ltd.
	Young F.T.I Eite No. 1 The Federation Of Thai Industries		2010- Present 2010- Present	Executive Director Executive Director	TPI Service Co., Ltd. TPI Polene Power (International) Co., Ltd.
	Executive Development Program No.10 Ministry of Finance FPO : Forum Economic Guru Seminar No. 3 Ministry of Finance		2014- Present Jul 2015- Present 2006- Present	Executive Director Executive Director Executive Director	TPI Commercial Co., Ltd. TPI Healthcare Co., Ltd. Thai Petrochemical Industry Co., Ltd.
	Energy Executive Program No. 1 The Federation Of Thai Industries		2007- Present Oct 2019-Present Oct 2019-Present Oct 2019-Present Oct 2019-Present 2007-2008	President Executive Director Executive Director Executive Director Executive Director Investment Analyst	Thai Nitrate Co., Ltd. TPI Deep Sea Port Co., Ltd. TPI Smart City Co., Ltd. TPI Wind Power Co., Ltd. TPI Solar Power Co., Ltd. MFC Asset Management Plc.
	Directors Accreditation Program (DAP- No.132/2016) Thai Institute of Directors (IOD)		Present Present Present	Executive Director Executive Director Executive Director	TPI Concrete Co., Ltd. Thai Propoxide Co., Ltd. TPI Bio Pharmaceuticals Co., Ltd.
	Tisco Wealth Enhancement Program (WEP 4) No.4 (2016)		Present	Executive Director	United Grain Industry Co., Ltd.
	The Young Executive Program in Energy Literacy for a Sustainable Future (YTEA) No.7 (2019)		Present 2002-2007 2016-Present Present	Executive Director Supervisor Director Executive Director	Pornchai Enterprises Co., Ltd. Thai Petrochemical Industry Plc. Polene Silicon Co., Ltd. TPI Distribution Center Co., Ltd.
	Digital Marketing Analytics for Growth (MDES) and DUGA		Present	Executive Director	TPI Biomass Power Co., Ltd.
	Executive Breakfast Forum 2022 Ep.12 Balanceing Risk, Trust and Opportunity in an Uncertain World (MDES) (DEGA)				
	"know the architect for Senior Executives", Generateion 4				
	Refreshment Training Program (RFD) No. 9/2023 Thai Institute of Directors (IOD)				

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Pornpol Suwanamas 44 years of age <ul style="list-style-type: none">no relationship	Bachelor of Humanities, Srinakharinwirot University	-	2019-Present 2019-Present	Director Independent Director, Audit Committee	TPI Polene Plc. TPI Polene Plc.
	Master of Technology and printing / Mind and Brain Learning of Oxford Brookers University		2008-Present	Director and Secretary	Mind Management Promotion Foundation under patriarchal patronage
	PhD. Of Buddhist theology at Wat Bowoniwet School in Bangkok		2008-Present	Director and Secretary	Paendin Dham Foundation under patriarchal patronage
	Certification of No.29 Meditation instructor Course from Willpower Institute , Wat Tham Mongkol.		2010-Present	Director and Secretary	Novice promotion foundation under patriarchal patronage
	Certification of No.13 teacher training from Willpower Institute , Wat Tham Mongkol.		2013-Present	Vice Chairman	Rojana Dhamma Foundation
	Intermediate Certificate Course of Political new Leadership no.4, King Prajadhipok’s Institute		2017-Present	Director	The National council on social welfare of Thailand Ministry of Labor
			2018-May, 2019	Working Group	
	Advanced Certificate Course in Promotion of a Peaceful Society no.6, King Prajadhipok’s Institute		1982-Dec 20, 2019	Assistant secretary to the abbot of the Rama IX Kanchanaphisek Temple.	Rama IX Kanchanaphisek Temple.
	Directors Association Program (DAP) no.196/2020		2013-Dec 20, 2019	Assistant Secretary to Chiang Rai Lord Abbot of Buddhist monastery	
	Leadership Succession Program (LSP) no.12		2019	<ul style="list-style-type: none">Junior of Budget CommissionConsultant of Junior of Religion CommissionConsultant of Junior of labor commission senator	
	Know the Architect for Senior Executives no.4, Architect Council of Thailand				
	Diploma Programs Democratic politics for senior executives no.24		2018-May, 2019	Advisor of chairman	Rojana Industrial Park PCL.
			2019	Director	Pathumwan Demonstration School Srinakarinwirot University (primary school)
	Environmental Governance Certificate Program for Senior Executives no.9 (DCCE)			Director	Pathumwan Demonstration School Srinakarinwirot University (Secondary school)
	Certificate Program in Digital Health Management Innovation no.2 (HIDA)			Monk teacher- morality course	Navaminthrachinuthit Bodidecha School.
	Advanced Insurance Courses no.11 (OIC)		2021	Monk teacher- morality course	Rama IX Kanchanaphisek School
			2022	Monk teacher- morality course Monk teacher- morality course Special Lecturer	
	Medical Leadership Certificate Program no.1, The Medical Council of Thailand		2022-2023		Udomsuksa School
		2023		Kasetsart University laboratory school Fa Sai Wittaya School King Prajadhipok’s Institute Department of Environmental Quality Promotion and Chulalongkorn University Suan Sunandha Rajabhat University Office of Insurance Commission (OIC)	

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Dr. Virat Chatdarong 45 years of age • no relationship	Ph.D.Massachusetts Institute of Technology (MIT), Engineering Department of Civil and Environment Master's degree 1. M.B.A Sasin, Chulalongkorn University 2. Massachusetts Institute of Technology (MIT), Engineering Department of Civil and Environment Bachelor's degree Engineering Department of Civil and Environment, Chulalongkorn University (1 st Honors Gold Medal) • Business Reform and Networking Courses (BRAIN 4) The Federation of Thai Insutries • The Political “Leadership in new era” program, 6th generation, King Prajadhaipok’s Institute • Royal Recipients Ananthamahidol Foundation • Engineering 2000 • Director Accreditation Program DAP 189/2022	0.042	2021 – Present	Vice President	TPI Polene Plc.
			2009 – 2021	Asst. Vice President	TPI Polene Plc.
			2009 – Present	Asst. Vice President	TPI All Seasons Co., Ltd.
			2008 – 2023	Manager	Rayong Forest Co., Ltd.
			2018 – Present	Director	The Federation of Thai Insutries
			2018– 2022	Deputy Secretary General	The Federation of Thai Insutries
			2018 –2020	Vice President	The Federation of Thai Insutries
			2016 – 2018	Secretary	Rayong Industrial Council
			2018– Present	Director	Rayong Industrial Council
			2006–2008	Teacher	Engineering Department of Chulalongkorn University
Mr. Nitisit Jongphitakratana 54 years of age • no relationship	Master of Law, Thammasat University	-	2006–Present	Secretary	TPI Polene Plc.
			2011–Present	Asst. Vice President	TPI Polene Plc.
			2006–2011	Department Manager	TPI Polene Plc.
OTHER EXECUTIVES					
. Prasert Ittimakin 65 years of age • no relationship	M.B.A. Finance University of St. Thomas, U.S.A.	0.00	2001–Present	Senior Vice President Finance Division	TPI Polene Plc.
	Bachelor of Accounting, Chulalongkorn University		1998–2001		TPI Polene Plc.
			1990–1998	Vice President Accounting and Finance	Asia Credit & Securities Plc.
			Subsidiary Governance Program (SGP) no. 4/2023 Thai Institute of Directors (IOD)		Division Vice President Corporate Finance Department
Mr. Somkeart Srisuwan 65 years of age • no relationship	.B.A. of Kasetsart	-	2012–Present	Senior Vice President Information Technology Division	TPI Polene Plc.
	Bachelor of Accounting, Chulalongkorn University		1999–2012	Senior Manager (SVP) Office of Procurement and Administration Division	CIMB THAI Bank
			1993–1999	Senior Manager (SVP) System Development Department Division	Krung Thai Thanakit Finance Co.,Ltd.

NAME /AGE / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLD- ING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Miss Chularat Danwattanachai 63 years of age • no relationship	M.B.A. Thammasat University (2 nd Class Honors)	-	2001-Present	Vice President Accounting and Finance Division	TPI Polene Plc.
			1999-2001	Asst. Vice President Accounting and Finance Division	TPI Polene Plc.
			1989-1998	Asst. Vice President Corporate Finance Department	Asia Credit & Securities Plc.
Mr. Pongsak Yiengsakun 67 years of age • no relationship	Bachelor of Business Administration, Banking and Finance, Chulalongkorn University	-	2012-Present	Vice President Financial Operations Department	TPI Polene Plc.
			2001-2012	Asst.Vice President Financial Operations Department	TPI Polene Plc.
			1992-2001	Manager of Finance Department	TPI Polene Plc.
Mrs. Narumon Chattawan 57 years of age • no relationship	Bachelor Degree in Accounting, Thammasat University	-	16 Feb 2023- Present	Vice President	TPI Polene Plc.
			2022 – 15 Feb 2023	Accounting Department	
			2020-2022	Assistant Vice President	TPI Polene Plc.
	2018-2022		Accounting Department		
	2017-2022		Director	Trans Thai Railway Co.,Ltd.	
	2019-2020		Executive Director	Triton Holding Plc.	
	2018-2018		Director/Executive Director/ CFO	Triton Engineering and Construction Plc	
	Director	Nongree Power Plant Co.,Ltd.			
	Director	Splash Media Plc.			

Remarks : * Percentage of shareholding above includes shares held by spouses and offspring.

Attachment 2

Positions of the Management and Controlling Persons over the Company, its Subsidiaries, the Joint Venture Company, Associated Companies and other related Companies

as at 31 December 2023

Name	TPI Polene	The Affiliated Company 2/																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Mr. Prachai Leophairatana	//	//X	//X	//X	//X	//X	//X	//X	//	//X	-	//X	//X	//X	//X	//X	//X	//X
2. Mr. Prateep Leopairut	//	//	//	-	//	//	//	//	-	//	-	//	//	-	//	//	-	//
3. Dr. Pramuan Leophairatana	//	//	//	//	//	//	//	//	//	//	//	//	//	-	//	//	-	//
4. Mr. Prayad Liewphairatana	//	//	//	//	//	//	//	//	//	//	//	//	//	-	//	//	-	//
5. Mrs. Orapin Leophairatana	//	//	//	//	//	//	//	//	-	//	-	//	//	//	//	//	//	//
6. Mr. Pisej Iamsakulrat	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Mr. Thavich Taychanavakul	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8. Mr. Tayuth Sriyuksiri	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Mr. Khantachai Vichakkhana	/X	-	-	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10. Miss Malinee Leophairatana	/	-	-	/	-	-	-	-	/	-	//	//	//	-	-	-	-	-
11. Mr. Supoj Singsanei	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Mr. Pakorn Leopairut	//	//	//	//	//	//	//	//	-	-	-	//	//	//	//	//	//	//
13. Mr. Pornpol Suwanamas	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14. Miss Tanyaratt Iamsopana	//	-	-	-	-	-	-	-	-	-	//	-	-	-	-	-	-	-
15. Dr. Virat Chatdarong	/	-	-	-	//	-	-	-	-	-	-	-	-	-	-	-	-	-

Note : 1/ / = Director X = Chairman of the Board // = Executive Director
2/ List of the Company

No.	The Affiliated Company	Status
1.	TPI Concrete Co., Ltd.	Subsidiary company
2.	Thai Propoxide Co., Ltd.	Subsidiary company
3.	TPI Polene Power Plc.	Subsidiary company
4.	TPI All Seasons Co., Ltd.	Subsidiary company
5.	Polene Silicon Co., Ltd.	Subsidiary company
6.	TPI Polene Bio Organics Co., Ltd.	Subsidiary company
7.	Thai Nitrate Co., Ltd.	Subsidiary company
8.	Thai Special Steel Plc.	Associated company
9.	Mondo Thai Co., Ltd.	Subsidiary company
10.	Bangkok Union Life Insurance Plc.	Associated company
11.	United Grain Industry Co., Ltd.	Associated company
12.	Pornchai Enterprises Co., Ltd.	Related company
13.	TPI Commercial Co., Ltd.	Subsidiary company
14.	TPI Service Co., Ltd.	Subsidiary company
15.	TPI Healthcare Co., Ltd.	Subsidiary company
16.	Master Achieve (Thailand) Co., Ltd.	Subsidiary company
17.	TPI Bio Pharmaceuticals Co., Ltd.	Subsidiary company

The Board of Directors – TPI Concrete Co., Ltd. as at 31 December 2023

Name	Position
1. Mr. Prachai Leophairatana	Chairman
2. Mr. Prateep Leopairut	Director
3. Dr. Pramuan Leophairatana	Director
4. Mr. Prayad Liewphairatana	Director
5. Mrs. Orapin Leophairatana	Director
6. Mr. Panya Tangsingtrong	Director
7. Mr. Pakorn Leopairut	Director

The Board of Directors – TPI Polene Power Plc. as at 31 December 2023

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. Mr. Pakorn Leopairut	Director
6. Miss Pattrapan Leopairut	Director
7. Mr. Pakkapol Leopairut	Director
8. Miss Nitawan Leophairatana	Director
9. Mr. Manue Leohairoj	Director
10. Mr. Thiraphong Vikitset	Director
11. Mr. Aram Senamontri	Director
12. Mr. Khantachai Vichakkhana	Director
13. Miss Malinee Leophairatana	Director
14. Mr. Wanchai Manosutthi	Director
15. Mr. Porakrit Leophairatana	Director

The Board of Directors – TPI Polene Bio Organics Co., Ltd. as at 31 December 2023

Name	Position
1. Mr. Prachai Leophairatana	Chairman
2. Mr. Pateep 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
11. Mr. Thanakorn Liewphairatana	Director
12. Miss Chutinan Liewphairatana	Director
13. Mr. Vipot Kotbua	Director
14. Mr. Pakpoom Thongsorn	Director

The Board of Directors – TPI All Seasons Co., Ltd. as at 31 December 2023

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

The Board of Directors – Mondo Thai Co., Ltd. as at 31 December 2023

Name	Position
1. Mr. Prachai Leophairatana	Chairman
2. Mr. Prateep Leopairut	Director
3. Dr. Pramuan Leophairatana	Director
4. Mr. Prayad Liewphairatana	Director
5. Mrs. Orapin Leophairatana	Director

The Board of Directors – TPI Commercial Co., Ltd. as at 31 December 2023

Name	Position
1. Mr. Prachai Leophairatana	Chairman
2. Mrs. Orapin Leophairatana	Director
3. Mr. Pakorn Leopairut	Director
4. Miss Pattrapan Leopairut	Director
5. Mr. Pakkapol Leopairut	Director
6. Mrs. Achira Chatdarong	Director
7. Mrs. Nitawan Leophairatana	Director
8. Mr. Thanakorn Liewphairatana	Director
9. Miss Chutinan Liewphairatana	Director
10. Mr. Prasert Ittimakin	Director
11. Mr. Vipot Kotbua	Director
12. Mr. Pakpoom Thongsorn	Director
13. Mr. Chairat Kittithorn	Director

The Board of Directors – TPI Service Co., Ltd. as at 31 December 2023

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

The Board of Directors – Thai Nitrate Co., Ltd. as at 31 December 2023

Name	Position
1. Mr. Prachai Leophairatana	Chairman
2. Mr. Prateep Leopairut	Director
3. Dr. Pramuan Leophairatana	Director
4. Mr. Prayad Liewphairatana	Director
5. Mrs. Orapin Leophairatana	Director
6. Mr. Pakorn Leopairut	Director
7. Mr. Pakkapol Leopairut	Director

The Board of Directors – Master Achieve (Thailand) Co., Ltd. as at 31 December 2023

Name	Position
1. Mr. Prachai Leophairatana	Chairman
2. Mrs. Orapin Leophairatana	Director
3. Mr. Pakorn Leopairut	Director
4. Mr. Pakkapol Leopairut	Director
5. Mrs. Achira Chatdarong	Director
6. Mrs. Nitawan Leophairatana	Director
7. Miss Pattrapran Leophairut	Director
8. Mr. Thanakorn Liewphairatana	Director
9. Miss Chutinan Liewphairatana	Director

The Board of Directors – TPI Bio Pharmaceuticals Co., Ltd. as at 31 December 2023

รายชื่อกรรมการ	ตำแหน่ง
1. Mr. Prachai Leophairatana	Chairman
2. Mr. Prateep Leopairut	Director
3. Dr. Pramuan Leophairatana	Director
4. Mr. Prayad Liewphairatana	Director
5. Mrs. Orapin Leophairatana	Director
6. Miss Pattrapan Leophairut	Director
7. Mr. Pakorn Leopairut	Director
8. Mr. Pakkapol Leopairut	Director
9. Mr. Thanakorn Liewphairatana	Director
10. Miss Chutinan Liewphairatana	Director
11. Mr. Porakrit Leophairatana	Director

The Board of Directors – TPI Healthcare Co., Ltd. as at 31 December 2023

รายชื่อกรรมการ	ตำแหน่ง
1. Mr. Prachai Leophairatana	Chairman
2. Mr. Prateep Leopairut	Director
3. Dr. Pramuan Leophairatana	Director
4. Mr. Prayad Liewphairatana	Director
5. Mrs. Orapin Leophairatana	Director
6. Miss Pattrapan Leophairut	Director
7. Mr. Pakorn Leopairut	Director
8. Mrs. Nitawan Leophairatana	Director
9. Mr. Pakkapol Leopairut	Director
10. Mr. Porakrit Leophairatana	Director

The Board of Directors – Thai Propoxide Co., Ltd. as at 31 December 2023

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

The Board of Directors – Polene Silicon Co., Ltd. as at 31 December 2023

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

Attachment 3

Detail of Internal Audit Manager

as at 31 December 2023

NAME / FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/ TRAINING	%SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Somchai Kitpipit • no relationship	M.B.A. Business Law Ramkhamhaeng University	-	2006-Present	• Asst. Vice President Internal Audit Department Internal Audit	TPI Polene Plc.
	Bachelor of Business Administration (Accounting), Ramkhamhaeng University		1992-2006	• Manager Internal Audit Department	Agro Industry business, Securities business, Petrochemical business, Cement business, Printing equipment business.
	Tax Auditor				

Courses Training for Internal Audit Manager

No.	Courses Training	Period	Training Companies
1.	Keep pace with tax laws and financial reporting standards for NPAEs	November 4-5, 2023	Tax Auditor's Association
2.	Update current taxation and financial reporting standards	December 17-18, 2022	Tax Auditor's Association
3.	Risk Management	July 15, 2022	TPIPL Personnel Development and Training Department by Prof. Surapong Choorungsit
4.	Update of Taxation in the Covid-19 Era and Accounting Standards in 2021	December 18-19, 2021	Tax Auditor's Association
5.	Anti-Corruption	April 9, 2021	TPIPL Personnel Development and Training Department
6.	Personal Data Protection Act B.E. 2562 (2019)	September 25, 2020	Professional Internal Audit Service (PIAS)

Attachment 4

Assets used in the business operations and details of the appraisal of the assets as at December 31, 2023

Details of the assets used in the business operations and list of the asset appraisal are detailed in the Annual Report 2023 (Form 56-1 One Report), Section 1, Structure and Operation of the Group of Company, Section 4: Assets Used in Business Operation.

Attachment 5

Policies and Guidelines for Good Corporate Governance and Business Ethics : Full Version

Policies and Guidelines for Good Corporate Governance and Code of Conduct: Full Verion. The Company discloses such information on its website at <https://www.tpipolene.co.th/th/aboutus/code-of-conduct-th>



Attachment 6

Audit Committee's Report for 2023

To : Shareholders

The Audit Committee of TPI Polene Public Company Limited consists of four independent directors, who are all qualified with knowledge of finance, law and management administration: namely, Mr. Supoj Singsanei as the Chairman of the Audit Committee; Mr. Pises Iamsakulrat and Mr. Thavich Taychanavakul and Mr. Pornpol Suwanamas, as Audit Committee members, which has been considered and proposed by the Board of Directors for appointment in accordance with legal procedures: with Mr. Nitisit Jongphitakratana, the Corporate Secretary, as Secretary to the Audit Committee.

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, such as ESG principles to be in line with the Sustainability Report., etc. In 2023, the Audit Committee convened 5 meetings as follows :

1. To review and to evaluate internal control systems

The Company and its subsidiaries have appropriate internal control systems and have operated the business efficiently and effectively under appropriate and sufficient internal controls, as supported by the operational performance report. The Company and its subsidiaries have 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 and its subsidiaries, 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 public well-being creation and environmental conservation and fosters 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. The Company has a sound internal control system and works effectively and efficiently under an adequate and appropriate internal control system, which can help prevent damage, according to the Audit Committee's examination of the Company's operations over the previous year. This might take place quickly, lower operational risks, aid in making the Company's financial statements and reports accurate and trustworthy, and enable the protection of the Company's assets and investors' money. A unit dedicated to internal auditing is in place to give assurance in accordance with the yearly plan, which is reviewed and approved by the chairman of the audit committee.

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

Financial statements are financial reports that show the performance and financial position of an entity that must be disclosed to stakeholders. The Audit Committee has reviewed important items in the consolidated financial statements of the Company and its subsidiaries, both quarterly financial statements and fiscal year 2023 financial statements as well as having a meeting with the Company's auditor to independently exchange opinions on the financial statements without the presence of management on issues of material information of the financial statements and disclosures in the notes to the financial statements. It was found that the Company prepared financial reports in accordance with generally accepted accounting standards and disclosed sufficient information in the notes to the financial statements within a reasonable period of time as required by law and the financial reporting standards set by the Federation of Accounting Professions which are beneficial to the decision of investors and all stakeholders.

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. Risk Management Review

The Company has set up a risk management committee chaired by the Chief Executive Officer and has executives from related departments as committees to consider structures, policies, risk management frameworks, risk management plans, review risks, and follow up on risk management. The Risk Management Department is responsible for preparing risk management reports, implementing and supporting risk management across the organization. The Company has focused on the environmental risks from greenhouse gas emissions that affect climate change, the risks that may arise from economic crime and modern technology (IT SECURITY), consumer behavior risks from rapidly changing communication technologies, risks caused by the outbreak of COVID-19, etc. The Company, through the Risk Management Committee and all organizational departments, has continuously observed the changing environment and taken into account significant risks that could have an impact on the Company's operations. From weekly management meetings, the Company has determined measures to respond to risks within acceptable levels and has included them in the annual work plan.

5. Review of fraud investigations

The Company has announced an Anti-Fraud and Corruption Policy through its Chief Executive Officer, which outlines guidelines for employees at all levels of the Company to understand and take part in the prevention and fight against corruption in the organization both directly and indirectly. This includes creating channels for whistleblowers or complaints about corruption actions related to the Company from both internal complainants and external stakeholders. The Company provides protection to complainants and complaints will be kept confidential both during and after the investigation is completed. If the accused has actually committed an offense, the Company has imposed disciplinary action in accordance with the regulations set by the Company. If the offense is an unlawful act, the offender must be prosecuted and subject to legal penalties.

6. Review of connected transactions or conflicts of interest

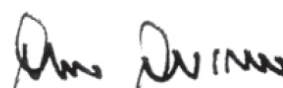
The Company has created the Company's business ethics (Code of Conduct) for company directors, executives, and employees at all levels and everyone to acknowledge and strengthen the organizational culture that gives importance to operations that do not conflict with having an interest and conflicts of interest with the Company in order for the organization to gain the most from transparent and auditable business operations. The Audit Committee reviewed the connected transactions and transactions that may have conflicts of interest from the reports of the relevant directors and found that the transactions were reasonable and did not cause any disadvantage to the Company and properly disclosed to the regulatory authority within the specified timeframe.

7. To select, nominate, and propose the remuneration of the statutory auditors of the Company for the year 2024.

The Audit Committee has taken into consideration the independence, performance, experience and an 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 Miss Thanyalux Keadkaew, CPA registration no. 8179 or Mr. Ekkasit Chuthamsatid, CPA registration no. 4195 or Mr. Natthaphong Tantichattanont, CPA registration no. 8829, KPMG Phoomchai Audit Limited, or, to be the statutory auditors of the Company for the year 2024.

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 with an adherence to the importance of sustainable business management. 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. Supoj Singsane)

Chairman of the Audit Committee

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 2023 financial statements of the Company and its subsidiaries 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 have 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 thereby 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 credibly to ensure that the financial statements of the Company and its subsidiaries present financial positions, operational results and financial cash flow which are accurate and reliable in all material aspects.

Sincerely Yours,



(Mr. Khantachai Vichakkana)
Chairman of the Board



(Mr. Prachai Leopairatana)
Chief Executive Officer



บริษัท ทีพีโอ โพลีน จำกัด (มหาชน) TPI POLENE Public Company Limited

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