

รายงานประจำปี ๒๕๕๙

annual

report 2016

THE BEAUTY OF NATURE



TPI NATURAL WOOD
TONGUE AND GROOVE

บริษัท ทีพีโอ โพลีน จำกัด (มหาชน)
TPI POLENE
Public Company Limited





Contents

Financial Highlights	165	Corporate Development in 2016	203
Corporate Profile	167	Operating Results and Financial Status in 2016	211
Message from the Board of Directors	169	Inter-Company Transaction	218
Audit Committee's Report for the year 2016	173	Risk Management	220
Corporate Social Responsibilities: CSR	174	Capital Structure	221
TPI Polene and Social Responsibility	177	Shareholding Structure & Dividend Payment Policy	222
TPI Polene, its Quality, Safety, Hygiene and Environment	188	The Management	223
Overview of Business Operations	191	Corporate Governance	241
Business Structure of the Group	192	Report of the Board of Directors' Responsibilities	
Nature of Business	193	for Financial Statements	247
Affiliated Companies	200	Auditor's Report	248
Revenues Structure	202	Consolidated Financial Statements	253

Investors can access the information of the Company that issued security, from the annual report (form 56-1) of the Company through the company's website at www.sec.or.th



Ready to Move Steadily Forward



Other than maintaining its position as one of the leading cement and plastic resin manufacturers, TPI Polene Group is a leader of power generation, using clean and efficient renewal energy sources with proprietary technologies well adapted to waste-to-energy operations through recoverable recyclable materials from community waste and processed industrial waste to boost RDF (Refuse Derived Fuel). The aim is to reduce the use of fuel generated from fossils as much as possible for ultimate benefits under the zero-waste policy.

Under the concept “Clean Energy and Clean-up Country”, TPI Polene Group has become a leading operator of power plants in Thailand, with the largest waste-to-energy power plant operations in the country. This is accomplished by minimizing residual waste from operations and reducing gas emissions to be a socially responsible and environmentally friendly enterprise.



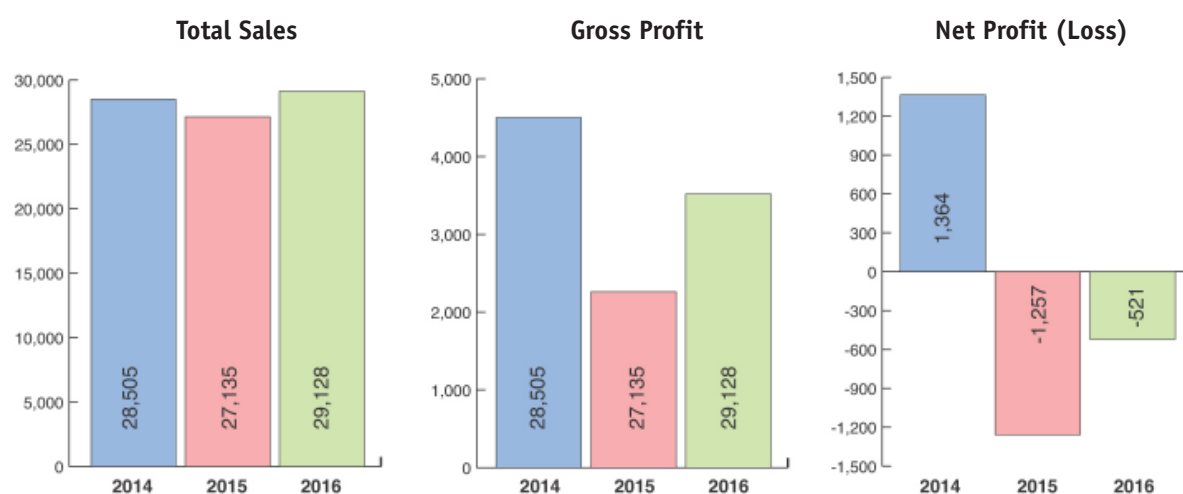
Financial Highlights

	Unit	2014	2015**	2016
Operational Performance				
Total Revenues	(Baht Mil.)	31,200	29,247	31,492
Total Sales	(Baht Mil.)	28,505	27,135	29,128
Gross Profit	(Baht Mil.)	4,501	2,261	3,517
Operating Profit (Loss) before income tax	(Baht Mil.)	775	(1,880)	(1,806)
Net Profit (Loss)	(Baht Mil.)	1,364	(1,257)	(521)
Financial Status				
Total Assets	(Baht Mil.)	99,931	107,645	115,534
Total Current Assets	(Baht Mil.)	13,515	16,953	19,549
Total Liabilities	(Baht Mil.)	42,146	51,679	60,460
Total Financial Debt	(Baht Mil.)	27,600	37,681	46,609
Total Shareholders' Equity	(Baht Mil.)	57,785	55,966	55,074
Key Financial Ratios				
Gross Profit Margin	(%)	15.79	8.33	12.07
Net Profit Margin	(%)	4.37	(4.30)	(1.66)
Paid-up Capital	(Baht Mil.)	20,190	20,190	20,190
Par value per share	(Baht)	10.00	1.00	1.00
Book Value per share	(Baht)	2.89	2.80	2.76
Earnings per Share	(Baht)	0.068	(0.063)	(0.026)
Dividend per Share	(Baht)	0.02	0.02	0.02
Dividend payout Ratio *	(%)	40.94	N/A	125.00
Debt to Equity Ratio	(times)	0.73	0.92	1.10
Financial Debt to Equity Ratio	(times)	0.48	0.67	0.85

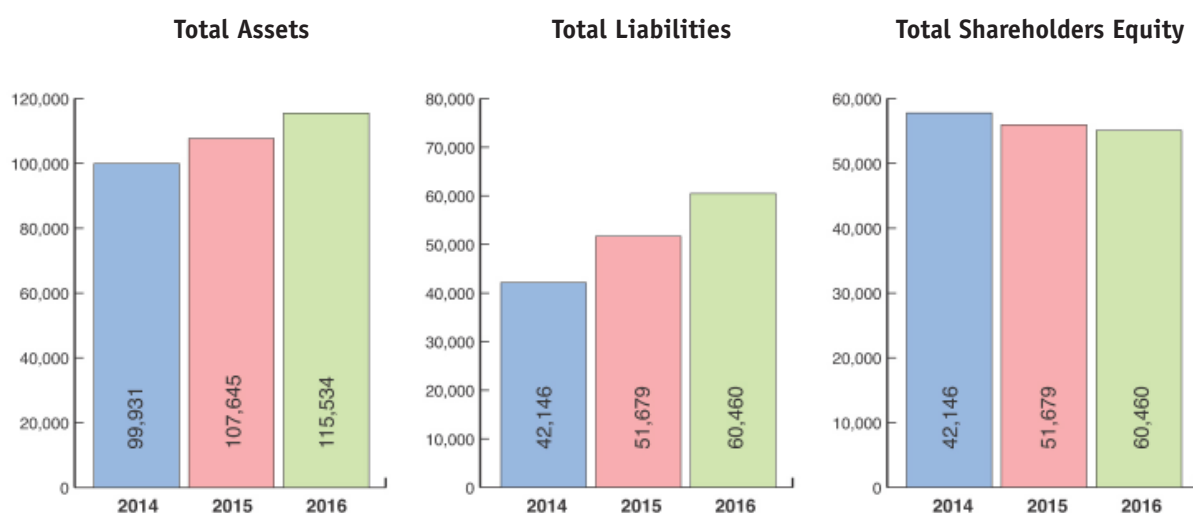
Remarks: * Based on separate financial statements.

** Consolidated Financial Statements (Restated)

Total Revenues and Net Profit



Financial Status



Corporate Profile

Company's Name	: TPI Polene Public Company Limited
Abbreviation in the SET	: TPIPL
Registration Number	: 01075370000564 (formerly Bor. Mor. Jor. 303)
Nature of Business	: Manufacture and sale of cement, cement mortar, clinker, electricity, Ready-mixed concrete, LDPE/EVA plastic resin, solar film, VAE glue, concrete roof tile, fiber cement, lightweight Concrete, industrial waste disposal, organic fertilizer and drinking water, etc.
Registered Capital	: Baht 24,815,000,000 Consisting of 24,815,000,000 ordinary shares, at the par value of Baht 1 each.
Paid-up Capital	: Baht 20,190,000,000 Consisting of 20,190,000,000 ordinary shares, at the par value of Baht 1 each.
Accounting Period	: January 1 - December 31

Location

Head Office Location : 26/56 Chan Tat Mai Road, Thungmahamek, Sathorn, Bangkok 10120

Tel. Number : +66 (0) 2213-1039 - 49, 285-5090 -9

Fax Number : +66 (0) 2213-1035, 213-1038

Web Address : <http://www.tpiolene.co.th>

Cement Plant/Power Plant : 299 Moo 5, Mittraparp Road, Tambol Tubkwang, Kangkhoy, Saraburi 18260

Cement Mortar Plant

Lightweight Concrete Plant

Pyrolysis and RDF Plant

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

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

LDPE Plant : 299 Moo 5 Sukhumvit Road, Tambol Chuengnoen, Amphur Muang, Rayong 21000

Tel. Number : +66 (0) 3861-1333

Fax Number : +66 (0) 3880-2568

Concrete Roof Tiles and : 77 Moo 7, within CRT Plant sub-road from Sai Ban Kork Street, Banlardkaopoon and Highway no. 1014,

Fiber Cement Plant 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

Investors Relation Unit:

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

Other Relevant Information:

Share Registrars : Thailand Securities Depository Company Limited

Office Location : The Stock Exchange of Thailand, 93 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

Debentures, Debentures Registrar and Debenture Holders' Representatives
Offering for Sale of Debentures on December 31, 2016

Debenture Series	Name	Type	Amount (MB)	Interest Rate (p.a.)	Issued Date	Maturity Date	Tenor
TPIPL177A	Debentures of TPI Polene Public Company Limited No.1/2014 Series1 Due A.D.2017	Unsecured and Unsubordinated Debentures with a debentureholders' representative	3,000	5.00 %	17 Jan 2014	17 July 2017	3.5 Years
TPIPL187A	Debentures of TPI Polene Public Company Limited No.1/2014 Series2 Due A.D.2018	Unsecured and Unsubordinated Debentures with a debentureholders' representative	2,000	5.30 %	17 Jan 2014	17 July 2018	4.5 Years
TPIPL191A	Debentures of TPI Polene Public Company Limited No.1/2015 Series1 Due A.D.2019	Unsecured and Unsubordinated Debentures with a debentureholders' representative	3,000	4.85 %	22 Jan 2015	22 Jan 2019	4 Years
TPIPL201A	Debentures of TPI Polene Public Company Limited No.1/2015 Series2 Due A.D.2020	Unsecured and Unsubordinated Debentures with a debentureholders' representative	3,000	5.20 %	22 Jan 2015	22 Jan 2020	5 Years
TPIPL188A	Debentures of TPI Polene Public Company Limited No.2/2015 Series1 Due A.D.2018	Unsecured and Unsubordinated Debentures with a debentureholders' representative	3,000	4.10 %	5 Aug 2015	5 Aug 2018	3 Years
TPIPL198A	Debentures of TPI Polene Public Company Limited No.2/2015 Series2 Due A.D.2019	Unsecured and Unsubordinated Debentures with a debentureholders' representative	2,750	4.40 %	5 Aug 2015	5 Aug 2019	4 Years
TPIPL208A	Debentures of TPI Polene Public Company Limited No.2/2015 Series3 Due A.D.2020	Unsecured and Unsubordinated Debentures with a debentureholders' representative	2,205	4.65 %	5 Aug 2015	5 Aug 2020	5 Years
TPIPL218A	Debentures of TPI Polene Public Company Limited No.2/2015 Series4 Due A.D.2021	Unsecured and Unsubordinated Debentures with a debentureholders' representative	3,600	4.90 %	5 Aug 2015	5 Aug 2021	6 Years
TPIPL228A	Debentures of TPI Polene Public Company Limited No.2/2015 Series 5 Due A.D.2022	Unsecured and Unsubordinated Debentures with a debentureholders' representative	4,000	5.20 %	5 Aug 2015	5 Aug 2022	7 Years
TPIPL214A	Debentures of TPI Polene Public Company Limited No.1/2016 Series 1 Due A.D.2021	Unsecured and Unsubordinated Debentures with a debentureholders' representative	1,600	4.35 %	1 Apr 2016	1 Apr 2021	5 Years
TPIPL224A	Debentures of TPI Polene Public Company Limited No.1/2016 Series 2 Due A.D.2022	Unsecured and Unsubordinated Debentures with a debentureholders' representative	1,200	4.60 %	1 Apr 2016	1 Apr 2022	6 Years
TPIPL234A	Debentures of TPI Polene Public Company Limited No.1/2016 Series 3 Due A.D.2023	Unsecured and Unsubordinated Debentures with a debentureholders' representative	2,645	4.80 %	1 Apr 2016	1 Apr 2023	7 Years
Total			32,000				

Debenture Registrar and

Debenture Holders' Representative : CIMB Thai Bank Plc

Address : 44, Langsuan Road, Lumpini Subdistrict, Pathumwan District, Bangkok.
 Telephone : +66(0) 2626-7507-8, + 66(0) 2626-7591
 Fax : +66(0) 2657-3390

Statutory Auditor

: KPMG Phoomchai Audit Limited.

Office Location : 195 Empire Building 21-22nd FL., South Sathorn Road, Kwaeng Yannawa, Sathorn, Bangkok 10120

Telephone : +66 (0) 2677-2000

Fax : +66 (0) 2677-2222

Message from the Board of Directors

To: Shareholders

Dear Sirs,

The economic situation in 2016 started to recover gradually, mainly driven by the boost in spending in both the government and private sector in the country, as there are some signs of economic recovery. However, the export sector in the country still grew at a relatively low level in parallel with the economic conditions in other countries of major business partners. All of these factors have directly affected Thailand's economy, which has expanded at a relatively low level.

Operating Performance

In 2016, the Company and its subsidiaries reported total revenues and losses of Baht 29,128 million and Baht 31,492 million compared with Baht 27,135 million and Baht 29,247 million in 2015 or increased by 7.34% and 7.68% respectively.

In 2016, the Company and its subsidiaries registered losses for the year of Baht 521 million compared with losses for the year of Baht 1,257 million in 2015, a decrease in loss of 58.51%. Losses for the year of Baht 521 million in 2016 comprised normal operating losses of Baht 1,806 million (after deduction of depreciation on a revaluation surplus of Baht 1,295 million affected by the change of the accounting policy), a net foreign exchange gain of Baht 288 million, income tax income of Baht 562 million and a gain on bargain purchases of Baht 435 million, whereas losses for the year of Baht 1,257 million in 2015 comprised normal operating losses of Baht 1,880 million, net foreign exchange gains of Baht 107 million, compensation from insurance claims of Baht 53 million and income tax income of Baht 463 million.

The Offering for Sale of Baht 5,445 million debentures in 2016

In April 2016, the Company successfully completed its fundraising through the issuance and sale offering of unsubordinated/unsecured debentures, in registered form with debenture holders' representatives, in the amount of Baht 5,445 million, (whereby the Company's outstanding debt of unsubordinated/unsecured debentures as of December 31, 2016 were Baht 32,000 million) with the TRIS affirmed rating of such debentures at BBB+, with a stable rating outlook. The proceeds from the fundraising through the issuance and sale offering of debentures will be utilized for working capital in business operations and/or to facilitate current project investments and potential investment projects in the future.

Fund Raising through Initial Offering Public Offering ("IPO") of newly issued ordinary shares to be listed on the Stock Exchange of Thailand.

With the commitment to perform business operations under the concept "Clean Energy and Clean up Country", TPI Polene Power Public Company Limited ("TPI Polene Power") Co., Ltd. (a subsidiary owned company) is one of the top leading waste-to-energy power plant operators in Thailand, which has a competitive advantages with an established track record, an experienced technical staff and proprietary technologies well adapted to waste-to-energy operations in Thailand.

TIIPP's policy is to operate all kinds of power plants. In March 2017, TPI Polene Power offered up to 2,500,000,000 newly issued ordinary shares (representing 29.76 per cent of the enlarged paid-up capital of TIIPP upon the completion of the IPO) at the offering price of Baht 7 per share (Par value of Baht 1 per share).

Upon the completion of the IPO, TPI Polene remains the controlling shareholder of TIIPP, holding 70.24 per cent of its enlarged paid-up capital.

Signed a contracted power generation from a RDF-fired Power Plant with the Electricity Generation Authority of Thailand (EGAT).

Presently, TPI Polene Power sells a contracted power generation capacity of 73 MW, consisting of a contracted power generation capacity of 18 MW power generation units (from RDF-fired power plant of 20 MW), which has been selling electricity to EGAT since January 2015, and a contracted power generation capacity of 55 MW from RDF-fired power plant of 60 MW, which has been selling electricity to EGAT since August 2015.

In addition, TPI Polene Power expects to sign a contracted power generation capacity of 90 MW with EGAT (a 100 MW plant, consisting of a 30 MW waste heat recovery unit and a 70 MW RDF-fueled unit). The 30 MW waste heat recovery plant is already in operation and sells electricity to TPI Polene to be used in TPIPL's cement production process until the RDF-fired power generation of capacity of 70 MW becomes commercially operational. Thereafter, a RDF-fired Power Plant with a power generation capacity of 100MW will sell a contracted power generation capacity of 90 MW to EGAT, the contract of which is expected to be signed in the fourth quarter of 2017.

The RDF-fired Power Plants receives an adder of Baht 3.50 per kwh, which is payable in addition to the standard price of EGAT, on alternative-fuel-generated electricity for a 7-year period, from The Power Electricity Authority of Thailand. These RDF-fired Power Plants have been granted promotion certificates from the BOI, which entitles them to a number of benefits including tax exemptions.

Entered into a power purchase agreement with TPI Polene for the sale of power generation from Power Plant

Presently, TPI Polene Power initially sells electricity generated from the waste heat recovery power generation of capacity of 40 MW and 30 MW to TPIPL. The 30 MW waste heat recovery plant is already in operation and sells electricity to TPI Polene to be used in TPIPL's cement production process until the RDF-fired power generation of capacity of 70 MW becomes commercially operational. Thereafter, a RDF-fired Power Plant with a power generation capacity of 100MW will sell a contracted power generation capacity of 90 MW to EGAT as per detailed as above.

In addition, TPI Polene Power entered into a power purchase agreement with TPI Polene for the sales of power from a coal-fired power plant with an expected installed power generation capacity of 150 MW. The plant is expected to complete by the fourth quarter of 2017 while a coal-fired power plant with an expected installed power generation capacity of 70 MW is expected to be completed by the fourth quarter of 2017.

The Company is constructing another coal and RDF-fired power plant of 70 MW, which is designed and constructed to enhance the Company's operational flexibility. In the event that the Company's RDF-fired power plants of 60 MW or RDF-fired power plant of 70 MW operate at less than full capacity due to machinery breakdown, maintenance or otherwise, coal and RDF-fired power plants of 70MW can be used as a backup power plant to provide power for such power plants, where necessary.

New TPI Polene Group Innovation

The Company has developed new innovations in varieties of construction materials on the Nano levels such as printed fiber cement boards with timber and/or marble appearances as well as other printings, TPI Nano cement paint, high quality adhesive cement mortar to replace expensive epoxy resin, TPI cement mortars with a full range of applications to satisfy the needs of consumers with far better quality than usual materials and lower cost.

In addition, TPI Bio Organics Co., Ltd. (A TPIPL subsidiary) has consistently launched new Bio organic chemical products through research and development for product innovations. TPI Bio Organics successfully developed organic fertilizers to provide a full comprehensive range of applications, for growing organic plantations without dangerous chemicals and toxic insecticides. The company has become the only leading corporation in the world, who has well developed management system of Early Mortality Syndrome (EMS), the infections of which could induce the pathological catastrophe in shrimp farms, Bird flu (avian influenza) in poultry farm, Foot and Mouth Disease in cloven-hoofed animals farm, with no need of antibiotics which are harmful to consumers.

We are proud as a Thai Corporate Entity to be able to reach Thailand 4.0 status on clean and green energy, construction material and agricultural fronts in accordance with the current promoted policy of the Thai government.

Awards that make us proud

TPI Polene Group has passed all assessments and was awarded and certified in the category of Corporate Social Responsibility and Energy Award as well as Industrial Standards for the year 2016 under Asian and National Standards. TPI Polene realizes the importance of operating the business to achieve excellence. Our pursuit of excellence is congruent with an adherence to foster a good governance corporate culture throughout the organization while creating public well-being in surrounding communities, industries, agriculture, communities and consistently protecting the surrounding environment to maintain international standards.

The Company's current success has been one of our proudest achievements as a Thai corporation to be able to be competitive internationally. On behalf of the Company, the Company's Board of Directors would like to take this opportunity to thank all related parties for a well-coordinated effort and their ongoing trust in the Company to create unswerving progress for the organization. It is a major goal of the management team and all levels of the Company's staff to move the business forward to overcome obstacles to achieve the goal. We strengthened our growth potential in order to create sustainability within the group, to create stability for the organization, and to enhance the economic strength of the country. To this end, TPIPL realized the importance of conducting business operations by emphasizing the balanced consideration of all related parties, fair treatment to all parties concerned, while supporting public well-being and consistently protecting the surrounding environment to further enhance the sustainable growth of the country.

Sincerely Yours,



Mr. Visith Noiphan
Chairman of the Board
and the Independent Director



Mr. Prachai Leopairatana
Chief Executive Officer

Awards that make us proud

TPI Polene was recognized as a corporation which has a strong commitment and consistently cooperates to reduce or avoid gas emissions.

On June 9, 2016, TPI Polene was recognized by the Thailand Business Council for Sustainable Development (TBCSD), together with Thailand Business Environment Institute Foundation (TBEIF), as a corporation which has a strong commitment and consistently cooperates to reduce or avoid gas emissions. The awards confirm the Company's strong commitment and realizes the importance of Corporate Social Responsibility to consistently manufacture products that are environmentally friendly.

Granted renewal certificate for Carbon Label and filed the registration for "New Carbon Label"

The Company has received the certificate for "Carbon Label" and filed a registration for another new Carbon Label in the cement products category, which includes cement mortar and 11 other types of products the Thailand Greenhouse Gas Management Organization (TGO) The 11 types of products passed the evaluation criteria in the cement and cement mortar production category and 11 types were awarded the Carbon Label as follows:



1. TPI Portland cement type 1 (renewal)
2. TPI Lightweight concrete masonry cement mortar (renewal)
3. TPI hydraulic grout: red cement M299 (renewal)
4. TPI Portland cement type 3 (black cement)
5. Mixed cement: TPI199 (renewal)
6. TPI Green super cement (renewal)
7. Oil well cement: blue cement (renewal)
8. Masonry cement mortar: M209 (registered)
9. TPI Mixed cement: green cement (registered)
10. TPI Mixed cement: M197 (registered)
11. TPI masonry cement: M200 (registered)



The awards above confirm that the Company realizes the importance of Corporate Social Responsibility to consistently develop production processes to conform to international standards at environmentally friendly plants and employ the national resources for the ultimate benefit with an aim to reduce environmental impact by cutting carbon dioxide emissions to zero and promote sustainable nature conservation and environmental preservation.



Energy Management System: ISO50001:2011

On July 22, 2016, the Company received the ISO50001:2011 certificate for energy management standards from AJA Registrars. The reward confirms the Company's commitment to be a socially responsible enterprise dedicated to the environment and promoting sustainable environmental awareness to adhere to the best practice for energy efficiency with an aim to utilize energy resources. Presently, the world's energy crisis is a critical element that the world place a great emphasis on as it has a matter effect on production cost[D02]. Therefore, efficient energy management in an organization to fully utilize all the resources used in the production process is essential, which then helps mitigate or reduce the green-house gas emissions that cause global warming. To this end, the Company has a strong commitment to consistently comply with regulatory requirements and fully support activities regarding the environment in cooperation with the government.

Thailand Energy Awards 2016

On December 6, 2016, TPI Polene received a "Thailand Energy Award 2016", the outstanding performance reward in the category of innovation of effective utilization of energy under the project "Regenerative Downhill Conveyor". The award was presented by Air Chief Marshal, Dr. Prajin Juntong, Deputy Prime Minister, the Department of Alternative Energy Development and Efficiency ("DEDE") under the Ministry of Energy of Thailand (the "MOE"). The project as above can generate renewable electricity that is returned to the system with the power generation capacity of 820 Kwh or 5.5 million per annum with a value of Baht 18 million per annum.

CSR-DIW Awards 2016: Standard for Corporate Social Responsibility- Department of Industrial Works

On July 28, 2016, TPI Polene Power won a CSR-DIW Award 2016, in the category "Standards for Corporate Social Responsibility", from the Department of Industrial Works, Ministry of Industry, as a corporation which focused on the importance of "Corporate Social Responsibility" to consistently preserve society while creating sustainable public well-being in surrounding communities.

The certificates that TPI Polene Power has been awarded as above are considered an important part of its success in pursuing business operations with an adherence to fostering a good governance corporate culture while creating public well-being in surrounding communities and consistently protecting the surrounding environment in order to create sustainable development for societies.

Thailand Voluntary Emission Reduction Program: T-VER

On September 19, 2016, TPI Polene Power participated and registered in the project "Thailand Voluntary Emission Reduction Program: T-VER" from Thailand Greenhouse Gas Management Organization ("TGO") and promoted investment in projects for the processing of RDF from municipal solid waste that helps reduce the greenhouse gas emissions that cause global warming and reduce carbon dioxide gas in the amount of 34,754 tons per annum. It enables TPI Polene Power to generate revenues from the sale-purchase of carbon credits for the upcoming power plant and help creates good will towards TPI Polene Power for its commitment to be a prototype of a good corporation, leading to sustainable preservation of the surrounding environment.

Audit Committee's Report for 2016

To: Shareholders:

Dear Sirs,

The Audit Committee of TPI Polene Public Company Limited consists of 3 independent directors, who are all qualified with knowledge of finance, law and management administration: namely, Dr. Narasri Vaivanijkul as the Chairman of the Audit Committee; Mr. Manas Sooksmarn and Pol. Gen. Charnchit Bhiraueus as Audit Committee members; with Mr. Nitisit Jongphitakratana, the Corporate Secretary, as Secretary to the Audit Committee. All Audit Committee members possess appropriate qualifications and are, in all aspects, in compliance with the rules and regulations imposed by the Stock Exchange of Thailand.

The Audit Committee has fully performed its duties and responsibilities to review and evaluate internal control systems, disclosure of Company information, and to review implementation of the provisions of related governing laws, as well as any other important tasks. In 2016, the Audit Committee convened 5 meetings.

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 creating public well-being and environmental conservation and fostering the development of all our staff to expand their knowledge so as to become a knowledge organization. This will further enhance our long-term development and create sustainable growth for the Company.

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

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

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

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

4. To select, nominate, and propose the remuneration of the statutory auditors of the Company for the year 2017.

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 Mr. Ekkasit Chuthamsathit, CPA registration no. 4195 or Mr. Boonyarit Thanormcharoen, CPA registration no. 7900 or Mr. Natthapongse Thantijattanonond, CPA registration no. 8829, KPMG Phoomchai Audit Limited, to be the statutory auditors of the Company for 2017.

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



Dr. Narasri Vaivanijkul

Chairman of the Audit Committee

Corporate Social Responsibility (CSR)



The Policy to Create Sustainable Growth

The Company is committed to pursuing its business operations with ethics and well-managed business administration practices with an adherence to creating a corporate culture with good corporate governance in parallel with social conservation and environmental preservation. In its business operations, the Company concentrates on establishing a sustainable return on investment for shareholders. It continues to discharge its responsibilities towards relevant rules and regulations and support the community surrounding its facilities, thus providing better living standards for all related parties. The Company is continuously committed to promoting academic development, encouraging better healthcare and safety, protecting the environment and supporting beneficial activities towards society, and promoting Thai arts and traditional Thai cultures alongside social development with the objective to genuinely respond to the needs of the people in the surrounding communities to create sustainable growth for the Company.

The Policy to Enhance Sustainable Growth of TPI Polene Group

The Company's CSR Committee is responsible for the overall assessment of TPI Polene Group's CSR activities. This also includes the development of CSR activities with a policy of full commitment to create value and sustainable growth of CSR implementation. The policies of CSR implementation have been set to promote and to monitor CSR activities. The Group CSR committee consists of the Chairman, the Vice-Chairman, and the Committee members, who were recruited from top management in the relevant departments of TPIPL group. The meetings of the CSR Committee are held regularly to set the framework of TPI Polene Group's CSR activities to consistently monitor and create a corporate culture with good corporate governance.

The Stakeholders of the Company

The Company established "corporate governance policies for related parties who have conflicts of interest" by announcing the written publication of "the policies and measurements towards related parties who have conflicts of interest" as a principal guideline for employees to interact properly with the related parties who have conflicts of interest. The Company still maintains a policy of full commitment to the principles of creating value cooperatively with the related parties. Top management will be responsible for policy affairs treatment for all parties concerned and pass the opinion of the parties concerned through relevant departments, which are responsible for all parties concerned. The above policies are a principal guideline for the management and employees of the group that perform in compliance with the principles of good corporate governance by putting corporate social responsibility into clear practice. All related parties, who have a direct impact on business operations, are as follows:

1. Employees - Fair practice to employees/human right compliance
2. Shareholders/suppliers/contractors/customers - Value ethical and transparent .business conduct
3. Competitors - Enhance fair competition and new innovations
4. Surrounding community, as well as related persons as a whole - Reduce environmental impact at the source.

Guideline and Practices towards the Company's Stakeholders

Stakeholders	Requirements	Procedures	Plan implementation
1. Employees	<ul style="list-style-type: none"> - Work progress in their careers - Employees' welfare and security - Membership of Co-Op - Obtaining courses and training programs for potential development - Good image of the Company - Fair treatment - Safety in the workplace 	<ul style="list-style-type: none"> - The Company schedules training programs and on-the-job training sessions as well as relevant knowledge for employees to perform their duties properly, safely and suitably for employees in each respective position. - The Company provide courses and training sessions to develop growth potential, knowledge and competitive advantages of the employees to keep pace with the future growth of the corporation and work progress in their careers. - The Company encourages on-the-job training program among employees, including in-house and external-training courses in compliance with job descriptions. - The Company provides employees the opportunities to pursue their study and obtain courses training programming in compliance with job descriptions. 	<ul style="list-style-type: none"> - The Company has clear rules and regulations on employment to be strictly applied, which also include equal opportunities for employees to progress in their career regardless of sex, age, generic information, races, religion, educational background. The employment policies and conditions of work are based on job requirements. - The Company shall not hire expatriates, which include contractors and sub-contractors. - Allow expression of views and advice. - Fair practice to employees. - The Company offers salary and wages as well as welfare to be equivalent or comparable to those in the same industry. - The Company provides a safe and healthy working environment. - To comply with rules and regulations of human rights.
2. Shareholders	<ul style="list-style-type: none"> - To create sustainable return on investment. - To conduct the business with transparency. - To take part in decision-making. - Ongoing business operations and low risk. - To obtain information regarding operating results. 	<ul style="list-style-type: none"> - The Company shall protects shareholders' fundamental rights and ensure equitable treatment to all shareholders to facilitate shareholders to access the Company's information . - The Company operates in compliance with the principles of good corporate governance with honesty, prudence and without conflicts of interest to create sustainable value to all shareholders. - Deliver the invitation to the Annual General Shareholders' Meeting with all relevant documents for shareholders in advance of the meeting - Shareholders are able to appoint proxies to delegate their votes to others to act on behalf of them. - Provide shareholders opportunities to add agenda items or propose to the meeting the name of the persons to be elected as the Directors of the Company to be in compliance with the legal Articles of Association of the Company. - Constantly disclose corporate information as well as financial statements and operating results to all shareholders accurately, completely, transparently and in a timely manner to ensure that shareholders obtain adequate corporate operational performance through a network that is easily accessed. - Accept advice and complaints. 	<ul style="list-style-type: none"> - All shareholders have fundamental rights and must have equitable treatment. - To create long-term growth of the business and establish sustainable return on investment to shareholders.

Stakeholders	Requirements	Procedures	Plan implementation
3. Trade partners	<ul style="list-style-type: none"> - Clear purchasing policy - Fair business operation - Help develop growth potential of the purchasers. - Clear procurement policy. 	<ul style="list-style-type: none"> - TPIPL group has to obtain the best value for materials and goods and to maintain the highest ethical standards in dealing with suppliers. Value includes price, quality and service. - Purchasing personnel are not permitted personal interest in the procurement process. - The Company will not engage with the trade partners who deal with businesses that act against the law. - Employees of TPIPL group shall procure material and goods at the appropriate and fair price and ensure that its trade partners perform in compliance with guideline leading to sustainable growth for both parties. 	<ul style="list-style-type: none"> - Strictly perform in compliance with terms and conditions of the transaction and contracts. - Take into consideration of the corporate benefits of both parties, thus enhancing equitable practices for business operations - All trade partners should be treated equally.
4. Customers	<ul style="list-style-type: none"> - Good quality and safe merchandise. - Fair prices - Easy and convenient to acquire - Sales promotions and free samples. - Alternative merchandises - Provide products profiles and instruction 	<ul style="list-style-type: none"> - The Company is focused on the importance of quality product development and full-scale service to be delivered to customers in a timely manner and meet the requirements of customers. - The Company shall keep track of records of customers' profiles systematically in a safe place and protect customer information and records against unauthorized access to or misuse of customer records or information. - Offer fair prices for goods and services. - The Company provides a unit or center to be responsible for providing a range of information of products and services as well as submission of a claim or make a complaint. - An arrangement of customers seminars to consistently educate them on the variety of products. 	<ul style="list-style-type: none"> - Satisfy the needs to customers - Do not act or obtain or attempt to offer any goods or service by any means or device with the intent of fraud to the customers, who must believe in the quality of our goods or services - Provide customers goods and services which are safe and harmless for them. - Create brand loyalty.
5. Competitors	<ul style="list-style-type: none"> - Market share - Fair Competition - New innovations 	<ul style="list-style-type: none"> - Under the fair competition circumstances 	<ul style="list-style-type: none"> - Not to violate identifiable information of competitors. - To perform in compliance with good practices for trading.
6. Communities	<ul style="list-style-type: none"> - Keep the community informed of relevant information - Promoting Thai traditional cultures. - Improved Quality of life. - Participating in activities to develop public well-being - Create good opportunities for careers. 	<ul style="list-style-type: none"> - Survey the Community's needs and opinions. - Consistently provide mobile medical units for local people in the community - Supporting reforestation and rehabilitation of used mine areas. 	<ul style="list-style-type: none"> - Support of community activities - Provide training courses for employees to stimulate them to be conscious of environmental preservation.
7. Environment	-	<ul style="list-style-type: none"> - Enhancing production process to reduce environmental impact. - Generating renewable heat recovery to generate electricity back to the system - Generating crude oil and liquid fuel from tire pyrolysis - make use of decomposed organic substances as compost materials to produce Organic Fertilizers 	<ul style="list-style-type: none"> - reduce energy uses from coal - Processing of RDF as alternative fuel from municipal solid wastes - minimizing residual waste from operations and purchase wastes from the community and municipal government - Operate fully integrated industrial waste disposal business to help eliminate industrial wastes from industries

TPI Polene and Social Responsibility

Alongside our focus on business excellence, the Company has always strived to improve social development, community standards of living and the environment in order to deepen the harmonious coexistence of our Company and our society.

The Company and its subsidiaries, as a Thai corporation, realize the importance of the clear role of operating the business with an adherence to foster good corporate governance, while creating public well-being and be environmentally friendly by putting corporate social responsibility into practice. The Company has focused on development to further enhance the sustainable implementation in all respects, which can be partly reported below:



1. Environmental Activities

TPI Polene, TPI Polene Power and its subsidiaries are committed to environmental conservation. Hence, the Company properly improves and preserves the environment to conform to environmental standards and regulations and continuously prevents pollution in every aspect of work. This confirms the Company's strong commitment to be a prototype of a good manufacturer to operate the business to enhance the sustainable implementation environmental preservation. TPI Polene Group has passed all assessments and the Company has been awarded certificates at the international level throughout the year 2016 as follows:

Thailand Energy Awards 2016: TPI Polene received "Thailand Energy Award 2016", an outstanding performance reward in the category of innovation of effective utilization of energy under the project "Regenerative Downhill Conveyor". The project as above can generate renewable electricity that is put back to the system with the power generation capacity of 820 Kwh or 5.5 million per annum or with a value of Baht 18 million per annum.

The project above helps save energy costs, creating modern technology and innovations to save energy in a variety of ways. In addition, the award confirms the Company's progress and high potential for energy preservation to pursue its policy on energy saving in compliance with the speech of the Ministry of Asian Energy.

CSR-DIW Awards 2016: Standards for Corporate Social Responsibility- Department of Industrial Works: The award confirms that TPI Polene Power pursues business operations with an adherence to foster a good governance corporate culture while creating public well-being in surrounding communities and consistently protecting the surrounding environment to step forward with an attempt to creating transparency and business ethics for the sustainable development of the business. TPI Polene Power was registered in the project "Thailand Voluntary Emission Reduction Program: T-VER" from Thailand Greenhouse Gas Management Organization ("TGO") and promoted investment in projects for the processing of RDF from municipal solid waste that helps reduce the greenhouse gas emissions that cause global warming and reduce carbon dioxide gas. It enables TPI Polene Power to generate revenues from the sale-purchase of carbon credits for the upcoming power plant and help create good images towards TPI Polene Power for its commitment to be a prototype of a good corporation, leading to sustainable preservation of the surrounding environment.



• Plant trees project under Royal Auspices to mitigate the adverse effects of global warming in 2016.

The management team of TPI Polene and its staff, together with the head of the governmental authority in Saraburi province, community leaders and a group of students from Amphur Muanglek, Amphur Kangkhai, Saraburi province, jointly planted 2,000 trees at site J area in front of TPI Plaza market, Saraburi province.

In addition, TPI Polene participated in the activities “National Trees’ Day” in 2016 with the governmental authority in Saraburi province to jointly plant trees at the Temple of Sattprochakorn (Kharaj), the District of Phraran, Amphur Chalermphrakiat at Cavalry Center, Saraburi province, with an aim to participate in the surrounding communities and enhance social development and to help conserve the environment and promote sustainable nature conservation environment.

• TPI Polene promoted the use of organic agricultural products under a project with a goal, “To alleviate unhappiness, to encourage happiness and to make smiles” for the people in the district of the Temple of Nonthakae, Amphur Nongkai, Saraburi province; and participated in “Mobile Smile Fair”, in the district of Amphur Kangkhai, Saraburi province, to “Display and Demonstrate the application of Organic Fertilizers” to the agricultures to grow melon trees in Lobburi province, be an alternative for the farmers who are interested in organic agriculture (which are chemical free and safe for farmers and consumers). TPI Polene also sponsored “the Project for chemical free vegetables” to promote and encourage the growing of vegetables which are chemical free and safe for farmers and consumers.

• Made a contribution of 281.5 tons of cement to the governmental authority to support construction of a dam, which will create reservoirs that supply water for utilization during lean periods. Regulated flow of water helps form reservoirs to help in diluting harmful dissolved substances in waters by supplementing low inflows and can be used for irrigating arid lands. Reservoirs control the water running through a specific river, keep moisture on the surface of soil and further create a balance of nature. TPI Polene cooperated with governmental authorities such as the Office of Agriculture, Amphur Mae-On and Thanur Sub-district Administrative Organization to support the construction of reservoirs. Those projects include the construction of the dam in the area of Lum Huay Maecheek and Lum-Huay Lord, where the source of the rainwater of Lumnam Maetha alleviates the drought problem for people in the community of Tha-Nue District, Amphur Mae-On, Chiangmai Province; to support the project “Beautiful Forest, Clean Water, Thai People with the Harmony heart” of Sub-District Municipality of Tathungluang for the construction of Som-Kuem dam as the barrier to keep Mae-Tha river in the District of Tha-Thung-Luang, Lampoon province to help alleviate of the difficulties of the people in the District of Tha-Thung-Luang, Tambol Thakart, Amphur Maetha, Lumpoon province; to support the construction project of reservoirs and improve bungers to regulate the flow of water in the areas of Ubonrajthani province, together with 6 Infantry Regiments, King’s Royal Guard, Sapprasit Prasong Military Camp,; the construction project of 40 reservoirs to conserve water and preserve forests, together with the Office of Preservation Area 1, Saraburi branch in National Conserved Forest, in the area of Kangkhoy, Saraburi province.



2. Social Activities

• Contribution of blankets in 2016

The management team and the staff of the Company, together with the Environment for Better Life Foundation, distributed 11,100 blankets together with photographs of His Majesty the King, to local people, who suffer in the cold in remote areas. TPI Polene wanted to share and help alleviate the cold for those in need in the remote areas. As for the areas in the North, TPI Polene distributed 2,000 blankets to Border Patrol Police Bureau 3 (Chiangmai Center) to further distribute to the students under surveillance in the north and distributed 500 blankets to Mae-aye hospital, Chiangmai province to further distribute to patients, and distributed 1,000 blankets to the Meditation Center “Thamsiri”, to further distribute to the hill tribes and the elderly who suffered in the cold in remote areas in Amphur Mae-Sarieng, Chieng Rai province; 550 blankets to the hill tribes and local people who suffered in the cold in remote areas in Mae Fah Lung Hill, Chiengrai province, and 400 blankets to the pupils in Phakwangwittaya School. As for the areas in the Northeast, TPI Polene distributed 2,000 blankets to Border Patrol Police Bureau 24 (Udonthani Center) to further distribute to the students under surveillance of the Border Patrol Police Bureau and 500 blankets to the Environment for Better Life Foundation, to further distribute to the local people, who suffer in the cold in Tak and Nakornrajsima province.

• Made a contribution of Baht 11,527,500 to the foundations, non-profit organizations, and government authorities to help support activities that benefit society such as the construction of physical therapy building, Saohai Chalermphrakiat Hospital to accommodate with the increase number of patients, support “2016 Piyamaharajanusorn” to honor His Majesty the King Rama 5, to raise funds for Chula Songgra” and luncheon for the supporting the Fair to honor His Majesty the King Rama 5, to support an arrangement of the fair to honor and celebrate His Majesty the King Rama 3 Mahajesadarajchao, to support for the purchase of medical appliances to Phranankao Hospital, help support the project “Contribution of rice for Life” for Camillion Social Center Pracheenburi for the assistance and care of the elderly who are poor and to provide services to adapt to the needs of a broader range of homeless elderly; a group of orphans, who have HIV infection, a housing group of disabled kids to obtain good opportunity in life and help support the activity “Half Marathorn” in Jamjuree Centre, Chulalongkorn University to further support the academic development to celebrate for the occasion of “100 year- Anniversary of the university”, TPI Polene Power donated 10 wheel chairs under the project “Wheel Chair for the Disable” for the assistance of the young disable to be able to go to schools by





donating 10 wheel chairs, supported Sai Jai Thai Foundation under the Royal Patronage to provide assistance to the impaired soldiers, supported The Foundation For the Promotion and Development of impaired “under the Royal Patronage to be the host to arrange archery competition in the Asian Para Championship, Para CQT no 15, Barsil, supported “2016 Para-Archery World Ranking Event” Bangkok, Thailand to support the Disabled Athletes Association of Thailand Association (under the patronage of His Majesty the King) for the training of Thai disabled athletes to join the competition, help support the activity “Half Marathorn” in Bangsaen 21, Chonburi with aims to improve the quality of health. Part of the profits will be further distributed to “Child Development Fund” under the sponsorship of Songkhanakarin Hospital.

- Promoted the “Good Health Project” for the people in the community by continuously providing mobile medical units to protect them from overall hazards including seriously infectious illnesses. This also included general check-up services, and lung inspection services. TPI Polene also held activities to provide health information to the local people in the community and further promoted an awareness campaign for the people in the community to plant organic vegetables to encourage good health to the local people in the surrounding communities in Amphur Kaengkhoei, Amphur Muaklek, Amphur Chalermpraiat, Saraburi provinces; visited the patients and the disabled patients in the district of Muaklek, Amphur Muaklek, Tambol Mittraprab and Tambol Tubkwang Saraburi province; joined the project “Promote the growth of the children between 1-6 years of age in the rural district of Thabkwang”, and joined the project “Precaution of dengue hemorrhagic fever infection” and distributed abate sand granules to eliminate mosquito breeding sources in the communities; supported athletic activities under the Anti-Drug program of the Sub-District Administration Organization in Amphur Muaklek”, Saraburi province.

- To support and improve the quality of life of the Thai people, TPI Polene participated in the activity “Donation of blood for auspiciousness of His Majesty the King” under the coordination of the Center of Saraburi Hospital and Red Cross Saraburi. For the event, employees of TPI Polene, together with the local people in the community, jointly donated 97,600 cc of blood to patients in need in Saraburi province and the surrounding area.

- Supported the project to take a group of Public Health Volunteers in Tambol Mittraprab and Tambol Tubkwang, Saraburi province to have a field trip to provide health information and local vegetables to generate revenues in the community of the Municipal, Nan province, encourage good health to have the leaders of the communities of Ban Subborn to have knowledge trip in Leuy province and Petchburi province to support their knowledge and mental health, further encourage them to develop their careers and to eat healthy food; to arrange the study trip for the elderly in the District of Mittraparb to join the project that promotes mental health in Mookdaharn province.

- Supported the project “Good Health Project and the Sound Mind to Overcome Senility”, to take a group of the elderly in Amphur Salangphan, Amphur Wangmuang to have a field trip in Prajauabkirikhan province for the better quality of life of the elderly in both physical and mental health



to alleviate liabilities of the elderly and their families and so they can be happy in society.

- Supported the project “To trade the community waste in exchange for electricity, to develop the community to support knowledge base” by participating in the seminar with the local people in the community of Ban Subbornpattana, Amphur Kaengkhoi, Saraburi province, which aims to provide proper knowledge regarding waste management in the community aiming to reduce waste in the community.
- Helped develop the potential of the community leaders by having a group of community leaders, and community committees in Tambol Songkorn, Tambol Taopoon, Amphur Kaengkhoi, Saraburi province to follow and study on the path of Phratat Phanom, Phumanorom, Glass Gallery, Mookdaharn province; having a community group and community committee to have a study trip in Nongkai province; supported a community group and community committee and The Public Health Voluntary Group, Tambol Tubkwang and Ang-Hin community to join the student trip in Prajuabkirkhan province: supported a group of elderly people to have study trip in Nakornsawan province with the objective of enhancing knowledge, mental health; took part in the activities and community development, traditional and cultural cultivation, work creation and develop knowledge for the potential of the learners and further apply to be beneficial for them to create sustainable self-reliance in the community.
- Made a contribution of 1,146.77 tons of cement as well as 4,029 cubic meters of ready-mixed concrete, concrete roof tiles and other products, with total value of Baht 4,477,245.87 to the governmental authority for the renovation of office buildings and athletic grounds of the governmental authorities, help the construction of study rooms for the autistic, Sangsawang Institute foundation, under the Patronage of Princess Soamsaovali Kitiyakara, support improvement of the station at Hinlarb railways station, Saraburi province, State Railway of Thailand, help construction of help the construction of fully integrate development center for the autistics, under the Patronage of the under the patronage of Her Royal Highness the Queen Sirikit, help support the renovation of athlete park of with Infantry Regiments 1, King’s Royal Guard, help improving the building of “Training Vocational Sufficiency Center” of Security Operations Command Region 18, Saraburi province, to help the construction of dwelling and renovation housing for the poverty in the community of Amphur Kangkhoi, Saraburi province, The Company together with Infantry Regiments 31, King’s Royal Guard, Phaholyothin Military Camp, Lobburi province participated to help the construction of dwelling and renovation housing “Pracharaj Chalermpharkiat”, help development and renovation of housing Local Policemen Region 4, Khonkaen province, renovation housing for the poverty in the community of Thai Red Cross, Saraburi province, support the construction of first aid rooms for the soldier trainees of Operations Command Region 17, Kanjarnaburi province and support the renovation of protection and preservation center, under the surveillance of Office of National Resource and Forest Management 7 , Khunkaen province., etc.



- Distributed TPIPL 350 ml. bottled drinking water for a total of 358,080 bottles to the organizations to support activities such as “Walk-Run for collaboration in the Community no.10” of Siriraj Piyamaharajkarun Hospital, to promote healthcare and public wellbeing and to cooperatively supported the tradition and culture in Asalha Puja Day and Kao Phansa Day in the temples of Saraburi province, supported the “Novices Propagation Ordination summer Project” in the temples of Saraburi province. TPI Polene jointly promoted awareness of risk mitigation from road accidents during New Year’s holiday and the Songkran Festival to a variety of government authorities, such as the Provincial Constabulary Station in Saraburi province and Muaklek Police Station, supporting Youth Camp under the Anti-drug program, arranged by the sub-district of Kangkhoi, Saraburi province, etc.

3. Academic and Youth Activities

TPI Polene knows the importance of academic development and educational support for creating good opportunities for young people to learn hands-on by broadening their skills as well as consistently developing the quality of academic institutions. TPI Polene fully understands that our youth are fundamental to the future of the nation. For events, the Company held many activities and supported many organizations that performed useful activities for young people and granted scholarships to those with special qualifications, such as academic talent, but who might have lacked monetary resources. They are as follows:

Scholarships Awarded

- Consistently supported educational funds in the form of scholarships and fellowships to a total of 7 students in the community of Kaset Samphan (limestone area at site C), TPI Polene cement plant, Saraburi province. Scholarships are reserved for students with special qualifications, such as academic talent and good behavioral performance until graduation.
- TPI Refinery (1997) Co., Ltd., together with the Department of Mineral Fuels, Ministry of Energy awarded 906 scholarships to 8 schools for needy students in certain areas of the country such as Amphur Chaturatre and Amphur Bankhwao, Chaiyaboom province in concession reserved area.
- Awarded 20 scholarships to support needy students with outstanding academic qualifications and supported educational funds of 1 scholarship to schools as well as learning and sports materials for students in Banchankna School, Chonburi province.
- Supported children to create good opportunities to learn hands-on to dare to think, dare to express their opinions and dare to be assertive, by assembling “2016 Children Day Fair” in 38 places in schools and governmental authorities in Amphur Kangkhoi, Amphur Muaklek and Amphur Wangmuang, Saraburi province



To Enhance Academic Quality

- Promoted the project for national talented youth by arranging the forum “Competitive Academic Solution and General Academic Wisdom”, to reinforce academic fundamentals and English skills for the youth, research, developmental process, to create architectural teaching skills for students. The winners were awarded the trophy from Her Highness Princess Maha Chakri Sirindhorn.
- Supported an arrangement of the “42nd Congress on Science and Technology of Thailand (STT42)”, (STT) under the topic “Innovation for Land of Science to a Sustainable Future” ;the event is organized annually by the Science Association of Thailand, under the patronage of His Majesty the King, co-organized with the Faculty of Science of the universities in the country, to bring on advanced scientific and technological knowledge leading to sustainable development of the country. This year, special sessions in the form of Science Forum and Panel discussion are also organized under the topic “Quasi-periodic materials created a new branch of science, the atomic order of crystalline materials” by renowned invited speaker, Professor Prof. Dan Shechtman a Nobel Laureate in chemistry. In the event, exhibition on the work and duties of King Bhumibol Adulyadej, scientific work of as well as exhibition on advanced scientific and technological knowledge or instruments from various schools as well as outstanding scientists from diversified fields of science and technology of Thailand will be displayed in this conference and 300 of contributed papers from various areas of Science and Technology to be presented orally or in the form of posters.
- Promoted the arrangement “the 2nd Environment and Natural Resources International Conference (ENRIC 2016) : International Conference (ENRIC 2016) Interdisciplinary Approaches to Save Future Earth Environment, The faculty of Environment and National Resources, Mahidol University, and the aim is to bring together national and international scientists and technologists as well as young Thai scientists from diversified fields of science and technology and to give them an opportunity to share and exchange their experiences. Special sessions in the form of Science Forum and Panel discussion are also organized.
- Promoted the arrangement “International Conference on Operations and Supply Chain Management” (OSCM 2016) of the Faculty of Engineering, Mahidol University, with the objective to exchange academic research experience and development potential of an international academics research works, logistic management and supply chain, engineering management, quality control and sustainable management.
- Supported a “Science Museum Project” by taking 144 students from Bansubprik School and Kao Maikwian School, Bansubprik School, Self-Help/Cow-Raising Settlement School, Muaklek School, Saraburi province to join the activity “Science Walk Rally” and had the children get responses to queries regarding exhibitions in the museum by contacting, testing, thinking, deciding and searching for the answers by themselves. They also attended the science show “Nitrogen”, the performance of which was applied in an easy way to be understood by the children, who had also joined the experiment in the “Science Show”. The students had a good time joining the above activity, which helped them increase their experience in science and technology.



- Supported an education trip at Dusit Open zoo, Bangkok for vocational academics by having 120 students from Ban Subborn School, Kaomaikwan School, Bansubprig School and Self-Help/Cow-Raising Settlement School, Saraburi province, learn and observe wild animals and wildlife preservation at Nakornrajsima Open Zoo and the students from Bansubprig, Saraburi province to join the project with an aim to promote an outdoor education, conserve natural resources and environmental protection and perceive the value of nature and preservation of wild animal.

- Supported the project for vocational academics and teaching potential as a professional career to create the highest benefits for academic development by having a group of 29 teachers from three schools, such as Self-Help/Cow-Raising Settlement School, Bansubprig School, from Ban Subborn School, Wat Muaklek School, Saraburi province have a study trip in Ubonrajthani province, to have a group of teachers from Bankaomaikwan School to have site study of historical places in Rajchapak National Park, Prajabkirkhan province to have the seminar and exchange their opinion and knowledge to be further beneficial for their teaching and help support the retired personnel from the governmental authorities, such as teachers from schools in Saraburi province to use their perseverance and devotion to their careers.

- Support for the project of "Rural Development Voluntary Camps.

The Company made a contribution of TPIPL cement products and dry concrete of 196.62 tons and TPIPL concrete roof tiles, totaling Bath 339,890.09 to both governmental institutions and private institutions, for the construction of multi-purpose buildings, and to repair dilapidated study rooms, dining rooms and ground floors in the academic institutions. These included Chulalongkorn University, Ramkhamhaeng University, Technology Rajmongkol, Nakornrajsima, Kasetsart University, Thammasat University, King Mongkut's University of Technology, North Bangkok, King Mongkut's Institute of Technology Thonburi, and Bangkok University etc, to encourage the students to join useful activities during their free time and promote the development of skills, knowledge and talent of the students to apply their knowledge to practical use in the work fields and convey the knowledge to people in the community to perform the activities that bring benefits to society.

Also, TPI Polene made contributions of TPIPL cement to the Faculties of Civil Engineering in 25 institutions throughout the country for the purpose of a course-training program for masons and to create useful activities for the society.

- Made a contribution of 893.68 tons of TPIPL cement products, dry concrete and ready-mixed concrete as well as TPIPL Nano Super Armour and concrete roof tiles, totaling Baht 3,270,299.15 to governmental authorities and academic institutions, for the renovation, repair and construction of buildings, such as the project under cooperation with TISCO Bank Plc., for the construction of dilapidated study rooms for Bannonebonne School, Ubonrajthani province, in replacement of the old decay two-storey building, which has been built for 52 years. The new structure of this building was constructed under the standard of "Sor Por Chor 105/29", construction of concrete pavement in Watbankrabueng School, Nakornrajsima province. This included for the renovation, repair and construction of buildings in Ban Subprig School, Saraburi province, renovation of repair and construction of buildings of athletic courtyard and concrete pavement at Bannongpruepong School, Nakornrajsima



province, construction of swimming pool for the pupils Kaothong School, Nakornsawan province, which is the school model for brain development skill and athletic courtyard, fence in Prariyatpaisarn School, Nakornrajsima province.

- TPI Polene, Saraburi plant, was a host to welcome and fully support activities regarding academic programs in cooperation with a group of professors and students at the level of Bachelor degree, Master's degree and Ph.D. degrees from various institutions, such as: Provincial Administration Organization (PAO), Chaichabhoon province, to observe "Environmental Management" Rajapatre Ubonrajthani University and Thammasat University, to observe operations "Cement Production Process", Rajamongkol Esarn University to observe operations "Power Plants Management", personnel Muaklek District and Mittraparb District and the Committee to follow the test of environmental impact to observe the study "Power Plants Environmental Management", S.B furniture Co., Ltd. to observe operations "Safety at the Plant and 5 Sor", Burapha University to observe the operations "Organization Management", Mari Business Administration College, Nakornrajsima province to observe the operation "MIS and Computer System Management", Vocational Academic Nongmuang College, Lobbuti province as well as Ubonrajthani province and Khonkaen University to have site visit and observed the operation "Alternative Fuel Production, Production Process of TPI Organic Fertilizers and Environmental Management"

4. Religious Activities

- Katin Ceremony

TPI Polene Plc and its subsidiaries acknowledge the significance of promoting and preserving Buddhism and have consistently taken part in Katin ceremonies every year until the present. To this end, the management team, the company's staff, clients and mystic people together made donations for the construction and renovation of religious monasteries and buildings in the temples worth Baht 3,730,924. TPI Polene, hosted Katin ceremonies at Sridonmoon Temple, Ban Hin Lab Temple, co-hosted Katin ceremonies, offerings for the priests, and jointly made donations to: a Royal Katin ceremony at Sridonmoon Temple, Chiangmai province; hosted Katin ceremonies at Banhinlarb Temple, Saraburi province; a Royal Katin ceremony Ministry of Energy, Kawitsraram Temple, Lobburi province; co-hosted with Department of 6th Infantry, Lakchaisethinee Temple, Ubonrajthani province; participated in the offering robes to Buddhist priests at a monastery to construct "Little Buddha", Saraburi province; and co-hosted Katin ceremonies at Suanboonkert and Tamphraphothisat Temple, Saraburi province.

TPI Polene also supported the "Novices Propagation Ordination Project" at the Temple of the Rama IX Golden, to introduce and propagate the teachings of Lord Buddha to young people and kids by selecting youngsters from three levels of academic schools: primary schools, secondary schools and undergraduate (total of 19 Novices and Buddhist nuns) to volunteer to stay in the project in Bhuddhakaya, India and return back to Thailand to continue the project to practice Dhamma at Thammasatharn. In addition, 19 Novices and Buddhist nuns propagated the teachings of Lord Buddha to their parents on the special occasion of Songkran Day (April 13, 2016). "The Annual Novice Ordination in Summer", Wat Kaoman Thammaram, Saraburi province, and supporting "Dhamma Talk" so that laymen/laywomen can practice meditation at Watnasong Monks Temple,



Nakornrajsima province. The aim is to cultivate and create consciousness among Thai people. This also includes the propagation of Buddhism under the program. TPI Polene and its subsidiaries supported the propagation of Buddhism in order to bring about peace and harmony to the lives of the people in the country with various nationalities and religions. The aim is to cultivate and create consciousness among Thai people, to be patriotic to their homeland and sacrifice themselves for the genuine good of the nation, their religion and the monarchy. "The Novice Ordination", Nongpakboong Temple, Amphur Kangkhai, Saraburi province, and supported "Dhamma Talk" so that laymen/laywomen can practice meditation at Thamphothisat Temple, Amphur Kangkhai, Nakornrajsima province.

- TPI Polene and its subsidiaries supported the propagation of Buddhism through "The World Buddhist Television of Thailand (WBTV)" at Wat Yannawara and introduced and propagated the teachings of Lord Buddha in the country and to the world community in order to bring about peace and harmony to the lives of the people in the country with various nationalities and religions. The aim is to cultivate and create consciousness among Thai people, to be patriotic to their homeland and sacrifice themselves for the genuine good of the nation, their religion and the monarchy. This also includes the propagation of Buddhism under the program "The Miracles of Wisdom" with a monk as a daily speaker, Phrarajyannakawee and Phrapornphol Prasanno, at The Temple of the Rama IX Golden, to introduce and propagate the teachings of Lord Buddha.
- The Company donated TPIPL cement products and dry concrete of 4,244.71 tons, concrete roof tiles and ready-mixed concrete as well as other products, with total value of Baht 8,305,678, to more than 42 temples in the country for the purchase of construction materials to build and renovate religious places. These included ordination halls, meditation halls, Dharma study halls, a sermon hall in a monastery, a monk's house, crematory, Stupa, Dharma practice hall and surrounding areas around temples for Buddhists and people in general. These included the construction project of an ordinary hall, Phrabhudasrisappanyoo in the Nakornsawan Buddhism Park, construction of a Great Stupa, Wat Thammakai, and the construction of general purpose hall on Monastery of Phrabhuddasaiyart Lokkanartsartsadamunee to support Buddhism, Wat Paphookorn, Udonthani province. The Company donated cement to support Buddhism but also distributed cement for the construction of Phrabutthainsom Boromtriloktajnabordin, Amphur Muang, Leuy province and the construction of an ordinary hall, Phrasrimahatai-Pattaya, Chonburi province. These included Dharma study halls, Group of Phramahatai, Nakornrajsima province and improved the surrounding areas in Chaophorsue Shrine, Prachineburi province.

In addition, the Company also recognizes the importance of Muslim practices by consistently supporting and participating in Islamic rituals. We donated the clock for Ramadan (start) in the project "To bring peace to the troubled south of Thailand" with the objective to make clear and understand the Muslim instruction principles and religious context to stimulate and preach the spirit and awareness of the misled to cooperatively make and bring peace to southern Thailand under the Royal Philosophy of His Majesty King Bhumibol Adulyadej, "To Understand, Access and Develop" for the betterment of religion.



5. Preservation of Traditional Thai Culture

• Sustaining Artwork by TPIPL Cement Mortar and Preserving Thailand's Unique Identity

TPI Polene realizes the importance of art and culture and has consistently taken part in supporting cultural activities. The Company pursues its business operations with a full commitment to deepen the harmonious coexistence of the activities of the community from time to time by promoting and preserving Thai traditional cultures to be alongside the consistent development of Thai society. The Company knows that stucco molding is an artwork that requires skill, creativity and art developed over many years which can be seen at historical sites around the country. However, the interest of Thai craftsmen has waned and the art of stucco molding might vanish. TPIPL intends to keep on promoting Thai art and culture, and 2016 was the 16th year that the Company, with the collaboration of the Ministry of Culture, the Poh Chang Campus of the Rajamangala University of Technology Ratanakosin, and the Thai Sculptures Association arranged "The 16th Art of Stucco Molding" competition. The competition comprised two levels as follows:

II. General Public Level with three categories:

1. Molding stucco under the title "Inlaraj"
2. Molding cement mortar under the title "Bravery of King Naaresuan"
3. Sculpturing of cement mortar under the title, "The Athletics of Thailand"

II. Youth level molding premixed cement under the title, "Preservation of Thai Animals"

The competition was held on April 22-24, 2016.

Her Royal Highness Princess Maha Chakri Sirindhorn, the guest of honor, presided at the opening ceremony of the 16th Thailand Art of Stucco Exhibition on November 30, 2016 at the Poh Chang Museum Art Gallery, Pho Chang College. Her Royal Highness Princess Maha Chakri Sirindhorn bestowed the prize to the selected winners in "The Art of Stucco Molding of Thailand" competition, which further enhanced the highest spiritual kindness for the Art of Stucco Molding and the related persons for the further creation of the Art of Stucco Molding as the unique identity of our country. The Company was honored to take part in helping maintain the conservation of cultural art and development of the Art of Stucco as a unique Thai identity. The Art of Stucco, which appeared in ancient monuments, and valuable national sculptures all over the country, was developed in order to respond to and follow in the footsteps of His Majesty the King in maintaining the conservation and development of the Art of Stucco to remain as a valuable national sculpture forever.

• To Sustain Thailand's Traditional Cultures

In local areas, TPI Polene provided support for the offerings dedicated to Buddhist monks, and supplied the big candles used in the temples on the occasion of the beginning of Buddhist Lent, to more than 26 temples in Saraburi and Chaiyabhoon provinces. TPI Polene also preserved the "Thai traditional Songkran Festival", a traditional way of paying respect to elders and receiving blessings from elders in Amphur Kangkoi, Amphur Muaklek, Amphur Wungmuang, Saraburi province, and supported the fair "Historical 2nd World War" (for the 8th year)" in the sub-district of Kangkoi, Muaklek, Saraburi province to encourage Thai people to take part in maintaining the conservation of Thai historical culture with an aim to stimulate the harmony of Thai people and to protect Royal institutions.

"TPI Polene: we create the future alongside reliable wisdom, ethics and consciousness towards society."

TPI Polene, its Quality, Safety, Hygiene and Environment

TPI Polene is well aware that our success and the sustainable growth of the organization at a level of excellence is primarily the result of growth from operational outcomes together with the acceptance and trust of the community and society. Consequently, the Company's management has implemented Quality Standard Systems ISO 9001:2008, API Spec.Q1, Environment Standard System ISO14001,2004 Health and Safety Management Standard TIS 18001:2001, OHSAS 18001:2007 as well as ISO/IEC 17025:2005 Standard and Energy Management System ISO 50001:2011, certifying the performance evaluation test and calibration laboratories under the certified laboratory system of Thai Industrial Standards Institute. TPI Polene has applied the standardization in all respects to be implemented suitably and properly to enable TPI Polene to operate the business effectively and efficiently.

Quality Management

TPI Polene Group focuses on producing, distributing and delivering quality products to satisfy customers' needs. The Company consistently improves the effectiveness of quality control and reduces greenhouse gases. All products of TPI Polene Group were developed under the Quality Control System ISO 9001:2008, API Specification Q1, SPI Specification Q10 and ISO/IEC 17025:2005. In addition, the Company reviews objectives and targets regarding quality at least once a year.

Health and Safety Management

TPI Polene Group continuously emphasizes health and safety as a part of business operations to prevent all employees and all people involved from overall hazards including work-related injury and illness.

The Company, together with the Department of Welfare and Labor Protection, the Ministry of Labor, arranged the project "Safety and Health in workplace" to provide knowledge to the employees, educational institutions and people in general for the auspicious of Her Royal Highness Princess Maha Chakri Sirindhorn, with an emphasis to reduce accidents associated from risk in the workplace to zero. Throughout the year 2016, the Company has understood the significance of occupational health and safety in the workplace and has consistently taken part in developing safety systems in the workplace, aiming to reduce accidents to zero. The Company also participates in the projects as a corporation to conduct its business according to all the rules and regulations of Thailand regarding health and safety in order to reduce and control moderate to severe risks, was awarded and selected as the corporation in recognition of the achievement of Safety and Health in the workplace for the auspicious of Her Royal Highness Princess Maha Chakri Sirindhorn, from the Department of Welfare and Labor Protection on August 28, 2015.

The Company has implemented a Health and Safety Management System (OHSAS 18001:2007/TIS 18001:2011) and has conducted its business according to all the rules and regulations of Thailand regarding health and safety in order to reduce and control moderate to severe risks. The Company believes that health and safety are a responsibility of executives and employees at all levels; therefore, the Company provides sufficient and proper resources such as personnel, time, budgets, and training. Additionally, the Company reviews objectives and targets to control the risk of the activities of the company at least once a year and uses work performance in terms of safety as a factor in performance evaluation of employees.

In addition, the Company also prepares for health check-ups for all employees such as Lung Function Test and Autography.

Public Well Being and Employee Healthcare

The Company shows its serious concern for public health in the surrounding community by continuously sending mobile medical units to offer health services to the public. The Company also extends medical welfare (OPD) for employees and covers the families of employees such as parents, spouses and their children. In addition, annual medical check-ups are provided for all employees. The Company also prepared for the prevention of seasonal epidemics by supplying tetanus for clostridium tetani vaccines, flu type B and Swine Flu vaccines to employees and their families.

Environmental Management

TPI Polene Group is committed to environmental conservation. Hence, the Company properly improves and preserves the environment to conform to environmental standards and regulations and continuously prevents pollution in every aspect of work. The Company implemented international Environmental Standard System ISO 14001:2004 to reduce waste and environmental impact. The Company reduces the amount of dust as well as controls the quality of wastewater from the production process. In addition, the Company has a policy to economize energy usage and to handle waste properly as well as to utilize resources effectively. The Company fully supports activities regarding the environment in cooperation with the government, private sector and local communities. The Company promotes sustainable nature conservation with the rehabilitation of used mine areas to be the same as much as possible with the adoption of biodiversity process to determine design, plans and techniques to be used for reforestation. In addition, TPI Polene is committed to reducing environmental impact in the surrounding communities, such as dust, noise and vibrations. The Company promotes sustainable nature conservation by supporting reforestation and the

rehabilitation of used mine areas. The Company also reviews objectives and targets regarding the environment and provides suitable knowledge and training about the environment for all levels of employees in order to raise environmental awareness.

TPI Polene Group has operated The Waste Heat Recovery Power Plant business for bringing total cement production capacity to generate electricity. This enables the Company to reduce electricity energy usage and electricity generating of the PEA, thereby reducing our environmental impact at the source, as fuel is not required to be utilized for power generation in the above mentioned project.

Laboratory Standards

In addition, the laboratories of our cement plants passed the performance evaluation test under the certified laboratory system of Thai Industrial Standards Institute, according to ISO/IEC 17025:2005 and TIS 17025:2548, the performance evaluation test and calibration laboratories. In addition, the Company has been bestowed registration for private organization of “the analytical lab” in respect of environmental preservation by the Department of Industry, registration no. Ror-097.

Carbon Label: “the Symbol of Environmental-Friendly Production Process”

The Company was the first Thai manufacturer in the country and in the Asian region to be awarded the Carbon Label in Thailand and in Asia by the Thailand Greenhouse Gas Management Organization (TGO) in the cement production category in 2008. The 11 types of products passed the evaluation criteria and were awarded the Carbon Label. To this end, the Company has a strong commitment to consistently develop production processes at environmentally friendly plants.

On June 9, 2016, TPI Polene was recognized as a corporation which has a strong commitment and consistently cooperates to reduce or avoid gas emissions by the Thailand Business Council for Sustainable Development (TBCSD), together with Thailand Business Environment Institute Foundation (TBEIF). The awards confirm the Company’s strong commitment to the importance of Corporate Social Responsibility and to consistently manufacture the products that are environmentally friendly.

On September 19, 2016, TPI Polene Power participated and registered in the project “Thailand Voluntary Emission Reduction Program: T-VER” from Thailand Greenhouse Gas Management Organization (“TGO”).

Energy Management

The Company has participated in a preparation project for energy management standards together with the Department of Renewable Energy and Energy Conservation, Ministry of Energy, to be in compliance with Energy Conservation Act B.E 2538 (Amended B.E 2550) for Control Building and Control Factory. On July 22, 2016, the Company received the ISO50001:2011 certificate for energy management standards from AJA Registrars. The award confirms the Company’s commitment to be a socially responsible enterprise dedicated to the environment and promoting sustainable environmental awareness to adhere to the best practice for energy efficiency with an aim to utilize energy resources. Presently, the world’s energy crisis is a critical element that the world places a great emphasis on as it has a material effect on production costs. Therefore, efficient energy management in an organization to fully utilize all the resources used in the production process is essential, which helps mitigate or reduce the green-house gas emissions which causes global warming. To this end, the Company has a strong commitment to consistently comply with regulatory requirements and fully supports activities regarding the environment in cooperation with the government.

In addition, TPI Polene received the “Thailand Energy Award 2016”, the outstanding performance award in the category of innovation of effective utilization of energy under the project “Regenerative Downhill Conveyor” from Air Chief Marshal, Dr. Prajin Juntong, Deputy Prime Minister, the Department of Alternative Energy Development and Efficiency (“DEDE”) under the Ministry of Energy of Thailand (the “MOE”) on December 6, 2016.

Productive Management

The Company has applied the Total Productive Management (TPM) system, creating awareness so that everyone shares in the organizational development movement and opportunities are given for all levels of employees to take part in the activities through the Small Group Activity (SGA) and prepare One Point Lesson (OPL) for staff coaching in the departments. An arrangement of machinery and equipment inspections has been made regularly with Visual Control to promote cooperation and group activities amongst all employees and to motivate them by offering award “Improvement Sheets” for the purpose of problem solutions. Project teamwork has been set up to analyze the causes of problems to alleviate losses throughout the entire production process. TPM could be applied in the entire production process development starting from repair and maintenance as scheduled as well as quality control, customer service, new products design, office improvement, job improvement of supporting units, and the potential development of personnel through Work Flow Analysis methods, leading to excellence in operations and management.

Social Responsibility Standards

The Company has implemented social responsibility standards ISO 26000 to be implemented through the organization covering all major issues. The Company acts according to 237 standard regulations and 321 provisions. In addition, the Company operates sustainable community development projects in education, economics, public health, and the environment in order to enhance quality of life in the community in line with the Sufficiency Economy concept and ongoing organizational improvement. TPI Polene has always strived to improve educational and social development, community standards of living and the environment in order to deepen the harmonious coexistence of our Company and our society, following the Sufficiency Economy concept. On September 9, 2015 and July 28, 2016, TPI Polene won CSR-DIW Awards as the top manufacturer in the country, under the category “Standards for Corporate Social Responsibility”, from the Department of Industrial Works, Ministry of Industry. In addition, TPI Polene received “Thailand Coal Awards 2015” in the category “Corporate Social Responsibility”, on June 25, 2015 from the Department of Mineral Fuel, under the Ministry of Energy of Thailand (the “MOE”).

Integrated Management Systems

The Company’s LDPE plant has moved forward to be the top leading plastic resin manufacturer in Thailand and in the Asian region. TPI Polene is the first plastic resin manufacturer to be awarded Integrated Management Systems (IMS) from ISO Standard Institutions and it is among the top six manufacturers in the country, which all have been awarded the above certificate of Integrated Management Systems.

“TPI Polene: we create the future alongside reliable wisdom, ethics and consciousness towards society.”

Overview of Business Operations

TPI Polene group intends to operate its businesses by adhering to public well-being, social and community improvement and environmental responsibility to strengthen society as an integral part in moving the Thai economy forward together with Thai society. The Company is principally engaged in the manufacture and supply of the products mainly classified as follows:

1. Construction sector: manufacture & sale of cement, mortar, clinker, ready-mixed concrete, CRT/FCB, lightweight concrete and cement paint.,etc.
2. Petrochemical sector: manufacture & sale of EVA/LDPE plastic resins, ammonium nitrate and nitric acid, Polene Solar® and VAE., etc.
3. Energy sector: Manufacture and sale of electricity and steam, RDF alternative fuel, oil and NGV service stations and petroleum exploration., etc.
4. Others: Industry industrial waste disposal, manufacture and sales of humic fertilizers, grow organic, soap, real estate development, packaging bags, retailed products of the group and drinking water., etc.

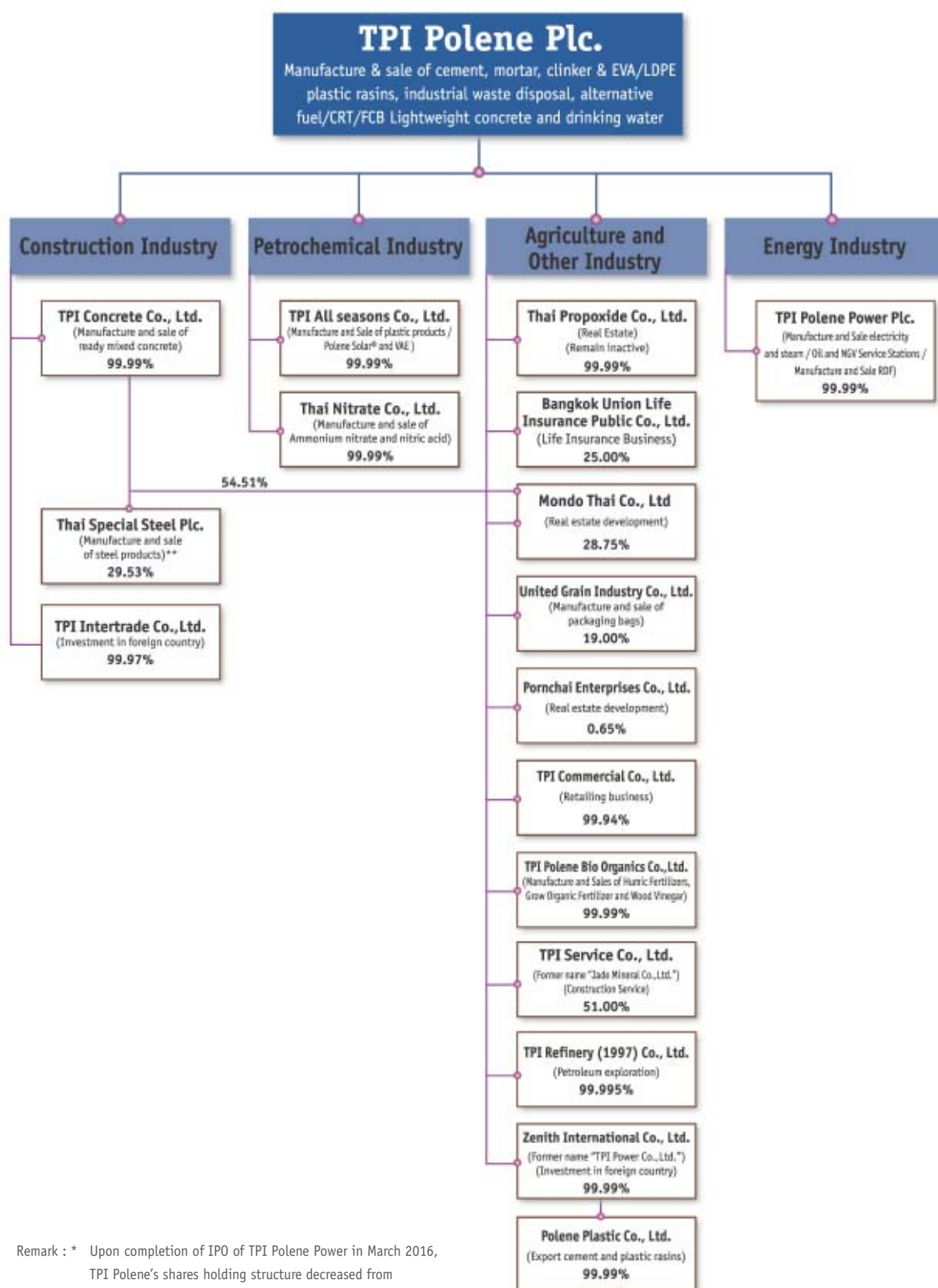
Policy of Business Segregation within TPI Polene Group

TPI Polene has established subsidiary companies and/or affiliate companies to support the core business and to be convenient, easy to manage, efficient to operate and increase its competitive advantages by considering any other factors, such as relevant governing laws, financial structure, taxes and risk management, etc.

TPI Polene has maintained a policy of managing its subsidiary companies to operate their business to be in compliance with the policies of its mother company to ensure that the business administration and good corporate governance system is controlled in the same way. As for the administration of subsidiary and affiliate companies, the Company has appointed a representative to a position in the executive management team to jointly manage and make decisions on policy and plan implementation by placing great importance on fostering a good governance corporate culture throughout the organization, with an emphasis on transparency to achieve set objectives.

TPI Polene and its subsidiaries have maintained our position as one of the top leading cement manufacturers to create stability and balance in business operations, public well-being, social and community improvement, while protecting our environmental surroundings to strengthen society and further enhance the sustainable growth of the Company to always be in compliance with the policy of TPI Polene's responsibility towards society.

Structure of the Group as at December 31, 2016



Remark : * Upon completion of IPO of TPI Polene Power in March 2016, TPI Polene's shares holding structure decreased from 99.99% to 70.24%

** Presently, a mutual solution has been achieved between creditors and debtors and is under consideration by the relevant court.

Nature of Business

1. Cement, Clinker and Mortar Cement Business

TPI Polene is one of the major manufacturers and distributors of cement products and mortar cement under the brand name “TPIPL”. The plants are located in Saraburi province. All the Company’s cement products meet the ISO/TIS certifications of industrial standards, ASTM Industrial Standards and the EU Industrial Standards. TPI Polene was the first cement manufacturer in Thailand to be 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.

TPI Polene was also the first cement manufacturer to be awarded the Carbon Label for both Portland cement and the mortar cement products. The Carbon Label demonstrates that the producer has submitted data to show that it has significantly reduced carbon dioxide (greenhouse) emissions, which cause global warming.

The Company currently operates four cement production plants with total production capacity of 13.5 MTPA (Cement line 4 become commercially operational in early 2016), using technologically advanced machinery, and is strategically located, adjacent to both a limestone quarry and an efficient transportation distribution network, which reaches throughout the country. This gives the Company its low-cost competitive advantage. In addition, TPI Polene Group operates Waste Heat Recovery Power Plants, which generate electricity from waste heat emitted from TPI Polene’s 4 cement production plants and/or uses Refuse Derived Fuel (RDF) as fuel to generate electricity in its RDF-fired power plants. As a result, TPI Polene Group becomes a power plant operator in Thailand, with the largest waste-to-energy power plant operations in the country, a renewable energy to enhance the environment.

Cement Industry

In 2016, Cement Line 4 become commercially operational, leading to an increase in the Company’s production output of cement and clinker, which can be used as the main raw material for other construction products of the Company, such as light weight concrete. However, the cement business was in a slowdown as a result of the economic deterioration in both the domestic and export markets.

In 2016, cement demand in the country was 30.7 million tons, decreasing from 31 million tons in 2015, or a slight decrease of 1% as the consistent economic deterioration in the country and drastic slumps in agricultural product pricing, particularly pricing of rice crops, which dropped constantly over the previous year due to the increase of supply in the global market as a consequence of prolonged drought conditions in particular areas in the world, but this has gradually been alleviated. However, cement demand consumption in the country in 2016 decreased compared to 2014, mainly due to the slowdown of government infrastructure projects and private construction projects. However, in 2017, it is anticipated that the cement business will tend to improve. In 2016, the Company has consistently developed new cement products to be launched and introduced to the market, such as TPI Super Primer for preparatory coating, automatic cement paint mixer and cement mortar for concrete surface repairing etc.

In 2016, Cement Line 4 become commercially operational in early year 2016, which thereby increasing the production output of cement and clinker that are constantly consumed as the main raw material for the production of other related products of the Company, such as light weight concrete, and concrete roof tiles, which enable the Company to create value added and generate sales revenues.

Demand growth for cement and clinker in export markets has slowed down due to higher competition from an increased number of cement producers in the global market. However, quality standards of cement products from Thailand are acceptable from those in other countries, and cement and clinker manufactured in Thailand are mostly required in the international market, particularly because of the development of large-scale investments in infrastructure construction in those countries.

Cement Industry in 2017

In 2017, the Company anticipates that cement demand in the domestic market will increase, supported by investment in public utilities and telecommunication development systems in both the public infrastructure and state enterprises’ on-going investment scheme. In preparation for the ASEAN Economic Community, the Thai government will launch a pilot project to set up “Special Economy Zones” as announced by the government, such as the district in Amphur Maesort, Tak province, Amphur Aranprathet, Sakaew province, Amphur Kongyai, Tak province, Amphur Muang, Mookdaharn province and Amphur Sadao, Songkha province., etc. All those factors have a direct impact on overall economic growth and demand for cement in the domestic market.

2. LDPE/EVA plastic resins

TPI Polene is the manufacturer and distributor of LDPE Homopolymer (LDPE) and LDPE Copolymer (EVA) plastic resin. TPI Polene operates this business in Rayong province, with total production of 158,000 TPA. The LDPE is the output to be used as a main raw material for many types of plastic products, while EVA plastic resin will be used to produce athletic shoes. Low-density polyethylene (LDPE) and Ethyl Vinyl Acetate (EVA) account for TPI Polene's market share of 20% and 90% of total domestic sales volume in the country respectively. We are the sole producer of EVA in Thailand and one of the few producers of EVA in the world who can develop proprietary EVA production technology.

LDPE/EVA Industry

In 2016, domestic demand consumption for LDPE/EVA plastic resins slowed down due to falling crude oil prices leading to a sharp drop in LDPE/EVA prices since the first quarter of 2016. Most consumers have monitored plastic resin prices and prolonged buying plastic resins owing to the fluctuation of plastic resins and crude oil prices in the year 2016.

In addition, this scavenging of volume markets has slowed, leading to a slight decrease in demand consumption in commodities in 2016. Meanwhile, entrepreneurs closely monitored economic conditions in the country; therefore, demand consumption for LDPE/EVA plastic resins remained constant as compared with the previous year. However, TPI Polene did not rely mainly on the domestic market and focused on export sales whereby demand consumption of EVA plastic resin in the international market, such as China and India, resulted in a consistent growth in export sales volume during the past several years.

The Company has focused on a policy to develop differentiated products to create value added to EVA plastic resins to create competitive advantages and yield higher contributions, such as high quality VAE copolymer emulsion, Stretch Wrap Film and PE film where demand consumption in both the domestic market and international market is quite high. In addition, TPI Polene has developed EVA Sheet Encapsulate, which is our innovative solar encapsulation film used for the production of solar cell modules.

LDPE/EVA Industry in 2017

In 2017, the Company anticipates that plastic resin prices will stabilize whereas cost of production in plastic resin will tend to decrease, which will be beneficial for the petrochemical business. The Company has focused on a policy to develop differentiated products to penetrate the niche markets that yield higher contributions.

3. Ready-mixed Concrete

TPI Concrete Co., Ltd. Manufacture (a 99.99% owned subsidiary company) is the second largest manufacturer and distributor of ready-mixed concrete with a market share of 12% of ready-mixed concrete demand in the country. Product quality and consistent improvement of service is our prominent feature.

The major competitors of TPI Concrete are Concrete Product and Aggregate Co., Ltd. (CPAC), Siam City Concrete Co., Ltd. and Asia Concrete Products Co., Ltd. There are also several other minor concrete manufacturers in the country.

Ready-mixed Concrete Industry

In 2016, the ready-mixed concrete industry slowed down, as a result of the economic slowdown in the country. Construction of some massive governmental infrastructure projects in those countries has been postponed to start by the end of the year 2017 as well as the timeline of private construction projects from private sectors, leading to the decrease in overall demand consumption of ready-mixed concrete in the country in 2016 compared to the previous year. However, demand for concrete in the country showed signs of recovery, a result of investment in the country's infrastructure projects, which includes construction of a highway project in the city, double track railways throughout Thailand and Laem Chabang Port A Project to further drive the increase of demand consumption for ready-mixed concrete for the property development of the country's infrastructure projects.

Ready-mixed Concrete Industry in 2017

In 2017, it is anticipated that the construction situation will tend to expand supported by some massive governmental infrastructure projects in late 2016 as well as an expedited disbursement of national budgets from the government. These projects consistently stimulate the economy in the country, particularly the Government's investment in infrastructure projects for the logistics system, which includes construction of the extension of the sky train's line routes to cover all areas in Bangkok, additional routes of motorway construction project, and double track railways throughout Thailand. The investment projects are estimated at Baht 200,000 million. In 2017, however, demand for concrete in the country showed signs of recovery to be in line with the Government's infrastructure development plans and the private sector's investment in construction of residential housing and condominiums in early 2017.

4. Concrete Roof Tile/ Fiber Cement Businesses and Lightweight Concrete

The Company currently operates three existing plants of concrete roof tiles as follows:

1. Corrugated production line: with total production of 100,000 TPA, autoclave and aircure production systems.
2. Board sheets production line: a substitute for wood product category, using autoclave production system.
3. Digital board production line, wall and floor decoration

Total production capacity of both Lines 2 and 3 are 150,000 MTPA.

Concrete Roof Tile products are comprised of concrete roof tiles products and its cover set. Total production of concrete roof tiles are 1,600,000 square meters or 16 million pieces per annum.

TPI Polene is the manufacturer and seller of concrete roof tiles and fiber cement products under the logo, "TPIPL", designed through a production process that uses modern machinery and high technology. Concrete roof tiles and fiber cement products are made from high quality cement and are manufactured to meticulous strength specifications, ensuring endurance and ultimate press and quality of the products surpassing the production standards from Thai Industrial Standards Institute and the International Standard Organization (ISO 9001:2015) from British Standards Institution (BSI). In addition, we have a skilled quality control team, assuring qualified products by the professional team under the standardization of roofing material, which can be tested before launching to the market. Concrete roof tiles and fiber cement products are made from high quality cement and are manufactured to meticulous strength specifications, ensuring endurance and ultimate press. It has captured all the characteristics of creative curb appeal, created a matte appearance and they make a roof stand out. TPI Polene put an emphasis on producing the products to be environmentally friendly and help to even out temperatures. The Company also developed varieties of products from fiber cement by employing modern "digital technology". TPI Polene is the very first manufacturer in the country to use digital technology.

Also, the Company also provides a full comprehensive range of design for structure of concrete roof tiles in professional styles. Our superior-quality tiles are available with roofing systems; heat-resistant coating and also the budget for installation can be quickly estimated. Our tiles are ideal to complete sustainable building construction, assuring efficient installation work by the professional team under the standardization of roofing material and efficient production process, which can be tested. Our roof system has a large variety of quality products with an attractive appearance and has a comparatively long lifecycle, as well as a highly efficient product development team.

The dominant characteristic of the lightweight concrete project is that the Company can produce lightweight concrete using a variety of raw material produced at its own plant, which is greater than 90%, which includes electricity and surplus of steam which will be reusable in the production process, thereby resulting in lower costs of production and creating competitive advantages.

Concrete Roof Tile/ Fiber Cement and Lightweight Concrete Industry

There are 6 major manufacturers in the Concrete Roof Tile and Fiber Cement Industry, which are Siam Cement Plc., (CPAC brand), Diamond Roofing Tiles Plc., (Diamond brand), TPI Polene Plc., (TPIPL brand), Siam City Cement Plc., Siam City Cement Plc., (Conwood brand), Mahaphant Fiber Cement Plc., (Mahaphant brand) and Oranit Roofing Tiles Co., Ltd., (Oranit brand). Big roofing manufacturers, who operate their own cement plants, have competitive advantages in terms of controlled costs of production.

There are 6 major manufacturers in the Lightweight Concrete Industry, which are Siam Cement Plc., (Q-Con brand), Thai Light Block and Panel Co., Ltd., (Thai Con brand), Diamond Roofing Tiles Plc., (Diamond brand), Siam City Cement Plc., Siam City Cement Plc., (Insee Super Block brand), Smart Concrete Co., Ltd. (Smart Block brand) and TPI Polene Plc., (TPI Block brand).

TPI Polene uses a strategy for sales and marketing in the domestic market through the integrated marketing concept, focusing on marketing a mix of products to customize the products offered to customers based on advertisements via television, print media and product displays at more than 1,000 construction material sales agents and modern trade shows throughout the country, as well as online media advertising to create awareness and deliver products details of marketing messages to consumers with real product presentations. TPIPL maintains the policy to produce new products through research and development for product innovations to respond to the needs of consumers, focusing on product differentiation suitable for a wide range of purposes, genuine application, reducing carbon dioxide gas that causes global warming and that are environmentally friendly.

The Company has a policy to consistently export fiber cement products and concrete roof tiles to AEC (ASEAN Economic Community) member countries such as Philippines, Laos and Myanmar and has a plan to expand the market to other countries and other continents, to accommodate economic expansion.

As there is some limitation of wood properties to be used in decoration or construction work, the fiber cement market has growth potential as they can be used as a substitute for wood. They have better properties as compared with wood, as fiber cement is manufactured to ensure moisture endurance, flexibility, free of termites and insects, and is cost saving compared to wood and its availability.

Before the year 2016, demand consumption for lightweight concrete consistently grew as it can be used as a substitute for bricks. However, due to the economic situation since 2016 until now, supply for lightweight concrete has exceeded demand and there were constructions of additional manufacturers in the country, leading to an intense price competition in the market. However, the Company also has competitive advantages as the products are designed through a production process that uses modern machinery and has maintained the policy to consistently develop a full comprehensive range of products in different size/dimensions for an ever-increasing number of applications to respond the needs of the customers, ensuring suitable application in order to expand the market and capture existing market share.

5. Refuse Derived Fuel ("RDF") Plant

TPI Polene Power Co., Ltd. operates a renewable energy business with an Alternative Fuel Power Plant, or Refuse Derived Fuel (RDF). It commenced commercial operations in 2001. The plant is located within the area of our cement plant in Saraburi province. The RDF project enables the Company to use RDF fuel for the partial substitution of coal, thereby reducing our coal usage in the cement production process and/or RDF fuel can be substituted as coal energy to generate energy in the form of electricity in the Plant. The RDF Plant as above has been granted promotion certificates from the Board of Investment ("BOI").

To support its RDF-fired power generation capacity, TPI Polene Power currently operates RDF production facilities with the daily installed capacity to process up to 4,000 tons of municipal waste and produce up to 2,000 tons of RDF. Presently, TPI Polene Power has constructed the warehouse for RDF storage up to 100,000 tons, to ensure sufficient waste supply to support its RDF requirement as fuel to generate power for a period of one month.

Presently, TPI Polene Power is expanding the production capacity for RDF fuel, with construction to be completed by the first quarter of 2017. Once the expansion project is completed, the RDF production facilities are expected to have the daily installed capacity to process up to 6,000 tons of MSW and produce up to 3,000 tons of RDF to accommodate its extensive usage as energy fuel for an Alternative Fuel Power Plant, or Refuse Derived Fuel (RDF).

6. Power Plants

TPI Polene Power is a power plant operator, with the largest waste-to-energy power operations in the country and become one of the top leading waste-to-energy power plant explorers in Thailand, with an established track record and expertise in waste management and proprietary technology well adapted to waste -to-energy operations in Thailand.

The Company currently has power plants in operation, with total installed power generation capacity of 150 MW and has a power plant under construction with total installed power generation capacity of 290 MW. Once the expansion project is completed, installed power generation capacity will total 440 MW as follows:

1. A waste heat recovery power plant (the "WHRPP-40MW"), which generates electricity from waste heat emitted from TPIPL's cement production plants and has an installed power generation capacity of 40 MW, consisting of two 20 MW power generation units. These RDF-fired Power Plants have been granted promotion certificates from the BOI.
2. An RDF-fired Power Plant with an installed power generation capacity of 20 MW. TPI Polene Power Co., Ltd. began to sell a contracted power generation capacity of 18 MW in January 2015 to The Electricity Generation Authority of Thailand (EGAT). The RDF-fired Power Plants receive an adder of Baht 3.50 per kwh, which is payable in addition to the standard price of EGAT, on alternative-fuel-generated electricity for 7-year period, from EGAT. These RDF-fired Power Plants have been granted promotion certificates from the BOI.
3. An RDF-fired Power Plant with an installed power generation capacity of 60 MW. In August 2015, TPI Polene Power Co., Ltd. began to sell a contracted power generation capacity of 55 MW from RDF-fired Power Plant with an installed power generation capacity of 60 MW to The Electricity Generation Authority of Thailand (EGAT). The RDF-fired Power Plants receive an adder of Baht 3.50 per kwh, which is payable in addition to the standard price of EGAT, on alternative-fuel-generated electricity for 7-year period, from The Power Electricity Authority of Thailand. These RDF-fired Power Plants have been granted promotion certificates from the BOI.
4. A power plant with an installed power generation capacity of 100 MW, consisting of a 30 MW waste heat recovery power generation unit and a 70 MW RDF-fired power generation unit, which commenced commercial operations in February 2016. Presently, TPI Polene Power Co., Ltd. has completed the construction of a Waste Heat Recovery Power Plant with an installed power generation of capacity of 30 MW, which will initially sell electricity generated from the waste heat recovery power generation unit to TPIPL to be used in TPIPL's cement production process until the RDF-fired power generation of capacity of 70 MW becomes commercially operational. Thereafter, a RDF-fired Power Plant with an installed power generation capacity of 100 MW will sign a contracted power generation capacity of 90 MW to EGAT in the fourth quarter of 2017, both of which have been granted promotion certificates from the BOI, which entitles it to a number of benefits including tax exemptions.

5. An RDF-fired Power Plant with an installed power generation capacity of 70 MW with total project investment of Baht 3,300 million. These RDF-fired Power Plants have been granted promotion certificates from the BOI.
6. A coal/RDF-fired power plant with an installed power generation capacity of 150 MW, with the investment project of Baht 7,300 million. The project is currently under construction and is expected to commence commercial operations in the fourth quarter of 2017. The electricity generated from a coal/RDF-fired power generation unit will be sold to TPIPL to be used in TPIPL's cement production process. This coal/RDF-fired Power Plant has been granted promotion certificates from the BOI.
7. A coal and RDF-fired power plant with an installed power generation capacity of 70 MW, with the investment project of Baht 900 million. The project investment was made in 2015 and is expected to commence commercial operations in the fourth quarter of 2017. The electricity generated from a coal/RDF-fired power generation unit will be sold to TPIPL to be used in TPIPL's cement production process. TPI Polene Power is in the process of filing an application to receive promotion certificates from the BOI.

7. Industrial Waste Disposal Business

TPI Polene also operates an industrial waste disposal business to dispose of industrial waste from various industries in the country, under a license to operate a central waste treatment plant granted by Department of Industrial Works. This project helps eliminate industrial waste from industries, enhance recycling opportunities, lower raw material and fossil fuel usage, and develop a recycling economy with the preservation of environmental surroundings.

8. Pyrolysis Plant

The Company operates modern, high-efficiency energy recovery technology using a Pyrolysis Plant, with total project investment of Baht 652 million. The pyrolysis plant is designed to generate crude oil and liquid fuel from waste plastic and tire pyrolysis. The project is operated adjacent to the RDF plant, which is located within the area of our cement plant in Saraburi province. The Pyrolysis Plant has been granted promotion certificates from the Board of Investment ("BOI"). The crude oil and liquid fuel will be used as energy power for truck transports of raw material in the cement production process, which enables the Company to reduce energy costs. Commercial value of crude oil at the plant to be enhanced depends on crude oil price in the global market.

9. Oil Service Stations and NGV gas stations

TPI Polene Power Public Company Limited also operates oil service stations and NGV gas stations in Bangkok and provincial areas, under the logo "TPIPL". NGV gas stations have been granted promotion certificates from the Board of Investment. Currently, TPI Polene Power operates a total of 8 oil service stations, 1 NGV gas station and 3 oil service stations and NGV in Bangkok and provincial areas.

10. Fertilizer Plant

TPI Polene Bio Organics Co., Ltd. (99.99% owned subsidiary of the Company). The project become operational in 2011 and is operated adjacent to the RDF Plant. The composting or the biodegradable waste is sorted and reprocessed into new material bound for the manufacture of organic fertilizer for full cycling for waste management collection, treatment and disposal services. The plant is located within the area of our cement plant in Saraburi province. The organic fertilizer plant has been granted promotion certificates from the Board of Investment ("BOI"). TPI Polene Bio Organics Co., Ltd. obtained quality products in compliance with the standards of IFOAM for liquid fertilizer on September 5, 2011. Most importantly, TPIPL organic fertilizers are toxic-free and safe for human beings and the environment. TPI Polene Bio Organics Co., Ltd. has consistently produced through research and product development to obtain varieties of products specially manufactured for plants and livestock (symbiotic products).

Organic Fertilizer Industry

In 2016, the Company has launched organic products for plants and livestock (symbiotic products) through research and product development to help protection disease in the farms, thus reducing the uses of antibiotics. TPI Polene puts an emphasis on producing the products to be safe for consumers and environmentally friendly. Organic agriculture in Thailand started to consistently expand and move in a good direction, driven mainly in organic crops, i.e. rice and integrate farming system. As a result of the slump in the agricultural product prices, farmers switched to produce on the crop yield that help create value added, whereby the organic agriculture seems to be a better alternative for them. However, as a consequence of severe drought can significantly worsen drought conditions and shortages in its water supply in recorded history 20 years. It had a substantial impact on the ecosystem and agriculture of the affected region and harm to the local economy. Apparently, most arid ecosystems have inherently low productivity in agricultural products whereas productivity from livestock remained constant.

It is anticipated that growth in the agricultural sector in the country showed signs of recovery, as drought conditions and shortages in its water supply have alleviated and farmers tend to cope with the problems of the slump in the agricultural product prices in the past several years.

11. Ammonium Nitrate and Nitric Acid

Thai Nitrate Co., Ltd. (a 99.99% owned-subsiidiary Company, is the largest producer of ammonium nitrate and nitric acid in the country and Thai Nitrate is the sole producer of nitric acid in Thailand.

12. TPIPL Drinking Water Business

TPI Polene 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.

13. Polene Solar® Products and VAE Copolymer Emulsion and Redispersible Powder

TPI All Seasons Co., Ltd. (99.99%-owned subsidiary of the Company) is the manufacturer and distributor of EVA film that is used for encapsulant for photovoltaic (PV) modules, which are ideal for crystalline, amorphous thin film solar panels. In addition, EVA can be used in laminated safety glass, wrap film, top sheet masking film, multi-purpose plastic sheet, anti-slip mat applications under the brand names of Polene Solar® and Vistasolar® which are certified by Thai Industrial Standards Institute (TIS 9001-2552) and the International Standard Organization (ISO 9001:2008). TPI All Seasons presently operates 10 production lines with an annual capacity of 20,100 TPA (85% from Vistasolar and 15% from Polene Solar®).

1) Polene Solar® plant with total production capacity of 3,100 TPA 2) Vista Solar® plant with total production capacity of 17,000 TPA. The project as above has been granted promotion certificates from the Board of Investment (“BOI”).

TPI All Seasons Co., Ltd. has also developed and launched VAE copolymer emulsion, which is widely used as adhesives for distribution, the main raw material of which are ethylene and vinyl acetate. It is classified as the green product. Also, the Company has developed and launched re-dispersible powder into the market.

Polene Solar® Products can be classified according to their components and application as follows:

1. EVA encapsulant for Photovoltaic (PV) modules: The encapsulant is very important for the solar module because it is used to fix all components of the modules together. Moreover, the EVA sheet must be robust and protect the solar cells against UV light and moisture for at least 25 years.

- Polene® Solar Film: In 2007, TPI All Seasons created the first EVA products by using high technology in collaboration with Thailand’s top-tier PV manufacturers and our R&D team, who have over 10 years of experience in polymeric materials. The product exhibits very outstanding properties such as high light transmitting, UV protection, excellent adhesion to glass which is suitable for various solar panels (crystalline and amorphous thin film) in order to meet the demands of domestic customers and the Indian market. Moreover, the company has also developed the EVA film for laminated safety glass and decorative ones.

- Vistasolar®: The most prestigious and oldest brand of EVA film in Europe has been purchased by TPI All Seasons Co., Ltd. in 2014. All machinery, equipment and its technology have been transferred to be installed Thailand. For this reason, the company has gained more market share and has become more well-known in the world market.

2. Blown film products

Blown film extrusion is a well-known technology that is the most common method to make plastic films, especially for the packaging industry (wrap film, top sheet and masking film). The company also developed the plastic curtain used for cold rooms and clean rooms.

3. Anti-slip mats

Polene EVA film can be used as a household multi-purpose plastic sheet such as anti-slip mats or surface protective film in the kitchen, living room and bathroom.

In 2016, TPI All Seasons Co., Ltd had the following total revenues: 78% from EVA encapsulant film, 21% from Blown film products and 1% from anti-slip mat and multi-purpose plastic film respectively.

Opportunity and Constraints of Solar Film Business

Solar energy is a naturally occurring and clean energy. With the large magnitude of solar energy available and concerns about global climate change, many countries try to utilize sunlight to generate electricity instead of oil and coal as well as to reduce the emission of greenhouse gases. For this reason, solar power is a promising choice to address the world energy crisis.

However, there are other factors affecting the opportunities and limitations of the EVA solar film business.

1. Government policy on renewable energy (Internal and Foreign Policies):

The government action plan that encourages the use of the renewable energy, especially solar energy, will promote the solar power industry. The Ministry of Energy will possibly increase the proportion of solar energy within 10 years and will allow rooftop solar energy systems with unlimited power generation. This support by the Thai Government may facilitate increasing capacity of EVA solar film production by our company due to the increase of solar power demand in the future.

In addition to Thailand's energy policy, the government's foreign policy also plays an key role in this business. If solar power is promoted around the world, this will also help to increase our production capacity. For example, Japan will host the online auction of solar power plants due to the energy crisis after Tsunami Disaster in 2011. According to the 21st United Nations Framework Convention on Climate Change - UNFCCC COP21, the member nations agreed to fund 100,000 million dollars to poor countries for renewable energy to achieve the target of limiting global warming to less than 2 degrees Celsius compared to pre-industrial levels.

2. Crude Oil and coal price:

Crude oil and coal are the main fuel for electricity generation. If the price of those raw materials decreases, this will retard the business of renewable energy and the production capacity of TPI All Season as well.

3. Technology:

If the technology of solar cell and solar module fabrications is developed to obtain more power, the cost of solar power generation might be reduced compared to the conventional technology and other renewable energy generations.

Competition in Solar Film Industry

TPI All Seasons Co., Ltd. is the sole producer in the country; however, in the international market, there are 3-5 competitors in China, South Korea and Spain. The most competent ones are those in China because the raw materials for production in China are cheaper with higher quality.

Forecast for the Year 2017

In 2017, it is anticipated that production output and sales revenues for solar film in the domestic market are set to become more stabilized, supported by Thai government policy on solar cell production. In addition, there are several manufacturers of solar cell from offshore to establish production base in Thailand. Besides, the real estate business in Thailand is growing continuously; this also increases the demand for our EVA film which is used for laminated glass and solar panels.

For the international market, sales revenues and profits will also increase owing to the threshold for entry into force of the Paris Agreement of the 21st United Nations Framework Convention to bring all nations into a common cause to undertake efforts to combat Climate Change - UNFCCC COP21 was achieved. The members of group agreed to raise funds of USD 100,000 million to enhance support and assist developing countries for the investment in clean energy projects with an aim to keep a global temperature rise this century well below 2 degree Celsius above pre-industrial levels. Therefore, the agreement also provides opportunities on higher demand consumption for solar cell in the global market.

14. Petroleum Exploration and Production Technology

TPI Polene Power Co., Ltd. (99.99%-owned subsidiary) entered the Petroleum Concession no. 2/2554/110 for concession block no. L29/50 with the Ministry of Energy on February 8, 2011, as the concessionaire for Petroleum Exploration and Production Technology. Presently, the Company is in the process of petroleum exploration on the concession reserve.

On December 23, 2015, TPI Polene Power transferred the rights, benefits and obligations in connection with the Petroleum Concession no. 2/2554/110 at book value to the TPI Refinery (1997) Company Limited. Nevertheless, the Company is subject to certain obligations under the Petroleum Act, B.E.2514 (1971) on behalf of TPI Refinery.

In addition, the Company has invested in other businesses through its subsidiaries and affiliated companies, and is involved in real estate development, the provision of life insurance services, and the manufacture and sale of packing bags, etc.

Affiliated Companies as of December 31, 2016

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	2,000,000,000	2,000,000,000	99.99
2. TPI Polene Power 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 electricity and steam, RDF, exploration and manufacture petroleum including oil and NGV service stations	8,400,000,000	5,900,000,000	99.99*
3.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®, VAE glue and RDP glue	450,000,000	450,000,000	99.99
4. 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	Manufacture and sale of electricity (Remain inactive)	1,000,000	250,000	99.99
5. 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 development as a residential estate	36,000,000	36,000,000	83.26**
6. 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	100,000	100,000	99.94
7. TPI Refinery (1977) Co.,Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5470 Fax: (02) 678-6511	Petroleum exploration	1,300,000	1,300,000	99.99
8. 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 humic fertilizer and wood vinegar	2,000,000,000	2,000,000,000	99.99
9. Thai Nitrate Co., Ltd.	26/56, 21 th 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
10. Zenith International Trading Co.,Ltd. (Former name "TPI Power Co.,Ltd.")	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Investment in Foreign	100,000,000	1,000,000	99.99
11. TPI Intertrade Co., Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Investment in Foreign country	100,000	100,000	99.97
12. TPI Service Co., Ltd. (Former name "Jade Minerals Co.,Ltd.")	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Construction business	1,000,000	1,000,000	51.00
13. Polene Plastic Co., Ltd	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 285-5090-9 Fax: (02) 213-1035	Export cement and plastic resins	10,000,000	10,000,000	99.99***

Remarks: * Upon the completion of Initial Public Offering of TPIPP in March 2016, the Company's shares holding structure in TPIPP reduced from 99.99% to 70.24%

** Held by TPI Polene Plc. and TPI Concrete Co., Ltd., which accounted for 28.75% and 54.51% respectively, totaling 83.26% .

*** Held by Zenith International Trading Co., Ltd. 99.99%.

Company's name	Head Office Address	Business	Registered Capital (Baht)	Paid-up Capital (Baht)	Shareholding (%)
Associated Companies					
1. Thai Special Steel Industry Public Co.,Ltd.	26/56, TPI Tower, Chan Tat Mai Rd., Thungmahamek, Sathorn, Bangkok 10120 Tel: (02) 678-5350-74 Fax: (02) 678-5375-6	Manufacture and sale of Steel	11,200,000,000	4,220,000,000	29.53
2. Bangkok Union Life Insurance Public Co., Ltd.	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
3. 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) 678-6988-99	Manufacture and sale of Packaging	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) 678-5490-3 Fax: (02) 678-5494	Real estate business and rental service	4,599,919,600	4,599,919,600	0.65

Sales Revenue Structure

TPI Polene's investment in reciprocal businesses will generate significant sales revenues and create steady growth for the Group. The sales revenues structure is as follows:

Unit: Baht Million

Product/Service	Operated by	% Of TPIPL's Shareholding	Sales revenues		Inter-company's revenues		Total Sales revenues			
			2016	2015	2016	2015	2016	%	2015	%
Construction material	TPI Polene Plc.	-	18,557	18,238	7,035	6,409	25,592	60.19	24,647	61.59
	TPI Concrete Co.,Ltd.	99.99								
Petrochemical and Chemical Products	TPI Polene Plc.	-	6,759	6,803	5,676	5,793	12,435	29.24	12,596	31.48
	Thai Nitrate Co., Ltd.	99.99								
Electricity and Utility	TPI Polene Power Co.,Ltd.	99.99	3,714	1,990	577	561	4,291	10.09	2,551	6.38
Organic Products	TPI Polene Bio Organics Co.,Ltd.	-	98	104	107	118	205	0.48	222	0.55
Total			29,128	27,135	13,395	12,881	42,523	100.00	40,016	100.00

Corporate Developments in 2016

2016 was another year of success for TPI Polene Group as the Company has expanded projects to build up business operations and consistently reduce energy. TPI Polene has moved forward to ceaselessly create high growth potential for the business by making further investments in projects as follows:

The Initial Offering Public Offering (IPO) of newly issued ordinary shares of TPI Polene Power Co., Ltd.

In March 2016, TPI Polene Power offer up to 2,500,000,000 newly issued ordinary shares, (comprising approximately 29.76% of the Company's total outstanding Shares after the Combined Offering), at the offering range price of Baht -7 per share (at the par value of Baht 1 each), the offering up to 2,500,000,000 newly issued ordinary shares is as follows:

1. In an aggregate of up to up to 2,500,000,000 newly issued ordinary shares (of which a maximum of 125,000,000 shares will be offered to a specific sub-group of the public who are our existing shareholders and who are eligible to subscribe for such shares in an amount not exceeding their respective entitlement. And to be offered for sale to the existing shareholders of the Company shall be 162 ordinary shares of the Company to 1 newly-issued ordinary shares of TPIPP (any fraction thereof will always be rounded down) while TPIPP will include the remaining shares after the subscription to existing shareholders of the Company to be incorporated in the shares allotment to be subscribed to the public accordingly.
2. In an aggregate of up to up to 2,375,000,000 newly issued ordinary shares. TPIPP will include the remaining shares after the subscription to existing shareholders of the Company (in item 1) to be incorporated in the shares allotment to be subscribed to the public accordingly.

TPIPP plans to use the proceeds from the IPO for debt repayment to TPI Polene and/or investment in future projects, including power generation projects, RDFPP-70MW, Coal-PP-150MW, Coal-RDF-PP-70MW, additional RDF boilers; and capacity expansion of RDF production facilities and for working capital and general corporate purposes and working capital purposes.

The Projects currently under Investment

1. TPI Polene Power Plc. has made an investment in the RDF-fired power generation of capacity of 70 MW, with a total investment of Baht 3,300 million. Presently, TPI Polene Power Plc. has completed the construction of a Waste Heat Recovery Power Plant with an installed power generation of capacity of 30 MW, which will initially sell electricity generated from the waste heat recovery power generation unit to TPIPL to be used in TPIPL's cement production process until the RDF-fired power generation of capacity of 70 MW becomes commercially operational. A RDF-fired Power Plant with an installed power generation capacity of 100 MW will sell a power generation capacity of 90 MW to EGAT within January 2017 (RDF-fire Power Plant 100 MW is in the process of signing the Power Purchase Agreement), with an adder at the rate of THB 3.50 per kWh of electricity for a period of seven years. RDF-fired Power Plant has been granted a promotion certificate from BOI.
2. A coal/RDF-fired power plant with an installed power generation capacity of 150 MW, with the investment project of Baht 7,300 million. The project is currently under construction and is expected to commence commercial operations in the fourth quarter of 2017. The electricity generated from a coal/RDF-fired power generation unit will be sold to TPIPL to be used in TPIPL's cement production process. This coal/RDF-fired Power Plant has been granted promotion certificates from the BOI.
3. A coal and RDF-fired power plant with an installed power generation capacity of 70 MW, with the investment project of Baht 900 million. Project investment was in 2015 and is expected to commence commercial operations in June 2017. The electricity generated from A coal/RDF-fired power generation unit will be sold to TPIPL to be used in TPIPL's cement production process. TPI Polene Power is in the process of filing an application to promotion certificates from the BOI.
4. An expansion of RDF plant to transform waste into usable fuel through a dry combustion process, with the investment project of Baht 1,450 million. The project will commence commercial operations by the end of 2016. The plant will transform RDF into a usable fuel for RDF-fired power plant. It is under construction.

New Product Development in 2016

Current construction projects mostly consume ready-made materials in an ever-increasing number of applications to accommodate with wide range of purpose and require labor cost saving. The Company has developed cement mortar to provide a full comprehensive range of applications. Therefore, TPI Polene has become the top leading manufacturer of cement mortar in the country. TPI Polene and its subsidiaries have developed new products as follows:



• Fiber Cement and Concrete Roof Tile Products

Hygiene Grade Cement Roof Tiles

Our hygienic grade cement roof tiles corrugated is well developed to possess outstanding properties apply of Nano Technology. The ingredients consist of special substances that enable it to have waterproof properties for cement roof tiles and has added anti-fungal and mildew resistance additives, which will lower the water absorption. Our Cement Roof Tile Hygiene Grade has been awarded TIS 1407-2540 industrial certification standard.

Hygiene Grade Concrete Roof Tiles

Our hygienic grade concrete roof tiles corrugated is well developed to possess outstanding properties apply of Nano Technology. The ingredients consist of special substances that enable it to have waterproof properties for concrete roof tiles and has added anti-fungal and mildew resistance additives, which will lower the water absorption. Our Concrete Roof Tile Hygiene Grade has been awarded TIS 535-2556 and 2619-2556 industrial standard certification.

• Cement Mortar Products

- Super Asphalt M609

Super Asphalt M609 is a sticky, black and highly viscous liquid or semi-solid substance, which can be well flowed, to be used as a glue to completely fill the joint of asphalt pavement and concrete pavement to also create flexibility of the pavement, without stingy odor from fuel oil or solvent. The product can be ready to apply immediately by mixing well. The product is sold in 5 gallon buckets.

- TPI Sealant M611

TPI adhesive sealant is designed, with quality that promote quick drying and adhesive textures, which is used to block the passage of fluids through the surface or joints or openings in material, have added benefits with regard to long-term durability and adhere firmly on fiber cement, concrete, artificial rock, aluminum, metal sheets, tiles, timber fascia, gypsum board, ceramic and UPVC., etc. It can be used for both interior and exterior applications. It has surpassed its properties proof to be safe for application, which adheres firmly on surfaces of walls. The product is sold in 300 ml. tube.

TPI Super Fix M612 : Polyurethane sealants with adhesive strength

Polyurethane sealants have added benefits with regard to adhesive textures, which adhere firmly on concrete, which is used to adhere on fiber cement to cover, the surfaces of steel sheets, ensuring strength, a fast setting property and adhesive textures. The ingredients consist of special substances that enable it to increase its enhanced adhesive strength, adhere firmly on fiber cement, concrete, cement surfaces and C-line metal sheets. The product is sold in 1 gallon buckets.

- TPI Super Premium Skim Coat Cement Plaster M650P

M650P is a ready-mixed mortar, suitable for different types of wall masonry, which can be applied on cement or concrete surfaces and can be plastered with a hard power trowel or steel trowel or used for finishing and skim-coating concrete surfaces, ensuring an elegant leveling appearance. It is a mixed material of cement with special chemicals that is well-suited to cover the rough surfaces of walls, inconsistent plastering concrete surfaces. The product is sold in 15 kilogram buckets.



Other Nano Products launched in 2016

TPI Super Primer for Heavy Duty Flooring “NP301P”: a preparatory coating for 2 polyurethane work to put on surfaces before painting, with the properties of ingredients consist of particle size of Nano emulsion that enable it to ensure better adhesion of paint on surface, and to form a binding layer that is better prepared to receive the paint, increase paint durability. The product is sold in 1 and 5 gallon buckets.



TPI Super Special Armour Nano Paint “NP302” (Top Coat: Heavy Duty Flooring)

A preparatory coating for 2 polyurethane work to put on surfaces before painting, With the unique specialty formula with fine cement-based mixtures, the colors give a smooth and adhesive texture, which adhere firmly on concrete, with the unique specialty formula with fine cement-based mixtures, the colors give a smooth and adhesive texture, has high resistance against UV radiation which adhere firmly on concrete, cement and fiber cement panels, which can be applied to surfaces with brushes or roller. It is designed to provide a long-lasting durable finish such as factory flooring and warehouses, etc. The product is sold in 1/4 and 1 gallon buckets.



TPI Super Special Armour Nano Paint “NP303” (Top Coat: Heavy Duty Flooring)

A preparatory coating for 2 polyurethane work to put on surfaces before painting, With the unique specialty formula with fine cement-based mixtures, the colors give a smooth and adhesive texture, has high resistance against UV radiation which adhere firmly on concrete which adhere firmly on concrete, cement and fiber cement panels, which can be applied to surfaces with brushes or roller. It is designed to provide a long-lasting durable finish such as factory flooring and warehouses, etc. The product is sold in 1/4 and 1 gallon buckets.

TPI New Formula High Density Concrete

The Company has invented and developed a new formula TPI high density concrete with a proportionately designed fine particle size mix of specialty quality and special high gravity of additives mixture to the production process of reinforced concrete parts consistently, which use modern technology development. The cubic density strength has been developed up to 2,600 kilograms per cubic to ensure the best possible consistent pouring, suitable for concrete work that need thick and opaque walls in radiation rooms in the hospitals.

Consistently Develop Potential in our Human Resources

As at December 31, 2016, the Company and its subsidiaries employed 9,592 persons. Of these, 143 were management personnel.

The Company pursues its business operations with a full commitment to good corporate governance, with an emphasis on transparency, social and environmental responsibility, ethics and fairness. Such pursuits are congruent with our commitment to foster development in our human resources and to drive our corporate culture toward excellence in all respects. The Company strongly believes that highly competent employees are the key driver for corporate success. To this end, the Company has focused on continuous development of our human resources in addition to aiming for our employees to perform their duties ethically, responsibly, and with integrity. Furthermore, the Company strongly believes that encouraging our employees to embrace corporate social responsibilities will reinforce the sustainable growth of our organization. In addition to the aforementioned activities, the Company has taken the following initiatives in order to further enhance our employees' competency:

Personnel Management System: The personnel management system at our cement plant is an online system. The program provides several services online; for instance, employee online attendance system and compensation leave system. This includes online personnel management system linkage through all units of operation, such as online attendance system and leave system, by applying finger scan for recording work attendance. This also includes employees' performance appraisal system and pay roll. CCTV have been installed in particular spots in the workplace.

Human Resource Development and Essential Knowledge: The Company acknowledges the importance of human resources; therefore, we encourage our employees to continuously develop and strive to achieve their fullest potential by providing all our employees with the opportunities to learn and acquire the knowledge equally among employees. The Company offers the following programs to our employees:

- **Development courses and training programs:** The Company fosters staff development at all levels. Each year, the Company schedules training programs specifically designed for each business unit to educate and to provide employees at different levels with understanding of their tasks and responsibilities.
- **External Training:** The Company encourages employees to acquire external education by subsidizing independent courses and seminars to be in line with job descriptions. The Company also provides our employees with opportunities to visit international fairs and global companies in order to update our employees with current international standards and expand our employees' vision. Employees are regularly supported to attend course seminars with Skill Development Center and Safety Committee, hygiene and environment in the workplace as imposed by the ministry of labor for further preparation to be professional lecturer and auditors for technician classification at the factory.
- **In-house Training:** To develop our employees' ways of thinking, potential and knowledge to perform their duties to be in line with the corporate objectives and competitive circumstances, the Company provides several in-house training programs in the following topics:
 - **New Employees Orientation:** To enroll the employees in the new employee welcome and orientation class through the Employee Development & Training Unit to foster an understanding of integrity and ethics as well as their roles and functions to perform their duties. The course session is held for employees to educate them in view of the cement production process, types, and quality of our products such as cement, concrete roof tiles, Nano paints and organic fertilizers. New employees are trained to know functions of each department and we also encourage our employees to meditate and study the ways of Dharma from notable and well-respected monks, and engage in Dharma practice, mediation practice and meditation walking during a 1-day course at Wat Rama IX Golden to ensure their confidence and pride in the Company, to encourage ethics and integrity, as well as to build positive working attitudes and relations with colleagues.



- **Courses Training Program for Management:** The course training includes production and operation management, project analysis and statistics, goal setting, time management and advanced motivation skills: understanding and getting input/feedback from different individuals. These provide much-needed opportunities to focus on strategic skills, to lead and manage to be in line with management systems and the ongoing business operations of the organization.



- **Course seminars for Sales Training Program:** To provide sales representatives and employees in the relevant departments with essential skills to maximize sales performance, such as Strategic Sales Development Course, advanced Sales Professionals and Service Mind to achieve the best results.
- **Products and their Specifications Training Program:** techniques to use products, such as TPIPL products, overview of products specification of Nano Cement Paints, Biotic Products, and penetration on agents for products specification annually.
- **Course Training Program on ISO 9001:2015, Internal Auditor, OHSAS 18001:** Upgrade Training Course as well as ISO/IEC 17025 Standard, certifying the performance evaluation test and Quality Standard Systems ISO 14001 and OHSAS 18001. TPI Polene has applied the standardization in all respects to be implemented suitably and properly to enhance the management team to perform their duties under Corporate Social Responsively and to reduce gamma radiation impact and waste management in general. The Company reduces the amount of hazardous wastes.

Health and Safety Management Standard: Safe way to use forklifts for machinery lifting, safe uses of machinery and cranes, advanced fire extinguisher course, risk appraisal, safety in the workplace for officers and heads of each department.

On-the-Job Training: To encourage coaching sessions and on-the-job training programs among employees to consistently develop the employees to perform their duties efficiently to be in line with the "Training Road Map" in each respective department. To enroll the employees in the new employee welcome and orientation class through the Employee Development & Training Unit to foster an understanding of their roles and functions to perform their duties. The course session is held for employees to educate them in view of all the functions of their duties at least 1-2 months ahead of their employment in their own departments. The course session is held for employees to educate them in view of the cement production process to all employees.

Energy Saving Course: The course session for energy management standards system: ISO50001, TSV energy Chart & Energy Equation and Awareness of Energy Preservation.



Ethics and Quality of Life: The company under the cooperation of the State Railway of Thailand, built the Statue of Kin Rama 5 to pay their respects beside the sideway of Phasadej railway station. In addition to placing Buddha statues at several significant spots in our factories for employees and visitors to pay their respects, we also encourage our employees and the management to meditate and study the ways of Dharma from notable and well-respected monks from Wat Praram 9, for instance: Phraonpol Visanno, Phrasriyansophon and Phrathambandit. These programs include the Dharma course arranged for children to cultivate the knowledge of Dharma through the practice of “self-consciousness, concentration and wisdom/study” with an aim to motivate the young students to concentrate on study (free of charge) at Wat Rama IX Golden, Bangkok.

In addition, the Company is focused on a policy to improve standards of living for employees, to be safe in both their lives and possessions as follows:

- The Company strictly prohibits drug activities; therefore, we have been certified as a “White Factory,” which signifies a permanent “Drug-Free” zone. Random alcohol breath tests are regularly set up. Any employee, who is found to have a preliminary reading of alcohol, will not be allowed to perform their duties and will face disciplinary punishment.
- The Company is committed to supporting disabled people to join the workplace by encouraging and promoting equal opportunities and equity treatment of people with disabilities. The Company has clear rules and regulations on employment to be strictly applied, regardless of sex, age, generic information, races, religious, education background which also includes equal opportunities for employees to progress in their careers as well as compensation. The employment policies and conditions of work are based on job requirements.

Traditional and Cultural Aspects: The Company has provided assistance to support society throughout 2016. This included donations of the Company’s products and financial assistance to a variety of organizations in Thailand. The Company made donations of cement for the construction and renovation of stupas, a sermon hall in a monastery, a monk’s dwelling, meditation halls, Ordination Halls, Dharma Study Buildings and Dharma Practice Halls etc. TPI Polene hosted the Royal Katin Offering at Wat Hinlab, Amphur Muaklek, Saraburi province, Wat Tham Sarika, Nakornnayok province; The Company made contributions of sets of new robes to Wat Sridonmun, Chiangmai Province. TPI Polene also preserves the Thai Traditional and local cultures such as “Traditional Merit Thai-Vietnamese” in Amphur Chalermphrakiat, Saraburi and upholding the Thai Traditional Songkarn Festival, “Bestow the Elephant to the Sovereign”; The Founder of Chaiyabhoon province, participated in the following ceremonies: the festival “Trace Back to World War” in the sub-district of Kangkhai, Saraburi province, “Flowing Fire Raft” in Amphur Thakor, Saraburi province and took part in maintaining the conservation of Thai historical cultural in the festival “Offering flowers to Monks”, with an aim to stimulate the harmony of Thai people and to protect Royal institutions, Buddhist Lent Day, Traditional Loy Kratong Festival and New Year’s day of community leader festivals.



Quality and Productivity Enhancement: In addition to our emphasis on HSE, OSHA and CSR as delineated above, we made a full commitment to improve our productivity and to ensure product quality control and assurance. The Company provides various training to our employees on Quality Management System pursuant to ISO 9000, Environmental Management System pursuant to ISO 14001, and Occupational Health and Safety Management System pursuant to Mor.Or.Kor. 18001. Training programs have been performed to encourage Office Improvement ("OI") to be in line with Total Productive Management ("TPM"), in those departments that support (rather than being directly involved in) production. These "OI" programs focus on improving working processes, reducing waste, and increasing work efficiency, in order to effectively increase productivity.

Other than the employee performance evaluation of the annual review conducted by the supervisors of each respective department, in August 2015 onwards, the Company has implemented the new system of annual performance evaluations, with the objective that employees actively acknowledge and are involved in understanding the requirements of their jobs and are together responsible for the performance of the plants, particularly total production costs, expenses, safety of operations of each respective department and activity involvement in TPM. Work flow analysis is as follows:

- Automation Warehouse System: to improve the distribution for the material handling with robots.
- Min-max Management: To ensure that the spare parts and tools are kept well-stocked, maintained and available.
- Management of cement fleet of trucks: To enhance efficiency to dispatch cement using our fleet of trucks and ensure the allocation of sufficient parking spaces for trucks to stop prior to cement dispatching as well as the management of truck flows in the shortest period of time.
- E-Recruitment: Online recruitment system of employees to enhance efficiency and transparency.

Efficient Time Management: The Company also encourages employees to participate in social activities during their free time. Available activities include a Buddhism club and athletic clubs, such as a petanque club, a football club, a golf club and a table tennis club and aerobics class trained by professional trainers., etc.

Encourage saving program: TPI Polene and TPI Concrete have established a co-operative saving program for employees to encourage saving money. This also includes financial assistance in the form of loan offerings to employees at a lower interest rate as compared with financial institutions.



Employee welfare: The Company also strives to support equality opportunities for employees to progress and to be secured in their career by providing assessment standard of job appraisal. In addition, the Company offers special care for employees who perform their work in particular areas by providing remuneration in form of salary and bonus, the Company also provides subsidized healthcare benefits in the form of OPD medical expenses (outpatient department) to employees and their family members, including father, mother, spouses and legal offspring. In addition, the Company also provides free annual health check-ups; life and healthcare benefits are offered in the form of health insurance packages and accident insurance coverage. Financial assistance is also offered for funeral rites of the employees, as well as the family members of employees who pass away. An establishment of “Funeral Assistance Association” among of the members of the Company’s employee was allowed to assist the members of the Association foundation to offer financial assistance for funeral rites of the employees. In addition, the Company offers special care for employees who perform their work in particular areas by providing free health check-ups at medical centers and free vaccination against tetanus and hepatitis B (HBV) to all employees and to ensure that all levels of the Company’s staff have received annual healthcare check-ups. Any employees found ill or with other physical impairments will be sent for repeated healthcare check-ups and put on other job rotations. Also, the Company provides mobile medical units for check-up services for the people in the surrounding community and encourages employees to jointly donate blood to Saraburi Center Hospital and Saraburi Red Cross every three months. Besides, TPI Polene also supported athletic activities such as “Colored Athletic” at cement plant to encourage coordination and harmonization between the management team and staff of the Company. The Company also entered the agreement with Government Housing Bank and Government Savings Bank to grant sources of fund for home loan for employees at the relatively low interest rate.

Employee welfare: The Company also provides educational support for children of employees by granting scholarships and provides additionally subsidized welfare to them.

Provide opportunity to the disables to work in the Company

The Company strives to support equal opportunities in society and it has clear rules and regulations on employment to be strictly applied, which also include equal opportunities for employment regardless of sex, age, generic information, races, religion, educational background as well as compensation and career paths. The employment policies and conditions of work are based on job requirements and qualifications of that particular person.

Operating Results and Financial Status for 2016

Revenues

Total consolidated revenues from sales in 2014, 2015 and 2016 were Baht 28,505 million, Baht 27,135 million and Baht 29,128 million respectively. An increase in sales revenues was primarily caused by the increase in sales revenues in the energy and utilities business, which accounted for 2.9%, 7.3% and 12.8% of total revenue from sales respectively.

In addition, sales revenues mainly generated from construction business sector, which accounted for 26.1%, 25.1% and 23.2% of total revenues from sales of total revenues from sales respectively.

In 2016, sales revenues generated from the energy and utilities businesses sector increased, which was primarily due to the realization of sales revenues from energy and utilities businesses increased because the RDF power plants with capacity of 60 MW generated and sold electricity under the PPA to EGAT since August 2015. In 2016, sales revenues generated from the construction business sector slightly increased mainly as a result of an increase in export sales volumes of clinker whereas the average price of cement and clinker went down, mainly due to the slowdown in the economy in the country. The mega construction projects from the government and the public sector have been delayed substantially. Also, sales revenues generated from the petrochemical business dropped to be in line with the decrease in selling prices and ethylene prices.

Other revenues, which were comprised of revenues from transportation, reversal of provision for fines, net foreign exchange gain, investment income and gain on bargain purchase and other revenues in 2014, 2015 and 2016 were Baht 2,695 million, Baht 2,112 million and Baht 2,364 million respectively. Other revenues in 2016 were considered higher compared with the same in the previous year because there were net gains from bargain of Thai Nitrate Co., Ltd's shares of Baht 435 million. Besides, the Company recorded net foreign exchange gain in 2014, 2015 and 2016 as the company and its subsidiaries had net foreign exchange gains due to a devaluation of the Euro currency against Baht currency as the Company incurred debt in Euro currency stemming from construction of the Cement Line no. 4. Total consolidated revenues in 2014, 2015 and 2016 were Baht 31,200 million, Baht 29,247 million and Baht 31,492 million respectively.

Other Income

In 2014, 2015, and 2016 the Company had other sales revenues of Baht 487 million, 684 million, and 342 million respectively. Other income was primarily from rent bulk of Baht 175 million, Baht 148 million and Baht 128 million, representing 35.9%, 21.7% and 37.3% in 2014, 2015, and 2016 respectively.

Cost of Goods Sold

Consolidated cost of goods sold in 2014, 2015 and 2016 were Baht 24,004 million, Baht 24,874 million and Baht 25,611 million respectively, which accounted for 84.2%, 91.7% 87.9% of total revenues from sales. As a result, gross profit margins in 2014, 2015 and 2016 represented 15.8%, 8.3% and 12.1% of total revenues from sales respectively. Gross profit margin in 2015 and 2016 decreased as compared with the same in 2014 as cost of goods sold increased as a result of a decrease in the recognition of depreciation from reappraisal of the assets whereas gross profit margins in 2016 as compared to the same 2015 increase as the Company and its subsidiaries' sales revenues increased to be in line with the increased proportion of sales revenues from in various projects in energy and utilities businesses sector.

Selling and Administrative Expenses

Consolidated selling and administrative expenses in 2014, 2015 and 2016 were Baht 5,005 million, Baht 5,081 million and Baht 5,364 million, which accounted for 17.7%, 18.7%, 18.4% of total revenues from sales respectively. The percentage in 2015 decreased due to an increase in revenue from the sale of goods from various projects in energy and utilities businesses sector.

Interest Expenses (Cost of financial debt)

In 2014, 2015 and 2016, the Company and its subsidiaries had interest expenses of Baht 461 million, Baht 1,018 million and Baht 1,649 million respectively. The interest expenses in 2016 increased considerably as the debt liabilities of the Company increased as a result of the utilization of loans to be in line with the progress of various projects in energy and utilities businesses sector.

Net Profit

In 2014, 2015 and 2016, the Company and its subsidiaries registered net profits (loss) of Baht 1,364 million, Baht (1,257) million and Baht (521) million or basic earnings (loss) per share of Baht 0.068, Baht (0.063) and Baht (0.062) respectively. Net loss in 2015 and 2016 is mainly due to the recognition of normal operating loss of (after deduction of depreciation on revaluation surplus of Baht 1,979 million and Baht 1,295 million respectively.

Net loss in 2016 decreased compared with those in 2015 mainly as a result of increase in sales revenues, an increase of net foreign exchange gains and gain from the bargain of shares purchase in Thai Nitrate Co., Ltd of Baht 435 million.

The Company and its subsidiaries recorded normal operating profits (excluding gains/losses on foreign exchange, gains/losses on investments, reversal of provision for fines, and income tax expenses) of Baht 775million, Baht (1,880) million and Baht (1,806) million in 2014, 2015 and 2016 respectively. The decrease in normal operating profits in 2015 and 2016 was mainly due to the record of the cost of goods sold (after deduction of depreciation on revaluation surplus) and the higher cost of debt of the Company as a result of the utilization of loans to be in parallel with progress of various projects in energy and utilities businesses sector.

Financial Status and Financial Ratio

Assets

At year-end 2014, 2015 and 2016, total consolidated assets were Baht 99,931 million, Baht 107,645 million and Baht 115,534 million respectively. The increase in assets value was mainly due to additional investments in various projects in energy and utilities businesses sector.

At year-end 2014, 2015 and 2016, total consolidated current assets were Baht 13,515 million, Baht 16,953 million and Baht 19,549 million respectively. The increase in total current assets was in line with the increase in cash, current investments and inventories. Inventory accounted for 68.6%, 64.7% and 60.0% of total current assets in 2014, 2015 and 2016, equating to average inventory turnover periods of 132 days, 146 days and 159 days respectively. Accounts payable (after the provision of doubtful debts) represented 19% 14.9% and 15.4% of total current assets, which equated to an average collection period of 34 days, 35 days and 36 days.

As of December 31, 2014, December 31, 2015 and December 31, 2016, the property, plant and equipment of the Company and its subsidiaries were Baht 82,368 million, Baht 85,848 million and Baht 92,733 million respectively. The increase in the property, plant and equipment was mainly due to additional investments in various projects in energy and utilities businesses sector, such as RDF Power Plant 70 MW, Coal Power Plant 150 MW, RDF Power Plant/Coal-Fired Power Plant 70 MW and RDF Fuel Power Plant.

Liabilities

Total consolidated liabilities were Baht 42,146 million, Baht 51,679 million and Baht 60,460 million at the end of 2014, 2015 and 2016 respectively. The debt liabilities increased because the Company has utilized loans from financial institutions to invest in various projects as mentioned above. In addition, in 2016, the Company offered for sale additional debentures in the amount of Baht 5,445 million, the proceeds of which were mainly used for to repay debentures outstanding debt to be redeemed for Baht 3,000 million and the rest as working capital for business operations.

Trade account receivables at year-end 2014, 2015 and 2016 were Baht 2,777 million, Baht 2,524 million and Baht 2,214 million, equating to an average payment period of 47 days, 38 days and 33 days respectively. The trade account receivables decreased because the Company made more payments to trade creditors.

As of December 31, 2014, December 31, 2015 and December 31, 2016, the Company and its subsidiaries had bank overdrafts and short-term loans from financial institutes of Baht 2,743 million, Baht 923 million, and Baht 5,610 million respectively; long-term loans from financial institutions of Baht 16,333 million, Baht 6,908 million, and Baht 8,909 million respectively; and debentures of Baht 8,000 million, Baht 29,555 million, and Baht 32,000 million respectively. Bank overdrafts and short-term loans from financial institutes increased as the Company used the proceeds to be utilized for working capital.

Shareholders' Equity

As of December 31, 2014, December 31, 2015 and December 31, 2016, shareholders' equity was Baht 57,785 million, Baht 55,966 million and Baht 55,074 million respectively. The shareholders' equity Aa of December 31, 2016 decreased due to a decrease of fixed assets reappraised by the independent appraiser to be in accordance with the accounting standard.

Capital Structure

At the end of 2014, 2015 and 2016, the debts to equity ratios were at 0.73 times, 0.92 times and 1.10 times respectively. In 2016, the debt to equity ratio was higher compared with the same in the previous year because the Company has utilized loans from financial institutions to invest in various projects as mentioned above.

Financial Liquidity

In 2014, 2015 and 2016, consolidated net cash flow from operating activities of the Company and its subsidiaries were Baht 1,834 million, Baht 1,155 million and 1,932 million respectively. It increased in 2016 4 as a result of an increase in sales revenues generated from investments in various projects in energy and utilities businesses sector.

In 2014, 2015 and 2016 net cash flow from investing activities of the company and its subsidiaries were Baht (18,398) million, Baht (8,389) million and Baht (7,962) million respectively as the Company consistently invested in plants including machinery and equipment from Cement Line No. 4, Mortar Plant, Power Plants, RDF Power Plant Project, Concrete Roof Tile Plant, Fiber Cement Plant, and Lightweight Concrete Plant.

In 2014, 2015 and 2016 net cash flow from financing activities of the Company and its subsidiaries were Baht 16,659 million, Baht 8,151 million, and Baht 7,059 million respectively. The Company received money from long-term loans from financial institutions and the issuance of debentures for the construction of various investment projects as mentioned above. As a result, by year-end 2014, 2015, and 2016 consolidated cash and cash equivalent were Baht 95 million, Baht 917 million and Baht 1,029 million respectively.

Interest Coverage Ratio in 2014, 2015 and 2016 equaled 6.68, 2.82, and 2.10 times respectively, which decreased consecutively because interest expenses decreased due to an increase of the interest expensed of long-term loans for various project investments and short-term loans for capital in business operations. In addition, Debt Service Coverage Ratio were 1.63, 1.36 and 1.52 times respectively and Interest-bearing Debt to Equity Ratio were 0.48, 0.67, and 0.85 times respectively.

Source of Funds and the Use of Funds

The Company and its subsidiaries had sufficient funds for various project investments as the source of funds came from the issuance of debentures, loans from financial institutions from both domestic and international institutions, as well as the use of cash from business operations of the Company and its subsidiaries. The projects which used the funds from loans from financial institutions are as follows:

- Cement Line No. 4 Project

Cement Line No. 4 project, with project investment of approximate Baht 11,500 million was 100% funded by financial institutions. The Company borrowed the funds from domestic financial institutions in the amount of Baht 5,500 million (which was fully prepaid in August 2015 from the issuance of debentures in 2015) and from financial institutions abroad under the guarantee of Euler Hermes Deutschland AG, a German Export Credit Agency of the Ministry of Finance in Germany, and Office National Du Ducroire or ONDD, a Belgian Export Credit Agency in Belgium, in the amount of Euro 153,851,376.39 with a 36-month grace period and a 10-year repayment period. The conditions were to maintain Debt to Equity Ratio to be equal or less than 1:1 and to maintain Debt Service Coverage Ratio to be equal or more than 1.20: 1. As of December 31, 2016, the Company had an outstanding debt of Baht 5,543 million of the above-mentioned loan.

- Power Plant 90 MW (A RDF-fired Power Plant 60 MW and a Waste Heat Recovery Plant 30 MW)

Power Plant 90 MW (comprising a RDF-fired Power Plant 60 MW and a Waste Heat Recovery Plant 30 MW), with the project investment of approximately Baht 4,700 million was 100% funded by domestic financial institutions. TPI Polene Power Co. Ltd. fully repaid the above mentioned loan in August 2015 using money from the issuance of debentures in 2015.

- Fiber Cement Plant and Lightweight Concrete Plant

Fiber cement Plant and Lightweight Concrete Plant had the project investment of Baht 3,300 million and Baht 800 million respectively. The Company borrowed funds of 75% of the project investments of each project and the Company repaid the above mentioned loans in August 2015 using the money raised by the issuance of debentures in 2015.

- Electric Locomotives

The Company made an investment to purchase electric locomotives for the amount of USD 24.2 million. The Company borrowed funds of 85% of the project investment from financial institutions abroad under the guarantee of SINOSURE, a Chinese Export Credit Agency in China. The condition was to maintain Debt to Equity Ratio to be equal or less than 1:1. As of December 31, 2016, the Company had an outstanding debt of Baht equivalent 658 million of the above mentioned loan.

As of December 31, 2016, the Company had debentures of Baht 32,000 million which met the terms and conditions to maintain Interest-bearing Debt to Equity Ratio to be equal or less than 1.5:1.

In addition, as of December 31, 2016 the Company's Debt Service Coverage Ratio (calculated for the past 12-month period according to condition stipulated in the loan agreement) equaled 1.68: 1 which was higher than the ratio 1.20: 1 as required in the loan agreement as mentioned above. The Interest-bearing debt to Equity equaled 0.85 which was equal or less than the ration of 1:1 as stipulated in the loan agreement as mentioned above.

Operational Results classified by Business Sector

Construction Business

Cement and ready-mixed concrete sales volume in 2015 decreased by 0.9% and 4.8% respectively compared with the same in 2014, due to economic recession, decreased prices of agricultural products resulting in decreased cement consumption. In 2015, the average domestic selling price of cement and ready mixed concrete decreased compared with the same in 2014.

In 2016, cement ready-mixed concrete sales volume increased by 1.2% whereas ready-mixed concrete sales volume decreased by 6.4% compared with the same in 2015, as the consistently economic deterioration in the country, resulting in the slowdown of government infrastructure projects and private construction projects. In 2016, average cement price and ready-mixed concrete price in the domestic market dropped by Baht 200/ton and Baht 250/cubic meter respectively as compared with the same in 2015.

Petrochemical and Chemical Business

In 2015, the selling price of plastic products increased by USD 250 per ton, whereas sales volume slightly increased compared with the same in 2013. However, in late 2014, the selling price of plastic products decreased rapidly to be in line with the decrease in oil prices in the global market. As a result, the Company recorded allowances for a decline in stock value of the plastic products in the amount of approximately Baht 200 million as detailed in note no. 8 to the financial statements.

In 2016, sales volume of plastic products dropped by 2.5% while the average selling price of plastic products slightly decreased by USD 30 per ton compared to the same in 2015. The price of plastic products decreased to be in line with continuously declining ethylene price whilst the variance between the selling price of plastic products and cost of ethylene in 2016 increased by USD50/ton, resulting in the better operating performance of the overall petrochemical and chemical business.

Energy and Utility Business

In 2015, total revenue increased by 32.50% compared with the same in 2014, which was due to an increase in revenues generated from power plants and RDF power plants of 20MW and 60 MW, which commenced production and sold electricity to EGAT under the PPA of 18MW and 55MW since January 2015 and August 2015 respectively. Out of the sales revenues in 2015, revenue generated from power plants, oil and gas stations services represented 63% and 32% respectively.

In 2016, total revenues decreased by 66.1% compared with the same in 2015, which was due to a increase in revenue generated from RDF-fired power plant 60 MW. Out of the sales revenues in 2016, revenue generated from power plants represented 82%, revenue generated from oil and gas stations services represented 18%.

Agriculture Business

In 2015, total sales revenue decreased by 14% compared with the same in 2014 due to a decrease of sales volume and the selling price, because overall, the agricultural economy in 2015 went down by 4.2%, compared with the same in 2014, as a result of drought and weakening prices of agriculture produce. This lowered the need to use fertilizer as a factor of agricultural production.

In 2016, total sales revenue decreased by 6% compared with the same in 2015 due to an increase in sales volume due to of prolonged drought condition in particular areas in the country and drastic slumps in agricultural product pricing, resulting the decrease in demand consumption of fertilizers.

Summary of Consolidated financial statements of TPI Polene Plc. in 2014, 2015 and 2016
Statements of financial position (Consolidated)

Statement of Financial Position	Accounting Period ended December 31					
	2014		2015		2016	
	"000" Baht	Ratio	"000" Baht	Ratio	"000" Baht	Ratio
Total current assets	13,514,709	13.52	16,953,174	15.75	19,549,201	16.92
Property, plant and equipment	82,368,135	82.43	85,847,611	79.75	92,733,155	80.26
Other non-current assets**	4,048,164	4.05	4,844,257	4.50	3,215,917	2.81
Total Assets	99,931,008	100.00	107,645,042	100.00	115,534,273	100.00
Total current liabilities	11,117,581	11.13	11,670,571	10.84	17,068,947	14.77
Long-term loans from financial institutions	15,662,957	15.67	6,504,022	6.04	8,002,058	6.93
Other non-current liabilities***	15,365,712	15.38	33,504,762	31.13	35,388,864	30.63
Total Liabilities	42,146,250	42.18	51,679,355	48.01	60,459,869	52.33
Equity						
Authorized share capital	24,815,000	24.83	24,815,000	23.05	24,815,000	21.48
Issued and paid-up share capital	20,190,000	20.20	20,190,000	18.76	20,190,000	17.48
Treasury shares held by subsidiaries	(359,235)	(0.36)	(359,235)	(0.33)	(359,235)	(0.31)
Shares premium	60,600	0.06	60,600	0.06	60,600	0.05
Retained earnings	16,696,323	16.71	16,527,855	15.35	16,693,810	14.45
Other components of equity	21,181,027	21.20	19,538,392	18.15	18,483,231	16.00
Non-controlling interests	16,043	0.02	8,075	0.01	5,998	0.01
Total Equity	57,784,758	57.82	55,965,687	51.99	55,074,404	47.67
Total Liabilities and Equity	99,931,008	100.00	107,645,042	100.00	115,534,273	100.00

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

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

Statements of comprehensive income (Consolidated)

Statement of Comprehensive Income	Accounting Period ended December 31					
	2014		2015*		2016	
	"000" Baht	Ratio	"000" Baht	Ratio	"000" Baht	Ratio
Income						
- Revenue from sales of goods	28,504,949	100.00	27,135,163	100.00	29,128,215	100.00
- Delivery income	1,223,292	4.29	1,245,348	4.59	1,264,643	4.34
- Reversal of provision for fine	200,000	0.70	0	0.00	0	0.00
- Net foreign exchange rate	761,137	2.67	106,504	0.39	287,989	0.99
- Other income	510,441	1.79	760,155	2.80	376,597	1.29
Total income	31,199,819	109.45	29,247,170	107.78	31,492,434	108.12
Expenses						
- Cost of sales of goods	24,004,080	84.21	22,894,808	84.37	24,315,714	83.48
- Cost of sales of goods-Depreciation on revaluation surplus	0	0.00	1,978,966	7.29	1,295,420	4.45
- Selling expenses	3,456,064	12.12	3,680,025	13.56	3,691,808	12.67
- Administrative expenses	1,598,609	5.61	1,400,723	5.16	1,671,869	5.74
- Finance costs	460,879	1.62	1,018,145	3.75	1,649,248	5.66
- Penalty and surcharge Tax expenses	0	0.00	0	0.00	0	0.00
- Net foreign exchange loss	0	0.00	0	0.00	0	0.00
- Loss from disposal of investment	0	0.00	0	0.00	0	0.00
- Other expenses	0	0.00	0	0.00	0	0.00
Total expenses	29,519,632	103.56	30,972,667	114.14	32,624,059	112.00
Share of profit of investment in associates and joint venture	56,313	0.20	5,154	0.02	48,121	0.17
Profit (Loss) before income tax expense	1,736,500	6.09	(1,720,343)	(6.34)	(1,083,504)	(3.72)
Income tax (expense) benefit	(372,891)	(1.31)	463,401	1.71	562,045	1.93
Profit (Loss) for the year	1,363,609	4.78	(1,256,942)	(4.63)	(521,459)	(1.79)
Total Comprehensive gain (loss) for the year	(53,789)	(0.19)	(1,411,571)	(5.20)	(489,987)	(1.68)
Profit (Loss) from operation **	775,363	2.72	(1,879,729)	(6.93)	(1,806,483)	(6.20)

Remarks: * consolidated financial statements (Restated)

** Profit from operation not including net foreign exchange gain/loss, gain on bargain purchase, investment loss, provisions for fines, income tax and tax expenses

Revenues from sales-outside customers

	2014 ("000" Baht)	%	2015 ("000" Baht)	%	2016 ("000" Baht)	%
Construction	20,087,333	70.47	18,237,937	67.21	18,556,750	63.71
Petrochemical and Chemical	7,451,721	26.14	6,803,148	25.07	6,759,341	23.21
Energy and Utilities	838,314	2.94	1,989,637	7.33	3,714,303	12.75
Agriculture	127,581	0.45	104,441	0.38	97,821	0.34
Total	28,504,949	100.00	27,135,163	100.00	29,128,215	100.00

Statement of cash flow (Consolidated)

	Accounting Period ended December 31		
	2014 ("000" Baht)	2015 ("000" Baht)	2016 ("000" Baht)
Net cash from operating activities	1,834,006	1,155,129	1,932,197
Net cash used in investing activities	(18,397,796)	(8,388,661)	(7,961,662)
Net cash from financing activities	16,658,797	8,150,856	7,058,570
Net increase in cash and cash equivalents	95,007	917,324	1,029,105
Cash and cash equivalents at 1 January	660,785	762,149	1,695,178
Effect of exchange rate changes on balances held in foreign currencies	6,215	14,564	(13,129)
Cash and cash equivalents from changes in holding of investment in subsidiaries	142	1,141	754,441
Cash and cash equivalents at December 31	762,149	1,695,178	3,465,595

Key Financial Ratio

Financial Ratio	Accounting Period ended December		
	2014	2015**	2016
Liquidity Ratio			
1.Current Ratio (times)	1.22	1.45	1.15
2.Quick Ratio (times)	0.31	0.43	0.39
3.Cash Ratio (times)	0.17	0.10	0.13
4.Receivable Turnover (times)	10.56	10.21	10.08
5.Collection Period (days)	34.09	35.25	35.72
6.Inventory Turnover (times)	2.74	2.46	2.26
7.Inventory Turnover Period (days)	131.54	146.45	159.49
8.Account Payable Turnover (times)	7.68	9.38	10.81
9.Payment Period (days)	46.85	38.36	33.30
10.Cash Cycle (days)	118.78	143.33	161.91
Profitability Ratio			
11.Gross Profit Margin (%)	15.79	8.33	12.07
12.Operating Profit Margin (%)	8.81	1.93	6.24
13.Other Profit Margin (%)	3.24	(0.52)	(1.75)
14.Cash to Net Profit Ratio (times)	0.70	2.11	1.02
15.Net Profit Margin (%)	4.37	(4.30)	(1.66)
16.Return on Equity (%)	2.36	(2.21)	(0.94)
Efficiency Ratio			
17.Return on Assets (%)	1.50	(1.21)	(0.47)
18.Return on Fixed Assets (%)	4.44	1.03	3.64
19.Assets Turnover (times)	0.34	0.28	0.28
Financial Policy Ratio			
20.Debt to Equity Ratio (times)	0.73	0.92	1.10
21.Financial Debt to Equity Ratio (times) ***	0.48	0.67	0.85
22.Interest Coverage Ratio (times)	6.68	2.82	2.10
23.Debt Service Coverage Ratio (times)	1.63	****1.36	1.52
24.Dividend Payout Ratio (%) *	40.94	N/A	125.00
Per Share			
25.Book Value per Share (Baht)	2.89	2.80	2.76
26.Net Profit per Share (Baht)	0.068	(0.063)	(0.026)
27.Dividend per Share (Baht)	0.020	0.020	0.020
Growth Rate			
28.Total Assets (%)	21.26	7.72	7.33
29.Total Liabilities (%)	70.64	22.62	16.99
30.Sales Revenue (%)	6.08	(4.81)	7.34
31.Operating Expenses (%)	10.92	0.52	5.57
32.Net Profit (%)	125.01	(192.18)	58.51

Remarks: * Calculation base on Separate financial statement.

** Consolidated Financial Statements (Restated)

*** The ratio as stipulated in the terms and condition, which shall not be more than 1.5:1

**** Prepayment amount not included

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 December 31, 2016, 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 6 of the consolidated financial statements as at December 31, 2016, which can be summarized as follows:

Company (Description of relationship)	Description of transaction	Baht million	Necessity and reasonableness
1. Pornchai Enterprise Co.,Ltd. (There are some common Directors.)	The Company and its subsidiaries advanced funds for infrastructure expenses to obtain good terms and conditions to Pornchai Enterprise for 90-year lease period.	177.62	Such agreements are regarded as special reciprocal agreements because the advance rent is considered to be a financial support to Pornchai Enterprise for the construction of the building and to ensure that the Company and its subsidiaries pay the total rental expense below that in the market and at the fixed rate for 90-year lease period, free from inflation rate reflection. In addition, the location is suitable for office building in Bangkok Metropolitan and the number of employees. Such agreements are regarded as special reciprocal agreement. Transactions are undertaken to accommodate the necessity to use office buildings of the Company. Therefore, the transaction is to support business operations under the same conditions as other tenants. The rental deposit and service fee are paid as the guarantee pursuant to Rental and Service Agreement.
	The Company pays rental advance to Pornchai Enterprise for 3-year lease period.	0.35	
	The Company pays rental and service fee as the deposit to Pornchai Enterprise	15.48	
	The Company and its subsidiaries pay rental fee to Pornchai Enterprise	33.75	
2. United Grain Industry Co., Ltd. ("UGI") (There are some common Directors.)	The Company and its subsidiaries pay UGI for cement bags.	7.26	Transactions are always undertaken at market rates to support normal business operations of the Company.
	Accounts Payable	0.90	
3. Thai Plastic Film Co.,Ltd. (There are some common Directors.)	The Company sells plastic resin to Thai Plastic Film.	35.82	Transactions are always undertaken at market rates to support normal business operations of the Company.
	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)	121.46	
	The Company and its subsidiaries pay Thai Plastic Film Co., Ltd. for cement bags.	95.74	
	Accounts Payable	56.12	
4. Thai Plastic Product Co.,Ltd. (There are some common Directors.)	The Company purchases cement bags for export from Thai Plastic Product.	408.47	Transactions are always undertaken at market rates to support normal business operations of the Company.
	Accounts Payable	71.89	
5. Bangkok Union Insurance Plc. (BUI) (There are some common Directors.)	The Company and its subsidiaries pay insurance premium to BUI.	166.53	Transactions are always undertaken market rates to support normal business operations of the Company.
6. Bangkok Union Life Insurance Plc. (There are some common Directors.)	The Company pays life insurance premium to Bangkok Union Life Insurance Plc.	16.29	Transactions are always undertaken at market rates to support normal business operations of the Company.

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.

Risk Factors

TPI Group has constantly managed risks to be at controllable and acceptable levels. The Company has already implemented a management information system ("MIS"), which covers various areas of management to identify different aspects of risk, in order to ensure that each operation unit operates so as to achieve its targets. Risk management can be classified as follows:

Risks associated with potential foreign currency exchange rate fluctuations

As at December 31, 2016, the Company's major long-term loans are mainly denominated in Baht currencies, representing 84% while the remaining long-term borrowing is denominated in Euro currency accounting for 13%. Therefore, the Company has impact from risks associated with the exchange rate fluctuation to some extent.

Besides, the Company 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 fluctuation in currency exchange rates by exporting products for payment in US dollars and maintaining a US dollar deposit account for repayment of principal and interest to creditors, to mitigate foreign exchange risk through natural hedging.

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

Risk associated with potential coal price fluctuations

Coal is a principle source of kiln fuel in the manufacture of cement. Coal price fluctuation depends on supply from major exporters in Australia and Indonesia. In case that 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.

Risk associated with credit provision

To mitigate credit risk stemming from debtors' potential failure to comply with their contracts, the Company has the policy to conduct business transactions with reliable trade partners by selling cement products based on cash and credit terms. Usually customers are required to give collateral in the form of a letter 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 December 31, 2016 and December 31, 2015, Allowance for Doubtful Debt percentage to Total Account Receivable of the Company was 4.22 % and 4.04%, respectively.

Risk associated with Product Price's fluctuation

The Company's plastic resins' price fluctuation has a direct impact on the business profitability of the group. However, the Company manufactures and sells a variety of products. Thus, cement products are regarded as a typically fundamental consumer item in that its price fluctuation depends on the health of the nation's economy. Revenue receipts from cement sales balances with the revenues from export sales of plastic resins while commodity's global price rise will drive coal prices to increase accordingly. All in all, cement production costs will be higher. Nonetheless, all these factors will also impact a plastic resin price hike, leading to an increase in plastic resins price and its higher revenues. These measures will partly protect the company against price fluctuations, by balancing revenue structure and net revenue earned by TPI Polene Group.

Financial Structure

Ordinary Share

As of December 31, 2016, the registered capital of the company is Baht 24,815 million consisting of 24,815,000,000 ordinary shares, at the par value of Baht 1 each. Paid-up capital is Baht 20,190 million consisting of 20,190,000,000 ordinary shares, at the par value of Baht 1 each.

Debentures

As of December 31, 2016, the Company issued unsubordinated/unsecured onshore Debentures, in registered form with debenture holders' representatives. Details of Debenture are summarized as follows:

Debentures, Debentures Registrar and Debenture Holders' Representatives

Offering for Sale of Debentures on December 31, 2016

Debenture Series	Name	Type	Amount (MB)	Interest Rate (p.a.)	Issued Date	Maturity Date	Term
TPIPL177A	TPI Polene Public Company Limited No.1/2014 Series1 Due A.D.2017	Unsecured and Unsubordinated Debentures with a debenture holders' representative	3,000	5.00 %	17 Jan 2014	17 July 2017	3.5 Years
TPIPL187A	Debentures of TPI Polene Public Company Limited No.1/2014 Series2 Due A.D.2018	Unsecured and Unsubordinated Debentures with a debenture holders' representative	2,000	5.30 %	17 Jan 2014	17 July 2018	4.5 Years
TPIPL191A	Debentures of TPI Polene Public Company Limited No.1/2015 Series1 Due A.D.2019	Unsecured and Unsubordinated Debentures with a debenture holders' representative	3,000	4.85 %	22 Jan 2015	22 Jan 2019	4 Years
TPIPL201A	Debentures of TPI Polene Public Company Limited No.1/2015 Series2 Due A.D.2020	Unsecured and Unsubordinated Debentures with a debenture holders' representative	3,000	5.20 %	22 Jan 2015	22 Jan 2020	5 Years
TPIPL188A	Debentures of TPI Polene Public Company Limited No.2/2015 Series1 Due A.D.2018	Unsecured and Unsubordinated Debentures with a debenture holders' representative	3,000	4.10 %	5 Aug 2015	5 Aug 2018	3 Years
TPIPL198A	Debentures of TPI Polene Public Company Limited No.2/2015 Series2 Due A.D.2019	Unsecured and Unsubordinated Debentures with a debenture holders' representative	2,750	4.40 %	5 Aug 2015	5 Aug 2019	4 Years
TPIPL208A	Debentures of TPI Polene Public Company Limited No.2/2015 Series3 Due A.D.2020	Unsecured and Unsubordinated Debentures with a debenture holders' representative	2,205	4.65 %	5 Aug 2015	5 Aug 2020	5 Years
TPIPL218A	Debentures of TPI Polene Public Company Limited No.2/2015 Series4 Due A.D.2021	Unsecured and Unsubordinated Debentures with a debenture holders' representative	3,600	4.90 %	5 Aug 2015	5 Aug 2021	6 Years
TPIPL228A	Debentures of TPI Polene Public Company Limited No.2/2015 Series 5 Due A.D.2022	Unsecured and Unsubordinated Debentures with a debenture holders' representative	4,000	5.20 %	5 Aug 2015	5 Aug 2022	7 Years
TPIPL214A	Debentures of TPI Polene Public Company Limited No.1/2016 Series 1 Due A.D.2021	Unsecured and Unsubordinated Debentures with a debenture holders' representative	1,600	4.35 %	1 Apr 2016	1 Apr 2021	5 Years
TPIPL224A	Debentures of TPI Polene Public Company Limited No.1/2016 Series 2 Due A.D.2022	Unsecured and Unsubordinated Debentures with a debenture holders' representative	1,200	4.60 %	1 Apr 2016	1 Apr 2022	6 Years
TPIPL234A	Debentures of TPI Polene Public Company Limited No.1/2016 Series 3 Due A.D.2023	Unsecured and Unsubordinated Debentures with a debenture holders' representative	2,645	4.80 %	1 Apr 2016	1 Apr 2023	7 Years
Total			32,000				

Debenture Registrar and Debenture Holders' Representative : CIMB Thai Bank Plc.

Address : 44, Langsuan Road, Lumpini Subdistrict, Pathumwan District, Bangkok 10330

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

Fax : +66(0) 2657-3390

Statutory Auditor : KPMG Phoomchai Audit Limited

Address : 195 Empire Tower, Floor 21-22, South Sathorn, Kwang Yannawa, Sathorn, Bangkok 10120

Telephone : +66(0) 2677-2000

Fax : +66(0) 2677-2222

Shareholding Structure

Shareholders	Number of Shares	Shareholding (%)
1. Leophairatana Enterprises Co., Ltd. 1/	4,308,595,450	21.34
2. Thai Petrochemical Industry Co., Ltd. 1/	2,774,698,160	13.74
3. Mrs. Orapin Leophairatana	867,346,240	4.30
4. Mr. Prayad Liewphaitana	867,122,740	4.29
5. Mr. Pakorn Leophairatana	862,745,810	4.27
6. Dr. Pramuan Leophairatana	808,900,000	4.01
7. Bangkok Bank Public Company Limited	657,693,240	3.26
8. Miss Pattrapan Leophairut	629,077,220	3.12
9. Mr. Nared Ngamapichon	560,000,000	2.77
10. TPI Concrete Co., Ltd.	200,163,540	0.99

Note: 1/ Majority shares held by the Leophairatana family

Dividend Payment Policy

The dividend payout policy of the Company is subject to the operational results of single financial statements of the Company. Dividend payment will be paid to shareholders by taking into consideration other factors such as liquidity, cash flow and financial status of the Company. Such dividend payments shall be subject to the shareholders' approval or the Board of the Directors' 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 dividends, the transaction shall be reported to shareholders at the next meeting.

	2014	2015*	2016
Dividend per share (Baht)	0.02	0.02	0.02
Par Value per Share (Baht)	1.00	1.00	1.00
Dividend Payout Ratio (%)	40.94	N/A	125.00

Remark: * Separate Financial Statements (Restated)

The Management

Management Structure

As at December 31, 2016, the management structure of the Company consists of three Executive Committees: the Board of Directors, the Executive Management Committee and the Audit Committee. The Board of Directors of the Company had a total of 16 directors, consisting of 7 independent directors, which exceeds one third of the total number of directors, details of which are as follows:

The Board of Directors as at December 31, 2016

Name	Position
1. Mr. Visith Noiphan	Chairman and Independent Director
2. Mr. Prachai Leophairatana	Director
3. Mr. Prateep Leopairut	Director
4. Dr. Pramuan Leophairatana	Director
5. Dr. Narasri Vaivanijkul	Independent Director and Chairman of the Audit Committee
6. Mrs. Boonsri Leophairatana*	Director
7. Dr. Chavin Iamsopana	Director
8. Mr. Prayad Liewphairatana	Director
9. Mrs. Orapin Leophairatana	Director
10. Mr. Manas Sooksmarn	Independent Director and Audit Committee
11. Pol. Gen. Charnchit Bhiraleus	Independent Director and Audit Committee
12. Mr. Pisej Iamsakulrat	Director
13. Mr. Thavich Taychanavakul	Independent Director
14. Mr. Tayuth Sriyusiri	Director
15. Mr. Khantachai Vichakkhana	Independent Director
16. Mr. Chulasingh Vasantasingh	Independent Director
17. Miss Malinee Leophairatana **	Director

Remarks: * Mrs. Boonsri Leophairatana retired by rotation on April 29, 2016.

** Miss Malinee Leophairatana is in the position of the Director in replacement of the one who retired by rotation, on April 29, 2016. and Mr. Nitisit Jongphitakratana is the Corporate Secretary.

Functions and Responsibilities 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.

The Executive Management Committee as at December 31, 2016

Name	Position
1. Mr. Prachai Leophairatana	Chairman of Executive 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. Dr. Chavin Iamsopana	Executive Director
7. Mr. Tayuth Sriyuksiri	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.

Functions and Responsibilities of the Executive Management Committee

1. To govern and determine the operational strategy of the business, in compliance with the policy of the Board of Directors.
2. To monitor operational results of each department.
3. To select and nominate top management of the Company.
4. To nominate and remove officers of the Company, and to determine their rewards.
5. To perform their duties in relation to the general administration of the Company

The Audit Committee as at December 31, 2016

Name	Position
1. Dr. Narasri Vaivanijkul	Chairman of the Audit Committee*
2. Mr. Manas Sooksmarn	Audit Committee
3. Pol. Gen. Charnchit Bhiraueus	Audit Committee

Remarks: * Possess background and experience in auditing of financial statements.

Functions and Responsibilities of the Audit Committee

1. To control and monitor the Company's financial reports to ensure that they are complete, adequate and reliable.
2. To monitor the auditing process and internal control systems of the Company to ensure that they are appropriate and efficient.
3. To select and propose the appointment of the statutory auditor of the Company.
4. To supervise and ensure that the Company acts in compliance with the regulations imposed by the SET and the SEC and related governing laws.
5. To consider the disclosure of information regarding connected transactions or transactions that might have conflicts of interest, to ensure it is accurate and complete.
6. To prepare the Audit Committee Report as disclosed in the Company's Annual Report to be in compliance with the provisions imposed by the SET and the SEC.
7. To perform any other tasks that may be stipulated in the Articles of Association of the Company.
8. To perform any other tasks that may be delegated by the Board of Directors.

The Management as of December 31, 2016

Name	Position
1. Mr. Prachai Leophairatana	Chief Executive Officer
2. Mr. Prateep Leopairut	President
3. Dr. Pramuan Leophairatana	President
4. Mr. Prayad Liewphairatana	President
5. Mrs. Orapin Leophairatana	Senior Executive Vice President
6. Mr. Prasert Ittimakin	Senior Vice President-Accounting and Finance Division
7. Miss Chularat Danwattanachai	Vice President - Accounting and Finance Division
8. Mr. Anugoon Piyapakorn	Vice President - Accounting Department
9. Mr. Pongsak Yiengsakun	Vice President - Finance 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.

Business relationships or professional service relationships between independent directors and the Company, or the parent company, or its affiliates, 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).

Selection of the Directors and the Management

The Board of Directors of the Company is responsible for the selection of Directors and Management of the Company. Selection of Directors takes into consideration their background, knowledge, experience in related fields of business, ethical behavior, standards of integrity, independence, courage in giving opinions, responsible discharge of duties, precision and honesty, and consistent attendance at all Board meetings. Their resumes and their ethical behavior are taken into consideration as well as other appropriate qualifications deemed beneficial to the Company. We also consider other factors that may impose conflicts of interest.

Selection of the directors to replace those retiring by rotation is under the criteria of the Office of Securities and Exchange Commission and the Stock Exchange of Thailand.

Selection of Management takes into consideration their background, knowledge, abilities, professional skills, and experience deemed beneficial to the Company. Management selection is in compliance with recruitment procedures of the Company.

Criteria for selection of the Independent Directors are as follows:

1. Under the criteria of the Office of Securities and Exchange Commission and the Stock Exchange of Thailand, Independent Directors:
 - 1.1 Are restricted in the number of shares they may hold to not greater than 1% of the voting shares in the Company, its affiliates, its associated companies, or its juristic persons that may impose conflicts of interest (implicitly including related persons as stated in Section 258 of the SEC's Act B.E. 2535.)
 - 1.2 Have no management participation in the Company, its affiliates, or its associated companies; and are not employees or regularly paid consultants, or persons who have control over the Company, its affiliates, or its associated companies or its juristic persons that may impose conflicts of interest.
 - 1.3 Have no business relationship with the Company, its affiliates, or its associated companies; and do not have any loss or gain, directly or indirectly, in the finance or management of the Company, its affiliates, or its associated companies; or its juristic persons that may impose conflicts of interest.
 - 1.4 Have no close relatives, or persons related in a way that may lead to a lack of independence from the management or major shareholders of the Company, its affiliates, or its associated companies, or its juristic persons that may impose conflicts of interest; nor may they be appointed to protect the interest of any director or major shareholders.

- 1.5 Maintain consistent attendance at all board meetings, and follow and monitor the business performance and operations of the Company.
2. Independent Directors must be capable, talented and knowledgeable, with backgrounds and experience deemed beneficial to the Company; such as backgrounds in engineering, accounting, finance etc.
3. Independent Directors must detail their qualifications and perform their duties with great care and loyalty in the best interest of the shareholders, without conflict of interest with/for their own businesses or former businesses, or related parties.

Remuneration of the Directors and the management

1. Remuneration in monetary terms

1.1 Remuneration of the Directors

In 2016, remuneration awarded to the Company's 17 directors in the form of meeting allowances and bonuses was Baht 29,750,176 compared to Baht 28,333,440 in 2015 for 16 directors. Details of remuneration in 2016 are as follows:

<i>Unit: Baht</i>					
No.	Name	Position	Meeting allowances	Bonus	Total
1.	Mr. Visith Noiphan	Chairman	1,604,676	254,710	1,859,386
2.	Mr. Prachai Leophairatana	Director	1,604,676	254,710	1,859,386
3.	Mr. Prateep Leopairut	Director	1,604,676	254,710	1,859,386
4.	Dr. Pramuan Leophairatana	Director	1,604,676	254,710	1,859,386
5.	Dr. Narasri Vaivanijskul	Director	1,604,676	254,710	1,859,386
6.	Mrs. Boonsri Leophairatana*	Director	534,892	254,710	789,602
7.	Dr. Chavin Iamsopana	Director	1,604,676	254,710	1,859,386
8.	Mr. Prayad Liewphairatana	Director	1,604,676	254,710	1,859,386
9.	Mrs. Orapin Leophairatana	Director	1,604,676	254,710	1,859,386
10.	Mr. Manas Sooksmarn	Director	1,604,676	254,710	1,859,386
11.	Pol. Gen. Charnchit Bhiraueus	Director	1,604,676	254,710	1,859,386
12.	Mr. Pisej Iamsakulrat	Director	1,604,676	254,710	1,859,386
13.	Mr. Tayuth Sriyusiri	Director	1,604,676	254,710	1,859,386
14.	Mr. Thavich Taychanakul	Director	1,604,676	254,710	1,859,386
15.	Mr. Khantachai Vichakkhana	Director	1,604,676	254,710	1,859,386
16.	Mr. Chulasingh Vasantasingh	Director	1,604,676	254,710	1,859,386
17.	Miss Malinee Leophairatana**	Director	1,069,784	-	1,069,784
Total			25,674,816	4,075,360	29,750,176

Remarks * Mrs. Boonsri Leophairatana retired by rotation on April 29, 2016. Remuneration was paid to Mrs. Boonsri Leophairatana until April 2016.

** Miss Malinee Leophairatana became a director, replacing one retiring by rotation, on April 29, 2016. Remuneration has been paid since May 2016.

1.2 Remuneration of Management

In 2016, remuneration awarded to the Company's 5 Executives including salaries and bonuses was Baht 254,046,400 compared to Baht 245,991,600 for total of 5 persons in 2015.

2. Other remuneration

Other remuneration to the Management includes company cars for each position.

Audit Fees

1. The Company and its subsidiaries paid audit fees for 2016 to:

- 1.1 The statutory auditor of the Company for the financial year ended 2016 in the amount of Baht -0-
- 1.2 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 2016 in the amount of Baht 8,750,000.

2. Non-Audit Fees

TPI Polene 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 2016 for a total of Baht 240,000.

Company shares held by the Directors and the Management (including couple marriage and their offspring) as at December 26, 2016

	Shareholding As at December 26, 2016	Shareholding As at December 21, 2015	Change
1. Mr. Visith Noiphan	-	-	-
2. Mr. Prachai Leophairatana	867,446,240	867,246,240	200,000
3. Mr. Prateep Leopairut	2,040,000	1,940,000	100,000
4. Dr. Pramuan Leophairatana	809,000,000	809,000,000	-
5. Dr. Narasri Vaivanijkul	-	-	-
6. Mrs. Boonsri Leophairatana**	-	-	-
7. Dr. Chavin Iamsopana	21,910,000	21,910,000	-
8. Mr. Prayad Liewphairatana	883,217,140	883,217,140	-
9. Mrs. Orapin Leophairatana	*	*	*
10. Mr. Manas Sooksmarn	-	-	-
11. Pol. Gen. Charnchit Bhiraueus	2,150,000	2,150,000	-
12. Mr. Pisej Iamsakulrat	8,128,400	15,400,000	(7,271,600)
13. Mr. Thavich Taychanavakul	1,091,180	1,091,180	-
14. Mr. Tayuth Sriyusiri	91,425,890	94,425,890	(3,000,000)
15. Mr. Khantachai Vichakkhana	27,760	27,760	-
16. Mr. Chulasingh Vasantasingh	50,000	50,000	-
17. Miss Malinee Leophairatana***	8,143,080	-	-
18. Mr. Prasert Ittimakin	10,480	10,480	-
19. Miss Chularat Danwattanachai	-	-	-
20. Mr. Anugoon Piyapakorn	-	-	-
21. Mr. Pongsak Yiengsakun	-	-	-

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

** Mrs. Boonsri Leophairatana retired by rotation on April 29, 2016.

*** Miss Malinee Leophairatana is in the position of the Director in replacement the Director who retired by rotation on April 29, 2016.

Positions of the Management and Controlling Persons over the Company, its Subsidiaries, the Joint Venture Company, Associated Companies and other related Companies as of 31 December 2016.

Name	TPI	Subsidiaries 2/																
	Polene	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Mr.Visith Noiphan	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Mr.Prachai Leophairatana	//	//x	//x	//x	//x	//x	//x	//x	//	//x	-	//x	//x	-	//x	//x	//x	//x
3. Mr.Prateep Leopairut	//	//	//	//	//	//	//	//	//	//	-	//	//	-	//	//	//	//
4. Dr.Pramuan Leophairatana	//	//	//	//	//	//	//	//	//	//	//x	//	//	-	//	//	//	//
5. Dr.Narasri Vaivanijkul	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Mrs.Boonsri Leophairatana	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Dr.Chavin Iamsopana	//	-	-	-	-	-	-	-	-	-	//	//	-	-	-	-	-	-
8. Mr.Prayad Liewphairatana	//	//	//	//	//	//	//	//	//	//	//	//	//	-	//	//	//	//
9. Mrs.Orapin Leophairatana	//	//	-	//	//	//	//	//	-	//	-	//	//	-	//	//	//	//
10. Mr.Manas Sooksmarn	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11. Pol.Gen. Charnchit Bhiraueus	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12. Mr.Pisej Iamsakulrat	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13. Mr.Thavich Taychanavakul	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14. Mr.Tayuth Sriyusiri	//	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15. Mr.Khantachai Vichakkhana	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16. Mr.Chulasingh Vasantasingh	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17. Miss Malinee Leophairatana**	/	-	-	/	-	-	-	-	/	-	//	//	//	-	-	-	-	-

Note: 1. / = Director X = Chairman // = Executive Director

2. / Names of the Companies

* Mrs. Boonsri Leophairatana retired by rotation on April 29, 2016.

** Miss Malinee Leophairatana is in the position of the Director in replacement the Director who retired by rotation on April 29, 2016.

No.	The Subsidiaries Company	Status
1	TPI Concrete Co.,Ltd.	Subsidiary company
2	Thai Propoxide Co.,Ltd.	Subsidiary company
3	TPI Polene Power Co.,Ltd.	Subsidiary company
4	TPI All Seasons Co.,Ltd.	Subsidiary company
5	Polene Plastic 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 Public Co.,Ltd.	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	Zenith International Trading Co.,Ltd.	Subsidiary company
16	TPI Intertrade Co.,Ltd.	Subsidiary company
17	TPI Refinery (1997) Co.,Ltd.	Subsidiary company

The Board of Directors - TPI Concrete Co., Ltd. as at December 31, 2016

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. Ms. Niphond Punyaratabandhu	Director

The Board of Directors - TPI Polene Power Plc. as of February 15, 2017

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
11. Mr. Apichai Chantarasaen	Director
12. Mr. Khantachai Vichakkhana	Director
13. Miss Malinee Leophairatana	Director
14. Mr. Wanchai Manosutthi	Director

The Board of Directors - Polene Plastic Co., Ltd. as at December 31, 2016

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 Pattrapan Leopairut	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 - TPI Polene Bio Organics Co., Ltd. as at December 31, 2016

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 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 December 31, 2016

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
8. Mrs. Nitawan Leophairatana	Director

The Board of Directors - Mondo Thai Co., Ltd. as at December 31, 2016

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 December 31, 2015

Name		Position
1.	Mr. Prachai Leophairatana	Chairman
2.	Miss Pattrapan Leopairut	Director
3.	Mr. Pakkapol Leopairut	Director
4.	Mrs. Achira Chatdarong	Director
5.	Mrs. Nitawan Leophairatana	Director
6.	Mr. Thanakorn Liewphairatana	Director
7.	Miss Chutinan Liewphairatana	Director
8.	Mr. Prasert Ittimakin	Director
9.	Mr. Anugoon Piyapakorn	Director
10.	Mr. Vipot Kotbua	Director
11.	Mr. Pakpoom Thongsorn	Director
12.	Mr. Chairat Kittithorn	Director

The Board of Directors - TPI Service Co., Ltd.* as at December 31, 2016

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
8.	Mrs. Achira Chatdarong	Director
9.	Mrs. Nitawan Leophairatana	Director
10.	Mr. Thanakorn Liewphairatana	Director

*Remarks: TPI Service Co.,Ltd. (former name Jade Minerals Co.,Ltd.)

The Board of Directors - Zenith International Trading Co., Ltd. as at December 31, 2016

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 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

*Remarks: Zenith International Trading Co., Ltd. (former name TPI Power Co.,Ltd.)

The Board of Directors - TPI Intertrade Co., Ltd. as at December 31, 2016

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.	Mrs. Nitawan Leophairatana	Director
8.	Mr. Pakkapol Leopairut	Director

The Board of Directors - TPI Refinery (1997) Co., Ltd. as at December 31, 2016

Name		Position
1.	Mr. Prachai Leophairatana	Chairman
2.	Mr. Prateep Leopairut	Director
3.	Dr. Pramuan Leophairatana	Director
4.	Mr. Prayad Liewphairatana	Director
5.	Mr. Prasit Charnsittichok	Director
6.	Mrs. Orapin Leophairatana	Director
7.	Mr. Pakorn Leopairut	Director
8.	Mrs. Nitawan Leophairatana	Director
9.	Mr. Pakkapol Leopairut	Director

The Board of Directors - Propoxide Thai Co., Ltd. as at December 31, 2016

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 Pattrapan Leopairut	Director
7.	Mr. Pakorn Leopairut	Director
8.	Mr. Pakkapol Leopairut	Director
9.	Mr. Thanakorn Liewphairatana	Director
10.	Miss Chutinan Liewphairatana	Director

Board of Directors as at December 26, 2016

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr.Visith Noiphan 83 years of age -no relationship	M.ENG.(Sanitary Engineering) Chulalongkorn University	-	2005-Present	Chairman and Independent Director	TPI Polene Plc.
			1982-1984	Director General of Department of Industrial Works	Ministry of Industry
	B.E. (Civil Engineering) Chulalongkorn University		1984-1986	Director General of Department of Industrial Promotion	Ministry of Industry
	Directors Accreditation Program (DAP- No.5/2003) Thai Institute of Directors (IOD)		1986-1988	Secretary General Thai Industrial Standards	Ministry of Industry
	Role of the Chairman (RCP) No.20/2008 Thai Institute of Directors (IOD)		1988-1992	Director General Department of Mineral Resources	Ministry of Industry
			1992-1993	Deputy Permanent Secretary	Ministry of Industry
				Acting of Permanent Secretary	Ministry of Industry
	Chairman Forum 2/2013 Thai Institute of Directors (IOD)		Advisor	The Office Of Prime Minister	
			1994-2005	Director and member of the Audit Committee	TPI Polene Plc.
			2001-Present	Chairman and Independent Director	Sahaviriya Plate Mill Co., Ltd.
			2006-Present	Chairman and Independent Director	Thai Agro Energy Plc.
			2014-Present	Chairman and Independent Director	Bangsaphan Barmill Plc.
Mr. Prachai Leophairatana 72 years of age Elder brother of Mr. Prateep Leopairut, Dr. Pramuan Leophairatana and Mr. Prayad Liewphairatana	M.S.E.E. University of California (Berkeley) U.S.A.	4.30	2001-Present	Chief Executive Officer	TPI Polene Plc.
			1991-Present	Chairman	TPI Polene Power Plc.
	B.E. (1 st Class Hons.) University of Canterbury, New Zealand		1969-1997	Chairman	Cathay Finance & Securities Plc.
			1978-2006	Chief Executive Officer	Thai Petrochemical Industry Public Co.,Ltd. and TPI Polene Group of Companies.
				1992-2000	Senator
	Directors Accreditation Program (DAP- No.35/2005) Thai Institute of Directors (IOD)		2000-2006	Board Executive Director	Bangkok Union Insurance Public Co.,Ltd.
			April 2012-Present	Director	Bangkok Union Insurance Public Co.,Ltd.
Dr. Narasri Vaivanijkul 83 years of age -no relationship	Ph.D. in Management Science The University of Texas at Austin, Texas. USA	-	2005-Present	Chairman of the Audit Committee and Independent Director	TPI Polene Plc.
			1998-2005	Independent Director and member of the Audit Committee	TPI Polene Plc.
	Directors Accreditation Program (DAP- No.5/2003) Thai Institute of Directors (IOD)		2009-Present	Chairman of Audit Committee	Assumption University Council
			Present	Director	Asian University of Science and Technology Council
				Chairman of Audit Committee	Rajapark College Council

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Prateep Leopairut 70 years of age Younger brother of Mr.Prachai Leophairatana, elder brother of Dr. Pramuan Leophairatana, and Mr. Prayad Liewphairatana	Honorary Doctorate Degree in Engineering Materials Faculty of Engineering Rajamangala University of Technology Rattanakosin	0.01	1987-Present	President	TPI Polene Plc.
	Honorary Degree, Rajamangala University of Technology Rattanakosin (RMUTSV)		1991-Present	Executive Director	TPI Concrete Co.,Ltd.
			1991-Present	Vice Chairman	TPI Polene Power Co.,Ltd.
			2002-Present	Executive Director	Polene Plastic Co.,Ltd.
			2007-Jan 2015	President	Thai Nitrate Co.,Ltd.
			2011-Jan 2015	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-Present	Vice Chairman	Bangkok Union Insurance Plc.
			1981-2006	President	International Plastic Trading Co., Ltd.
	M.S. (Industrial Engineering) Stanford University U.S.A.		1978-2006	President	Thai Petrochemical Industry Public Co.,Ltd.
	B.E. (Industrial Engineering) Chulalongkorn University		1973-Present	Executive Director	Leophairatana Enterprises Co., Ltd.
			1996-Present	Executive Director	Pornchai Enterprises Co., Ltd.
			1996-Present	Director	Mondo Thai Co.,Ltd.
			1987-present	President	Thai Petrochemical Industry and Trade Association
			1987-1993	Director	Bangkok Union Insurance Plc.
			1990-1992	President	The Thai Packaging Association
			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
	The Political “Leadership in new era” program, 2/2005, King Prajadhipok’s Institute		2009-Present	Expert on the examination of corpo- rate engineering level of working pro- fessionals industrial engineering field	Council of Engineers
	Directors Accreditation Program (DAP) No.28/2004 Thai Institute of Directors (IOD)		2012-2014	Chairman	ASEAN Federation of Cement Manufacturers (AFCM)
			2012-Present	Committee of the Examination of Work- ing professionals with Engineering di- ploma in industrial engineering field	Council of Engineers
	Directors Certification Program (DCP) No.53/2005		2012-2016	President	Thai Cement Manufacturers Association (TCMA)
	Thai Institute of Directors (IOD)		2012-2016	President of Cement Group	The Federation of Thai Industries
	Audit Committee Program (ACP) No.8/2005		2012-2016	Committee of the Federation of Thai Industries	The Federation of Thai Industries
			2012-2016	Committee of Logistics Economic Division	The Federation of Thai Industries
	Thai Institute of Directors (IOD)		2012-2016	Committee of Logistics Economic and Infrastructure Development	The Federation of Thai Industries
			2012-2016	Committee of Logistics Trade	The Federation of Thai Industries
	Understanding the Fundamental of Financial Statements (UFS) no.1/2006 Thai Institute of Directors (IOD)		2012-2014	Committee of Development of the eco- nomic cooperation of neighboring countries, the Mae-kong sub region (GMS/ACMECS/MJ/Business council of Burma-Loas-Cambodian-Vietnam)	
	Chartered Director Class (CDC) No.5/2009 Thai Institute of Directors (IOD)		2012-2014	Committee of Facilitate on Trade, Import-Export and Custom Practices	The Federation of Thai Industries
			2012-2016	Committee of The Institute of Industrial Environment	The Federation of Thai Industries
			2012-Present	Committee of the Institute of Industrial Energy	The Federation of Thai Industries
			2012-2014	President of construction Materials Cluster	The Federation of Thai Industries
			2012-2014	Honorary Member and Council Association	The Thai Packaging Association
			2013-Present	Committee of the Examination of License for pro- fessional Engineer in industrial engineering field	Council of Engineers
			2013	Committee Council of the study system rice industry	Committee on Economics, commerce and Industrial of the Senate
			2013-2014	Honorary Council	Committee on Economics, commerce and Industrial of the Senate
			2015-Present	President	Thai Organic Fertilizer Industry Foundation Trade Association

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Dr. Pramuan Leophairatana 67 years of age Younger brother of Mr. Prachai Leophairatana, Mr. Prateep Leopairut, elder brother of Mr. Prayad Liewphairatana	M.S., SC.D. in Chemical Engineering, Massachusetts Institute of Technology at Cambridge, M.A., U.S.A. B.S. (Honors) in Chemical Engineering, University of California at Berkeley, U.S.A. Directors Accreditation Program (DAP- No.39/2005) Thai Institute of Directors (IOD)	4.01	2001-Present	President	TPI Polene Public Co.,Ltd.
			1973-Present	Director	Leophairatana Enterprises Co.,Ltd.
			1978-2006	President	Thai Petrochemical Industry Public 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.
			1990-Aug.2013	Director	Thai Nitrate Co.,Ltd.
			1991-Present	Vice Chairman	TPI Polene Power Co.,Ltd.
			1991-Present	Executive Director	TPI Concrete Co.,Ltd.
			1996-Jul.2014	Director	Mondo Thai Co.,Ltd.
			1997-Present	Chairman	BUI Life Insurance Plc.
			2002-Present	Executive Director	Polene Plastic Co.,Ltd.
			2010-Present	Executive Director	TPI Polene Bio Organics Co.,Ltd.
Miss Malinee Leophairatana 74 years of age Elder sister of Mr.Prachai Leophairatana, Mr.Prateep Leopairut, Dr.Pramuan Leophairatana and Mr.Prayad Liewphairatana	Master Degree in Actuarial Science Georgia State University, U.S.A. Bachelor of Commerce and Accounting Major in Statistics (Second Honour) 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.2535 as Amended by Non-Life Insurance Act (No.2), B.E.2551 Certified as Actuary under Section 83/2 of The Life Insurance Act B.E.2535 as Amended by Life Insurance Act (No.2), B.E.2551	-	April 2016-Present	Director	TPI Polene Plc.
			Jan 2016-Present	Director	TPI Polene Power Plc.
			1973-Present	Director	Leophairatana Enterprises Co., Ltd.
			2001-Present	Chief Executive Officer	Bangkok Union Insurance Plc.
			1997-Present	Director	Bangkok Union Life Insurance Plc.
			1987-1989	President	Thai General Insurance Association
Dr. Chavin Iamsopana 73 years of age Brother-in-law of Mr. Prachai Leophairatana, Mr. Prateep Leopairut, Dr. Pramuan Leophairatana, and Mr. Prayad Liewphairatana	Doctor of Engineering, Osaka City University Japan Directors Accreditation Program (DAP- No.28/2004) Thai Institute of Directors (IOD) Directors Certification Program (DCP-No.28/2004) Thai Institute of Directors (IOD) Audit Committee Program (ACP-No.15/2006) Thai Institute of Directors (IOD)	0.11	1987-Present	Executive Director	TPI Polene Public Co.,Ltd.
			1989-Present	Executive Director	Thai Plastic Film Co.,Ltd.
			1989-Present	Executive Director	Thai Plastic Product Co.,Ltd.
			1989-Present	Executive Director	United Grain Industry Co.,Ltd.
			1997-Present	President	BUI Life Insurance Co.,Ltd.
			2004-Present	Executive Director	Bangkok Union Insurance Public Co.,Ltd.

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Prayad Liewphairatana 65 years of age Younger brother of Mr. Prachai Leophairatana, Mr. Prateep Leopairut, and Dr. Pramuan Leophairatana	M.S.C.E. University of Michigan (ANN ARBOR) U.S.A. Directors Accreditation Program (DAP- No.29/2004) Thai Institute of Directors (IOD)	4.37	1987-Present	President	TPI Polene Public Co.,Ltd.
			1973-Present	Director	Leophairatana Enterprises Co.,Ltd.
			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 Polene Power Co.,Ltd.
			1991- Present	Executive Director	TPI Concrete Co.,Ltd.
			1996-Present	Executive Director	Mondo Thai Co.,Ltd.
			1997- Present	Executive Director	BUI Life Insurance Co.,Ltd.
			2002-Present	Executive Director	Polene Plastic Co.,Ltd.
			Oct 2013-Jan 2015	Executive Director	Thai Nitrate Co.,Ltd.
			2009-Aug.2013	Director	Thai Nitrate Co.,Ltd.
			2010-Present	Executive Director	TPI Polene Bio Organics Co.,Ltd.
Mrs. Orapin Leophairatana 69 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)	4.30	1998-2003,	Senior Executive	TPI Polene Plc.
			2005-Present	Vice President	
			1977- 1982	Third Secretary	Ministry of Foreign Affairs
			1986-1997	Managing Director	Cathay Finance & Securities Plc.
			1995-1997	Director	Bangkok Stock Trading Center
			1995-1997	Chairman	Association of the Securities Brokerage
			April-Dec.1997	Director	Association of Finance Companies
			1998-Present	Executive Director	TPI Concrete Co., Ltd.
			2001-2011	Director	Thai Listed Company Association
			2002-Present	Executive Director	Polene Plastic Co.,Ltd.
			2007-Present	Vice Chairman	TPI Polene Power Co., Ltd
			2009-Present	Executive Director	TPI All Season Co., Ltd.
			2009-Aug.2013	Director	Thai Nitrate 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.
Mr. Manas Sooksmarn 81 years of age -no relationship	Master of Science in Industrial Engineering and Management, Oklahoma State University, U.S.A. Post Graduate diploma Industrial Development Programming. (Economics) Institute of Social Studies (ISS), The Hague, Netherlands Master of Political Science, Ramkhamhaeng University B.E. (Industrial Engineering), Chulalongkorn University. National Defense College No.31 Directors Accreditation Program (DAP- No.47/2005) Thai Institute of Directors (IOD)	-	2005-Present	Independent Director and member of the Audit Committee	TPI Polene Public Co.,Ltd.
			1996-2000	Senator	The Senate of Thailand
			1996-1997	Committee	Express Authority of Thailand
			1997	Advisor to Deputy Minister	Ministry of Interior
			1997, 2001	Advisor to Deputy Minister	Ministry of Agriculture and Cooperatives
			2006	Honorable Committee	The Constitutional Court

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Pol.Gen.Charnchit Bhiraueus 72 years of age -no relationship	Master Program of Public and Private Management, National Institute of Development Administration (NIDA) Bachelor of Public Administration (Royal Police Cadet Academy) and Bachelor of Law Directors Accreditation Program (DAP- No.47/2005) Thai Institute of Directors (IOD) Understanding the Fundamental of Financial Statements (UFS) No.11/2007 Thai Institute of Directors (IOD) Finance for Non-finance Director (FND) No.38/2007 Thai Institute of Directors (IOD)	0.01	2005-Present	Independent Director and member of the Audit Committee	TPI Polene Public Co., Ltd.
			2000-2004	Deputy Commissioner -General	Royal Thai Police
			2002-2010	Vice Chairman	Asian Crime Prevention Foundation (Thailand)
			2005-2006	Advisor to Deputy Minister	Ministry of Justice
			2006-2007	Advisor to Deputy Prime Minister	
			2006-2010	Committee of National Justice	Ministry of Justice
			2007- 2008	Vice Chairman and CEO	TOT Public Co.,Ltd
			2007-Present	Honorable Committee	Parliamentary Commission
			Jan 2001-Jul.2014	Honorable Committee	Royal Thai Police
Mr. Pises Iamsakulrat 52 years of age -no relationship	Master of International Trade, Golden Gate University, U.S.A. Bachelor Degree, Business Administration, Menlo College, California, U.S.A	0.04	2008- Present	Director	TPI Polene Public Co., Ltd
			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.
			1997- Present	Director	K. Cotton & Gloss Co., Ltd.
			1997- Present	Director	TPI Holding Co., Ltd.
Mr. Thavich Taychanavakul 67 years of age -no relationship	Bachelor 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)	0.01	2008- Present	Independent Director	TPI Polene Public Co., Ltd
			1990- Present	Managing Director	Thai Industrial Estate Co., Ltd.
			1991-2016	Board Executive Director	Hi-Tech Nittsu (Thailand) Co.,Ltd.
			1999-2013	Chairman of the Audit Committee	Bangkok Union insurance Plc.
			1999-Present	Board Executive Director	Ayutthaya Technology Hi-Tech CenterCo.,Ltd.
			2012-Present	Board Executive Director	Hi-Tech Kabin Logistics Co.,Ltd.
			2012-Present	Advisor	Thai Industrial Estate Association
			2013-Present	Board Executive Director	Mae Fah Luang University Council
			2013-Present	Member of the Audit Committee /Independent Director	Bangkok Union insurance Plc.
Mr.Tayuth Sriyuksiri 62 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)	0.45	2008-Present	Executive Director	TPI Polene Public Co., Ltd
			1982- Present	Managing Director	K. Cotton & Gloss Co., Ltd.
			1994- Present	Director	TPI Holdings Co., Ltd.
			1999- Present	Director	Micro Fiber Industry Co., Ltd.
			2005- Present	Director	Hua Thai Manufacturing Plc.

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr. Khantachai Vichakkhana 68 years of age -no relationship	Master of Political Science, (Public Administration), Thammasat University	-	Oct 2009 - Present	Independent Director	TPI Polene Public Co., Ltd
			Jan 2016-Present	Independent Director	TPI Polene Power Plc.
	1986		Land Officer- Uttaradit	Department of Lands	
	1986-1988		Land Officer- Nakhornnayok	Department of Lands	
	1988-1989		Land Officer- Nonthaburi and Bangyai District	Department of Lands	
	1989-1990		Land Officer- Phuket	Department of Lands	
	1990-1992		Land Officer- Chonburi	Department of Lands	
	1992-1995		Department of Important book	Department of Lands	
	1995-1998		Land Management Division	Department of Lands	
	1998-1999		Director of Bureau Authority Land	Department of Lands	
	1999-2000		Inspector-General	Department of Lands	
	2000		Staff Plan & Policy Analysis (Land)	Department of Lands	
	2000-2002		Directors: Land Registration Bureau of Standards	Department of Lands	
	2002-2008		Deputy Director -General Director and the Nomination,	Department of Lands	
	Aug.2014-Present		Remuneration and Corporate Governance committee Independent Director	L.P.N. Development Public Co.,Ltd.	
	Extracurricular				
	Division Director of Security within the Kingdom Program (Ka.Rmn): Royal Thai Army (1979)		Council Member	Rajamangala University or technology Bangkok	
			Qualified Director	National Council Boy Scouts	
	Advance Land Management School Program Class 3: Department of Lands (1984)		Assets Management Committee	Thai Red Cross Council	
			Diagnosis Sub-Committee	Office of the Election Commission of Thailand	
	Advance administration Program: Class 30, Institute of Administration Development,	Committee	Retired Government Officials’ Pension		
		Committee	Association of Interior Foundation		
	High Level Information Technology Executives (CIO) Seminar (2003)	Committee	Executive Public Administration Foundation (EPAF) TriamudomsuksaAlumni Foundation		
		Committee	Anan Anantakool Foundation		
	Political Development in Democratic Governance for Executives Program Class 8, King Prajadhipok’s Institute (2004)	Committee	Dr.Suk Phukyaphon, Foundation		
		Committee	Hospital & phrapiya school Foundation		

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS
Mr.Chulasingh Vasantasingh 66 years of age -no relationship	Bachelor of Law (Honor), Chulalongkorn University	-	Aug.2014-Mar2015	Director	TPI Polene Public Co., Ltd
			Mar2015-Present	Independent Director	TPI Polene Public Co., Ltd
	Thai Barrister at law, Institute of Legal Education of the Thai Bar		2005-2009	Deputy Attorney General	Office of The Attorney General
			2009-2013	Attorney General	Office of The Attorney General
			2010-2013	Independent Director and Chairman of the Audit Committee	PTT Plc.
	Master of Comparative Law (MCL.) University of Illinois, U.S.A.		2010-2013	Independent Director and Chairman of the Audit Committee	Airways International Public Co., Ltd
	Honorary doctor of laws, Ramkhamhaeng University		2010-2014	Independent Director and Chairman of the Audit Committee	Krung Thai Bank Public Co., Ltd
	Honorary doctor of laws, Chulalongkorn University		Nov.2013-Jan2016	Independent Director and	Thai Oil Public Co., Ltd
			Nov.2013-Jan2016	Member of the Audit Committee	Thai Oil Public Co., Ltd
			Nov.2013-Jan2016	Chairman of the Audit Committee	Thai Oil Public Co., Ltd
	Honorary doctor of laws, Yonok University		Feb2014-Present	Independent Director and Chairman	Aqua Corporation Public Co., Ltd
			2014-Present	Independent Director and Chairman of the Audit Committee	Global Power Synergy Public Co., Ltd
	The Certificate, Harvard Business School		Apr2015-Present	Director and Independent	Quality House Plc.
	Degree Programs, National Defense College No.388		May 18,2015- -Present	Chairmanof the Audit Committee	Quality House Plc.
	Advanced Certificate Course in Politics and Governance in Democratic Systems, King Prajadhipok's Institute			Honor and Social roles Council of State	Office of the Council of State
				Professor emeritus	Chulalongkorn University
	Advanced Certificate Course, Capital Market Academy			Advisor to the Bureau	Council Crown Property Bureau
				Director Member of Property Committee	Chulalongkorn University
	Advanced Certificate Course, Thailand Energy Academy				
	Top Executive Program in Commerce and Trade, TEPCOT				
	Poompalungpandin Program, Chulalongkorn University				
	Directors Certification Program (DCP35/ 2003), Thai Institute of Directors				
	Finance for Non-Finance Director (FN 7/2003), Thai Institute of Directors				
	Understanding the Fundamental of Financial Statements (UFS 1/ 2006), Thai Institute of Directors				
	Audit Committee Program (ACP 17/ 2007), Thai Institute of Directors				
	DCP Refresher Course (1/2008), Thai Institute of Directors				
	Financial Institutions Governance Program (FGP 4/2012), Thai Institute of Directors				
Mr. Nitisit Jongphitakratana 46 years of age -no relationship	Master of Law, Thammasat University	-	2006-Present	Secretary	TPI Polene Public Co., Ltd
			2011-Present	Asst.Vice President Department	TPI Polene Public Co., Ltd
			2006-2011	Manager Department	TPI Polene Public Co., Ltd

NAME/AGE/ FAMILY RELATION AMONG DIRECTORS & EXECUTIVES	EDUCATIONAL BACKGROUND/TRAINING	% SHARE HOLDING*	WORK EXPERIENCE		
			DURATION	POSITION	COMPANY/ BUSINESS

OTHER EXECUTIVES

Mr. Prasert Ittimakin 57 years of age -no relationship	M.B.A. Finance University of St. Thomas, U.S.A.	-	2001-Present	Senior Vice President Finance and Account Division	TPI Polene Public Co.,Ltd.
	Bachelor of Accounting, Chulalongkorn University		1998-2001	Vice President Finance and Account Division	TPI Polene Public Co.,Ltd.
			1990-1998	Vice President Corporate Finance Department	Asia Credit & Securities Plc.
Miss Chularat Danwattanachai 55 years of age -no relationship	M.B.A. Thammasart University	-	2001-Present	Vice President Finance and Account Division	TPI Polene Public Co.,Ltd.
			1999-2001	Asst.Vice President Finance and Account Division	TPI Polene Public Co.,Ltd.
			1989-1998	Asst. Vice President Corporate Finance Department	Asia Credit & Securities Plc.
Mr. Anugoon Piyapakorn 58 years of age -no relationship	M.B.A. Chulalongkorn University	-	2012-Present	Vice President Accounting Department	TPI Polene Public Co.,Ltd.
			2001-2012	Asst. Vice President Accounting Department	TPI Polene Public Co.,Ltd.
			1989-2001	Manager Accounting Department	TPI Polene Public Co.,Ltd.
Mr. Pongsak Yiengsakun 60 years of age -no relationship	Bachelor of Accounting, Chulalongkorn University	-	2012-Present	Vice President Financial Operation Departmen	TPI Polene Public Co.,Ltd.
			2001-2012	Asst.Vice President Financial Operation Department	TPI Polene Public Co.,Ltd.
			1992-2001	Manager Finance Department	TPI Polene Public Co.,Ltd.

Remarks: * Percentage of shareholding above includes shares held by spouses and offspring.

Corporate Governance

Throughout 2016, the Board of Directors of the Company operated in compliance with the principles of good corporate governance by carrying out their duties with transparency, ethics, and responsibility to shareholders, customers, employees, society and others stakeholders.

As the Company values ethical business conduct, we issued a Code of Business Conduct, which is constantly reviewed to make it more suitable for changed circumstances. The Company's Directors acknowledge best practice for directors of a listed company as their principle guideline. The Directors, the management and all levels of staff carry out their duties with honesty, integrity, and good ethics. All realize that the Company is a long-established, leading, reputable company with a track record of over 20 years. Corporate governance practices of the Company can be divided into 5 sections as follows:

Section 1. Stakeholder Rights

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

1. Shareholders' Meeting

The Company schedules an annual general meeting of the shareholders ("AGM") within 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 2016, the Annual General Shareholders' meeting was held on April 29, 2016 at the Conference Room on the 9th floor of TPI Tower, 26/56 Chan Tat Mai Rd, Thungmahamek, Sathorn, Bangkok. A total of 14 directors attended the AGM.

The Audit Committee of the Company and the Legal Advisor were acted as the agents for the ballot throughout 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> for shareholders' consideration in advance of 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 supplementary and supporting) for the decisions 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 7 days ahead of the meeting date. An invitation to the AGM is also announced in newspapers for 3 consecutive days in advance of the meeting.

3. Facilitating Shareholders

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

4. Conduct of Shareholders' Meetings

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

5. After the Shareholders' Meetings

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

Section 2. Equitable Treatment of Shareholders

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

1. Conducting the meeting in sequence of agenda items as specified in the invitation and not adding agenda items without notifying shareholders in advance, to ensure they have enough time to investigate before making their decisions.

2. Appointing Proxies to maintain the rights of those shareholders who cannot attend in person: they are able to appoint proxies, or to delegate their votes to any independent director in attendance.

In addition, the Company also discloses the format of the proxies together with all details and procedures on the Company's website at <http://www.tpipolene.co.th> 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.

5. Ensuring strict supervision of the use of inside information by explicitly defining in writing the misuse of inside information as part of the Code of Conduct. In addition, in order to prevent any conflicts of interest, or misuse of inside information by the Board and Management, the Company has put in place internal information controls to supervise the use of inside information as follows:

1. Directors and Management will be regularly informed of related laws and regulations pertaining to misuse of inside information, through various communication channels.
2. The Company discloses in the TPIPL annual report the shareholdings of Directors, Management (and the holdings of management equivalents in Finance and Accounting Division) in compliance with the regulations of the Office of Securities and Exchange Commission.
3. The Directors and Management of the Company are fully responsible for submitting a report of their shareholdings in the Company, and those of their spouses and minors, in accordance with provisions contained in the Securities and Exchange Act B.E. 2535.
4. Any misuse of internal information shall be subject to disciplinary action, including dismissal, as announced in the Company's rules and regulations.

6. Devising practical guidelines for potential conflict of interest in its Good Corporate Governance and Code of Conduct for the Directors. Management and employees must strictly comply with these.

Section 3. Stakeholder Roles

The Company is well aware of the roles of all stakeholders. The Company sets precise responsibilities to be prudent, fair, and respect the rights of all stakeholders, in operating its business. Hence, the Company has established a Code of Business Conduct emphasizing the balanced consideration of all stakeholders, which has been disclosed via <http://www.tpipolene.co.th>

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

All management levels have to strictly follow the Code of Conduct as best practice principles, and it is a strict policy to ensure that all employees under each relevant organization 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:** In its business operations, the Company concentrates on establishing the greatest benefit to shareholders. The accounting and financial systems are in place to ensure that any mistakes and irregularities will be identified in due course and that financial reports are accurate, adequate and reliable. The Company's continuously strong financial potential is demonstrated in its ability to make appropriate dividend payments to shareholders.
- 2. Customers:** The Company places a great emphasis on customer satisfaction through the quality of its products and services, provided at reasonable prices. For the manufacturing of cement, plastic resin and ready-mixed concrete, the Company and its subsidiaries have also been awarded ISO 9001:2000 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 loyalty.

3. **Management and Employees:** The Company realizes the importance of human resources. Hence, the Company fosters development of all levels of management and staff with internal and external training to enhance their capabilities. The Company applies compensation systems which reward and benefit management and staff appropriately and in line with remunerations in other companies in the same industry.

In addition, the Company also focuses on the safety of its human resources by adopting Health and Safety Management standards. This is reflected in the attainment of the Health and Safety Management standard TIS 18001 certification from the Anglo Japanese American Registrars (AJA) for our cement plant. For our plastic resin and ready-mixed concrete businesses, the Company was also awarded TIS 18001 certifications. These systems have been implemented to reduce accidents in the workplace.

4. **Trade partners:** The Company ethically sets its business operation strategies, thus enhancing relationships with all trade partners through transparent and fair practices. The Company has a policy of benefit sharing and equitable treatment for trade partners and strictly adheres to contractual agreements made. The Company is independent, without strong involvement with any trade partners.
5. **Competitors:** The Company applies equitable treatment and abides by the framework of fair competition.
6. **Community and Society:** The Company, as a Thai Company, continues to be determined to discharge its responsibilities towards the nation, society and communities. Accordingly, the Company is continuously committed to promoting and supporting beneficial activities towards society, religion, education and youth by establishing a full-scale foundation under the name, "the Environment for Better Life Foundation" as detailed in section "TPI Polene and Society".
7. **Environmental Responsibility:** The Company acts as a good citizen, conscious and aware of being one part of this society. It continues to be determined to discharge its responsibilities towards relevant rules and regulations and support the community surrounding its facilities by eliminating problems and protecting the environment, thus providing better living standards for the communities near its plants. As reflected in its full support for environmental enhancement, the Company has received ISO 14001 certification for Environmental Management System as detailed in section "TPI Polene for Safety and Environment".

Section 4. Information Disclosure and Transparency

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

1. **Disclosure of Company information including financial reports** is executed accurately, completely and in a timely fashion as reflected in the Annual Report form (Form 56-1), the Company's Annual Report (Form 56-2) and other reports, which are carried out in compliance with the guidelines set by the SEC and the SET.
2. **A plant visit** is provided for interested institutional investors, shareholders and analysts to access information and have meetings with the Management of the Company. In addition, the Investor Relations Unit has been established to be responsible for communicating information to institutional investors, shareholders, analysts, and relevant authorities in an equitably and fair manner.
3. **Disclosure of Company information is made through approved communication channels** via the SET, 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. **Functions and responsibilities of the Board and Sub-Committees are disclosed:** see above in the section "Management". In addition, the number of meetings and meeting attendance of each member are disclosed in the section "Corporate Governance", clause 5 "Responsibilities of the Board".
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.

Section 5. Responsibility of the Board

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

1. Structure of the Board

(1) Composition

As of December 31, 2016, the Company's Board of Directors consists of 16 directors, of whom 7 were management team members and 9 were non-management, of whom 7 were independent directors. This exceeds one-third of the Board.

(2) Qualifications of the Company's Directors

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

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

(3) Definition of the Independent Director Qualification

The Board of Directors has defined the qualification of Independent Directors in line with the requirements of SEC and SET. Details are contained in the section "Management", above.

(4) Segregation of the Power of the Chairman and the Chief Executive Officer

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

(5) Independence of the Chairman

The Chairman of the Board, as an independent director, is not a member or chairman of any sub-committee, and is thus able to express his views on business operations independently. This ensures a balance of power.

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

(6) Corporate Secretary

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

2. Sub-Committee:

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

The Executive Management Committee is composed of 7 members who are knowledgeable, capable, ethical and experienced in diverse fields. Duties and responsibility of the Executive Management Committee are contained in the section "Management".

The Audit Committee consists of 3 Independent Directors. Members' qualifications meet the requirements stipulated in relevant SEC and SET announcements. The Committee is assigned to perform checks on management and secure the balance of power in various business activities to ensure reliability and integrity, and serving the best interests of all stakeholders at all times. Duties and responsibilities of the Audit Committee are contained in the section "Management".

3. Roles, Duties and Responsibilities of the Board

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

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

(2) Conflict of Interest: The Board has a clear policy to execute transactions, which have potential conflicts of interest in a manner that is in the best interests of the Company and its shareholders. Transactions between the Company (and 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. Details of connected transactions that may involve conflicts of interest (according to criteria of the SET and the SEC) must be disclosed in the Company's Annual Report; in the Annual Report form (Form 56-1) or declared in other reports. This also includes disclosure of information on connected transactions according to the general accepted accounting standard criteria. Details of connected transactions are disclosed in the section "Inter-Company Transactions".

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

(3) Internal Control and Internal Audit: The Board employs an appropriate, and effective, internal control system to ensure Management prevents and mitigates business risks, and produces accurate and reliable financial statements.

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

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

At the Board of Directors' meeting no. 1/2017 held on January 26, 2017, attended by the Audit Committee and the Independent Directors, the Board evaluated five aspects of the sufficiency of the internal control systems of the Company and its subsidiaries. These were: the organization and environmental control system; the risk management system; Management control system; the information and communication system; and the monitoring system.

The resultant assessment showed that the internal control systems of the Company and its subsidiaries operated appropriately and sufficiently in all five aspects, thus mitigating business and operational risks and allowing the Company to manage its operations effectively and efficiently.

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

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

The Company convenes each meeting in compliance with the provisions of the Public Company Act. The minutes of each meeting are properly documented, are certified by the Board, and are systematically filed under tight security. In 2016, the Board of Directors and the Audit Committee convened meetings a total of 12 times and 5 times, respectively, with attendance as detailed below:

Name	Position	Number of Meeting Attendance	
		The Board of Directors 12 Times / 2016	The Audit Committee 5 Times / 2016
1. Mr. Visith Noiphan	Chairman and Independent Director	10/12	-
2. Mr. Prachai Leophairatana	Director	12/12	-
3. Mr. Prateep Leopairut	Director	11/12	-
4. Dr. Pramuan Leophairatana	Director	11/12	-
5. Dr. Narasri Vaivanijkul	Independent Director and Audit Committee	12/12	5/5
6. Mrs. Boonsri Leophairatana*	Director	-/12	-
7. Dr. Chavin Iamsopana	Director	10/12	-
8. Mr. Prayad Liewphairatana	Director	11/12	-
9. Mrs. Orapin Leophairatana	Director	12/12	-
10. Mr. Manas Sooksmarn	Independent Director and Audit Committee	12/12	5/5
11. Pol.Gen. Charnchit Bhiraueus	Independent Director and Audit Committee	11/12	3/5
12. Mr. Pises Iamsakulrat	Director	11/12	-
13. Mr. Thavich Taychanavakul	Independent Director	10/12	-
14. Mr. Tayuth Sriyuksiri	Director	12/12	-
15. Mr. Khantachai Vichakkana	Director	12/12	-
16. Mr. Chulasingh Vasantasingh	Independent Director	11/12	-
17. Miss Malinee Leophairatana**	Director	7/12	-

Remarks: * Mrs. Boonsri Leophairatana retired by rotation on April 29, 2016.

** Miss Malinee Leophairatana became a director, replacing one retiring by rotation, on April 29, 2016.

4. Remuneration of Directors and Management

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

The Company fairly remunerates its Management, taking into account their responsibilities, performance, the operating results of the Company, and comparability within the same field of business. Details of remuneration are disclosed in the section "Management".

5. Training of Directors and the Executive

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

Report of the Board of Directors' Responsibilities for Financial Statements

The Board of Directors of the Company are aware of their duties and responsibilities to ensure that the financial reports of the Company 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 creditably to ensure that the financial statements of the Company and its subsidiaries present financial position, operational results and financial cash flow which are accurate and reliable in all material aspects.

Sincerely Yours,



Visith Noiphan
Chairman of the Board



Prachai Leopairatana
Chief Executive Officer

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 2016, 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 2016 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 requirements of the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

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

Acquisition of business	
Refer to Note 4 and 5 to the consolidated and separate financial statements.	
The key audit matter	How the matter was addressed in the audit
<p>During 2016, the Group acquired 49.99% of the outstanding shares in Thai Nitrate Co., Ltd. in addition to the 50% previously held resulting in the recording of gains on bargain purchase of Baht 435 million in the consolidated statement of comprehensive income for the year ended 31 December 2016.</p> <p>The accounting for this transaction is complex due to the significant judgment and estimate that are required to determine the fair value of the assets acquired and liabilities assumed and consideration transferred.</p> <p>Due to the high level of judgment involved, and materiality of the transaction, 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"> • assessing the independence and competency of the external specialist engaged by the Group for the valuation of fair value of relating assets; • evaluating the key assumptions and methodologies used by the Group to identify the identifiable assets and liabilities acquired and determine their fair values; • involved KPMG external expert to assess the appropriateness of the valuation methodology and the reasonableness of the key assumptions used to determine the fair value of property, plant and equipment; and • evaluating the adequacy of the disclosure in accordance with the related Thai Financial Reporting Standards.

Valuation of inventory	
Refer to Note 4 and 10 to the consolidated and separate financial statements.	
The key audit matter	How the matter was addressed in the audit
<p>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> <p>Due to the high level of management's judgment and the significant carrying amounts involved, 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 Group's business plan and process on estimate the net realisable value derived from business plan; • 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; and • evaluating the adequacy disclosure in accordance with the related Thai Financial Reporting Standards.

Impairment assessment of property, plant and equipment and investment in subsidiary	
Refer to Note 4, 12 15 and 25 to the consolidated and separate financial statements.	
The key audit matter	How the matter was addressed in the audit
<p>There's a decline in the demand and loss making of agriculture segment. This situation indicated that property, plant and equipment and investment in subsidiaries may be impaired.</p> <p>Since the consideration of impairment of assets depend on the management's judgments and assumptions in respect to the forecast of operating results, discount rate and key assumptions used to estimate the recoverable amount of aforementioned business, 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 management's process of identifying impairment indicator and impairment testing and estimate recoverable amount; • considering the investee's ability to generate profit by comparing with historical performance, future action plan and other relevant data; and • evaluating the adequacy of disclosure in accordance with the related Thai Financial Reporting Standards.

Valuation of Exploration assets	
Refer to Note 4 and 15 to the consolidated and separate financial statements.	
The key audit matter	How the matter was addressed in the audit
<p>All costs associated with the exploration are recognised as exploration assets and will be charged to profit or loss in the period when there is no discovery of proved reserves or no discovery of commercially adequate reserves and no future exploration and assessment plan.</p> <p>Due to the future exploration and assessment plan including the operation as planned, high level of management's judgments involved. 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 preparation of management's future exploration plan; • considering the management-approved future exploration plans; • evaluating the assumptions used in management's valuation of exploration assets by comparing with the petroleum estimates, and budget; • evaluating the adequacy of disclosure in accordance with the related Thai Financial Reporting Standards.

Recognition of deferred tax assets	
Refer to Note 4 and 17 to the consolidated and separate 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; • evaluating assumption used by management by comparing to operation plan and external information; and • evaluating the adequacy of disclosure in accordance with the related Thai Financial Reporting Standards.

Emphasis of Matter

Without modifying my opinion, I draw attention to the following matters:

As described in note 3 to the financial statements stating the effect of the Company's adoption from 1 January 2016 of a new accounting policy. The corresponding figures presented are based on the audited financial statements as at and for the year ended 31 December 2015 after making the adjustments described in note 3.

As described in note 39 (4) to the financial statements, the uncertainty related to the outcome of lawsuit in relation to its operation of mining which is under consideration of the Court.

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.

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

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

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

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

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

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

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

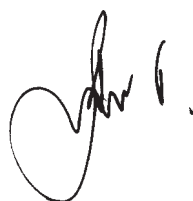
- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion.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

- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

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

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

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



(Bunyarit Thanormcharoen)

Certified Public Accountant

Registration No. 7900

KPMG Phoomchai Audit Ltd.

Bangkok

28 February 2017

Statement of financial position

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
		31 December		31 December	
Assets	Note	2016	2015	2016	2015
Current assets					
Cash and cash equivalents	7	3,465,595	1,695,178	2,552,273	928,804
Current investments	8	75,669	680,958	17,669	679,958
Trade accounts receivable	6, 9	3,014,777	2,527,611	2,120,607	3,626,902
Other receivables		606,955	549,932	517,283	506,710
Short-term loans to related parties	6	-	-	115,398	1,738,838
Receivables and advances to related parties	6	54,221	73,970	219,046	165,421
Inventories	10	11,724,075	10,969,059	9,783,785	9,141,177
Other current assets		607,909	456,466	119,587	99,147
Total current assets		19,549,201	16,953,174	15,445,648	16,886,957
Non-current assets					
Investments in associates and joint venture	11	722,495	1,582,702	229,500	513,909
Investments in subsidiaries	12	-	-	12,817,346	8,675,389
Long-term investments in related parties	13	45,870	45,870	45,870	45,870
Other long-term investments	8	36,117	36,178	18,943	18,934
Long-term loans to related party	6	-	-	4,528,846	1,635,021
Receivables and advances to related party	6	-	-	421,984	421,984
Investment properties	14	611,940	616,382	514,605	447,528
Property, plant and equipment	15	92,733,155	85,847,611	72,235,335	72,467,985
Land leasehold rights		653	1,459	-	-
Intangible assets	16	244,433	234,021	244,433	234,021
Advances payment for plant and equipment		1,088,049	1,841,059	223,746	897,130
Deferred tax assets	17	224,470	183,572	-	-
Other non-current assets	6, 39	277,890	303,014	226,410	251,311
Total non-current assets		95,985,072	90,691,868	91,507,018	85,609,082
Total assets		115,534,273	107,645,042	106,952,666	102,496,039

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

Statement of financial position

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
		31 December		31 December	
Liabilities and equity	Note	2016	2015	2016	2015
Current liabilities					
Bank overdrafts and short-term loans from					
financial institutions	18	5,609,638	923,136	4,718,066	923,136
Trade accounts payable	6, 19	2,214,330	2,523,938	2,595,005	2,629,166
Other payables	20	4,801,702	4,223,560	2,160,531	2,487,907
Payables and advances from related parties	6	28,513	61,674	90,470	118,418
Current portion of long-term loans from					
financial institutions	18	906,485	404,436	741,485	404,436
Current portion of debentures	18	3,000,000	3,000,000	3,000,000	3,000,000
Interest payable		234,275	189,222	233,698	189,222
Current portion of finance lease liabilities	18	87,480	203,797	40,155	110,152
Income tax payable		36,739	948	-	-
Other current liabilities		149,785	139,860	92,058	42,710
Total current liabilities		17,068,947	11,670,571	13,671,468	9,905,147
Non-current liabilities					
Long-term loans from financial institutions	18	8,002,058	6,504,022	5,670,430	6,504,022
Debentures	18	29,000,000	26,555,000	29,000,000	26,555,000
Finance lease liabilities	18	3,134	90,921	3,134	43,597
Deferred tax liabilities	17	4,709,330	5,167,145	4,533,652	5,162,355
Employee benefit obligations	21	1,373,924	1,317,394	1,178,236	1,159,678
Other non-current liabilities		302,476	374,302	301,896	491,271
Total non-current liabilities		43,390,922	40,008,784	40,687,348	39,915,923
Total liabilities		60,459,869	51,679,355	54,358,816	49,821,070

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

Statement of financial position

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		31 December		31 December	
Liabilities and equity		2016	2015	2016	2015
Equity					
Share capital:	22				
Authorised share capital		24,815,000	24,815,000	24,815,000	24,815,000
Issued and paid-up share capital		20,190,000	20,190,000	20,190,000	20,190,000
Treasury shares held by subsidiaries	23	(359,235)	(359,235)	-	-
Additional paid in capital					
Shares premium		60,600	60,600	60,600	60,600
Retained earnings					
Appropriated					
Legal reserve	24	824,300	808,505	824,300	808,505
Unappropriated		15,869,510	15,719,350	13,199,272	12,259,874
Other components of equity		18,483,231	19,538,392	18,319,678	19,355,990
Equity attributable to owners of the Company		55,068,406	55,957,612	52,593,850	52,674,969
Non-controlling interests		5,998	8,075	-	-
Total equity		55,074,404	55,965,687	52,593,850	52,674,969
Total liabilities and equity		115,534,273	107,645,042	106,952,666	102,496,039

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

Statement of comprehensive income

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
		Year ended 31 December		Year ended 31 December	
	Note	2016	2015 (Restated)	2016	2015 (Restated)
Income	6, 25				
Revenue from sale of goods	34	29,128,215	27,135,163	21,960,571	21,219,195
Transportation income		1,264,643	1,245,348	1,337,980	1,358,215
Gain on bargain purchase	5	434,990	-	-	-
Net foreign exchange gain		287,989	106,504	252,284	96,947
Investment income	26	34,223	76,293	3,366,838	149,602
Other income	27	342,374	683,862	510,613	670,783
Total income		31,492,434	29,247,170	27,428,286	23,494,742
Expenses	6, 31				
Cost of sales of goods	10	24,315,714	22,894,808	19,718,614	18,398,938
Cost of sales of goods-depreciation on revaluation surplus	3, 10	1,295,420	1,978,966	1,295,420	1,978,966
Selling expenses	28	3,691,808	3,680,025	3,325,297	3,332,131
Administrative expenses	29	1,671,869	1,400,723	1,756,017	1,179,379
Finance costs	32	1,649,248	1,018,145	1,647,433	955,677
Total expenses		32,624,059	30,972,667	27,742,781	25,845,091
Share of profit of investments in associates and joint venture	11	48,121	5,154	-	-
Loss before income tax expense		(1,083,504)	(1,720,343)	(314,495)	(2,350,349)
Income tax benefit	33	562,045	463,401	630,398	388,523
Profit (loss) for the year		(521,459)	(1,256,942)	315,903	(1,961,826)
Other comprehensive income (loss)					
Items that will not be reclassified to profit or loss					
Defined benefit plan actuarial gains (losses)	21	35,061	(166,457)	8,443	(148,597)
Income tax on other comprehensive income	17, 33	(6,703)	33,673	(1,689)	29,719
		28,358	(132,784)	6,754	(118,878)

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

Statement of comprehensive income

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		Year ended 31 December		Year ended 31 December	
		2016	2015 (Restated)	2016	2015 (Restated)
Other comprehensive income (loss) (continue)					
<i>Items that are or may be reclassified to profit or loss</i>					
Net change in fair value of available-for-sale investments		42	103	30	76
Share of other comprehensive income (loss)					
of investments in associates	11	3,078	(21,933)	-	-
Income tax on other comprehensive income	17, 33	(6)	(15)	(6)	(15)
		<u>3,114</u>	<u>(21,845)</u>	<u>24</u>	<u>61</u>
Other comprehensive income (loss) for the year, net of tax		<u>31,472</u>	<u>(154,629)</u>	<u>6,778</u>	<u>(118,817)</u>
Total comprehensive income (loss) for the year		<u>(489,987)</u>	<u>(1,411,571)</u>	<u>322,681</u>	<u>(2,080,643)</u>
Profit (loss) attributable to:					
Owners of the Company		(521,314)	(1,257,112)	315,903	(1,961,826)
Non-controlling interests		(145)	170	-	-
Profit (loss) for the year		<u>(521,459)</u>	<u>(1,256,942)</u>	<u>315,903</u>	<u>(1,961,826)</u>
Total comprehensive income (loss) attributable to:					
Owners of the Company		(489,842)	(1,411,746)	322,681	(2,080,643)
Non-controlling interests		(145)	175	-	-
Total comprehensive income (loss) for the year		<u>(489,987)</u>	<u>(1,411,571)</u>	<u>322,681</u>	<u>(2,080,643)</u>
Basic earnings (loss) per share (in Baht)					
	35	<u>(0.026)</u>	<u>(0.063)</u>	<u>0.016</u>	<u>(0.097)</u>

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

Statement of changes in equity

TPI Polene Public Company Limited and its Subsidiaries

Consolidated financial statements

(in thousand Baht)

Year ended 31 December 2015															
Balance at 1 January 2015															
Transaction with owners, recorded directly in equity <i>Distributions to owners of the Company</i> Dividends to owners of the Company <i>Total distributions to owners of the Company</i> <i>Changes in ownership interests in subsidiary</i> Acquisition of non-controlling interests without a change in control <i>Total changes in ownership interests in subsidiaries</i> Total transaction with owners, recorded directly in equity Comprehensive income (loss) for the year Profit (loss) - restated Other comprehensive income (loss) - restated Total comprehensive income (loss) for the year Transfer to retained earnings Balance at 31 December 2015	20,190,000	(359,235)	60,600	808,505	15,887,818	(189)	20,939,385	188,888	52,943	21,181,027	57,768,715	16,043	57,784,758		
	-	-	-	-	(399,357)	-	-	-	-	-	(399,357)	-	(399,357)		
	-	-	-	-	(399,357)	-	-	-	-	-	(399,357)	-	(399,357)		
	-	-	-	-	-	-	-	-	-	-	-	(8,143)	(8,143)		
	-	-	-	-	-	-	-	-	-	-	-	(8,143)	(8,143)		
	-	-	-	-	(399,357)	-	-	-	-	-	(399,357)	(8,143)	(407,500)		
	-	-	-	-	(1,257,112)	-	-	-	-	-	(1,257,112)	170	(1,256,942)		
	-	-	-	-	(132,784)	83	-	(21,933)	-	(21,850)	(154,634)	5	(154,629)		
	-	-	-	-	(1,389,896)	83	-	(21,933)	-	(21,850)	(1,411,746)	175	(1,411,571)		
	-	-	-	-	1,620,785	-	(1,583,212)	(37,612)	-	(1,620,785)	-	-	-		
	20,190,000	(359,235)	60,600	808,505	15,719,350	(106)	19,356,212	129,343	52,943	19,538,392	55,957,612	8,075	55,965,687		
	Year ended 31 December 2016														
	Balance at 1 January 2016														
Transaction with owners, recorded directly in equity <i>Distributions to owners of the Company</i> Dividends to owners of the Company <i>Total distributions to owners of the Company</i> <i>Changes in ownership interests in subsidiary</i> Acquisition of non-controlling interests without a change in control <i>Total changes in ownership interests in subsidiaries</i> Total transaction with owners, recorded directly in equity Comprehensive income (loss) for the year Loss Other comprehensive income (loss) Total comprehensive income (loss) for the year Transfer to legal reserve Transfer to retained earnings Balance at 31 December 2016	20,190,000	(359,235)	60,600	808,505	15,719,350	(106)	19,356,212	129,343	52,943	19,538,392	55,957,612	8,075	55,965,687		
	-	-	-	-	(399,364)	-	-	-	-	-	(399,364)	-	(399,364)		
	-	-	-	-	(399,364)	-	-	-	-	-	(399,364)	-	(399,364)		
	-	-	-	-	-	-	-	-	-	-	-	(1,932)	(1,932)		
	-	-	-	-	-	-	-	-	-	-	-	(1,932)	(1,932)		
	-	-	-	-	(399,364)	-	-	-	-	-	(399,364)	(1,932)	(401,296)		
	-	-	-	-	(521,314)	-	-	-	-	-	(521,314)	(145)	(521,459)		
	-	-	-	-	28,358	36	-	3,078	-	3,114	31,472	-	31,472		
	-	-	-	-	(492,956)	36	-	3,078	-	3,114	(489,842)	(145)	(489,987)		
	-	-	-	15,795	(15,795)	-	-	-	-	-	-	-	-		
	-	-	-	-	1,058,275	-	(1,036,336)	(21,939)	-	(1,058,275)	-	-	-		
	20,190,000	(359,235)	60,600	824,300	15,869,510	(70)	18,319,876	110,482	52,943	18,483,231	55,068,406	5,998	55,074,404		

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

Statement of changes in equity

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

Separate financial statements

	Note	Retained earnings				Other components of equity			Total equity
		Issued and paid-up share capital	Share premium	Legal reserve	Unappropriated	Fair value changes in available-for-sale investments	Revaluation surplus	Total other components of equity	
Year ended 31 December 2015									
Balance at 1 January 2015		20,190,000	60,600	808,505	13,161,205	(283)	20,939,385	20,939,102	55,159,412
Transaction with owners, recorded directly in equity									
Distributions to owners of the Company									
Dividends to owners of the Company	36	-	-	-	(403,800)	-	-	-	(403,800)
Total transaction with owners, recorded directly in equity		-	-	-	(403,800)	-	-	-	(403,800)
Comprehensive income (loss) for the year									
Loss - restated		-	-	-	(1,961,826)	-	-	-	(1,961,826)
Other comprehensive income (loss) - restated		-	-	-	(118,878)	61	-	61	(118,817)
Total comprehensive income (loss) for the year		-	-	-	(2,080,704)	61	-	61	(2,080,643)
Transfer to retained earnings									
		-	-	-	1,583,173	-	(1,583,173)	-	-
Balance at 31 December 2015		20,190,000	60,600	808,505	12,259,874	(222)	19,356,212	19,355,990	52,674,969
Year ended 31 December 2016									
Balance at 1 January 2016		20,190,000	60,600	808,505	12,259,874	(222)	19,356,212	19,355,990	52,674,969
Transaction with owners, recorded directly in equity									
Distributions to owners of the Company									
Dividends to owners of the Company	36	-	-	-	(403,800)	-	-	-	(403,800)
Total transaction with owners, recorded directly in equity		-	-	-	(403,800)	-	-	-	(403,800)
Comprehensive income (loss) for the year									
Profit		-	-	-	315,903	-	-	-	315,903
Other comprehensive income (loss)		-	-	-	6,754	24	-	24	6,778
Total comprehensive income (loss) for the year		-	-	-	322,657	24	-	24	322,681
Transfer to legal reserve		-	-	15,795	(15,795)	-	-	(1,583,173)	-
Transfer to retained earnings		-	-	-	1,036,336	-	(1,036,336)	-	-
Balance at 31 December 2016		20,190,000	60,600	824,300	13,199,272	(196)	18,319,876	18,319,678	52,593,850

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

Statement of cash flows

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December	
	2016	2015 (Restated)	2016	2015 (Restated)
<i>Cash flows from operating activities</i>				
Profit (loss) for the year	(521,459)	(1,256,942)	315,903	(1,961,826)
<i>Adjustments for</i>				
Depreciation and amortisation	2,477,964	2,122,410	1,830,547	1,530,811
Depreciation on revaluation surplus	1,295,420	1,978,966	1,295,420	1,978,966
Interest income	(28,183)	(42,480)	(197,630)	(107,320)
Finance costs	1,649,248	1,018,145	1,647,433	955,677
Dividend income	(13)	(5)	(3,153,318)	(5)
Gain on bargain purchase	(434,990)	-	-	-
Unrealised (gain) loss on foreign exchange	(174,132)	26,380	(186,558)	(33,483)
(Reversal of) bad and doubtful debt expense	9,833	(102,386)	(60)	(114,679)
(Reversal of) loss on decline in value of inventories	126,089	(104,938)	(29,925)	(179,472)
Provision for employees benefits	76,495	75,931	60,212	59,687
Provision for decommissioning	11,195	5,972	5,713	5,453
Impairment loss on other long-term investment	200	-	200	-
Loss on disposal of plant and equipment	20,023	8,856	13,842	114
Impairment loss on investments in subsidiary	-	-	382,000	-
Loss on disposal of investments in subsidiary	-	-	20,459	-
Reversal of loss on impairment of investment properties	(3,873)	-	-	-
Loss on disposal of investment property	2,568	3,274	260	-
Change in investment holding in subsidiary	2,068	9,277	-	-
Share of profit of investments in associates and joint venture	(48,121)	(5,154)	-	-
Income tax income	(562,045)	(463,401)	(630,397)	(388,523)
	<u>3,898,287</u>	<u>3,273,905</u>	<u>1,374,101</u>	<u>1,745,400</u>

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

Statement of cash flows

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December	
	2016	2015 (Restated)	2016	2015 (Restated)
<i>Changes in operating assets and liabilities</i>				
Trade accounts receivable	(363,776)	35,728	1,506,854	(107,603)
Other receivables	(26,771)	20,264	(10,024)	23,578
Receivable and advances to related parties	19,749	(6,831)	(53,625)	387,595
Inventories	(713,135)	(1,596,280)	(612,683)	(1,411,179)
Other current assets	(104,351)	(38,256)	(5,238)	27,809
Other non-current assets	26,914	(47,704)	24,901	(49,093)
Trade accounts payable	(336,109)	(253,343)	(34,156)	(151,222)
Other payables	(290,603)	(127,902)	(198,831)	(146,260)
Payable and advances from related parties	(33,161)	(14,772)	(47,862)	(96,093)
Other current liabilities	9,488	88,012	49,349	7,832
Employee benefit obligations	(13,684)	(12,642)	(13,297)	(9,552)
Other non-current liabilities	(88,442)	(590)	(195,088)	496
Cash generated from operating activities	1,984,406	1,319,589	1,784,401	221,708
Income tax paid	(52,209)	(164,460)	(15,202)	(148,506)
Net cash from operating activities	1,932,197	1,155,129	1,769,199	73,202
<i>Cash flows from investing activities</i>				
Interest received	27,701	42,978	197,864	108,702
Dividend received	13	5	3,153,318	5
(Increase) decrease in current investments	605,289	(682,870)	662,289	(681,870)
Purchase of property, plant and equipment	(6,215,750)	(5,778,729)	(2,004,525)	(3,935,623)
Sale of plant and equipment	2,796	450	5,750	8,711
Advance payment for plant and equipment	(1,843,290)	(1,912,988)	(352,247)	(554,880)
Loans to related parties	-	-	(6,331,692)	(6,308,281)
Proceeds from repayment of loans to related parties	-	-	5,060,546	3,241,088
Purchase of other long-term investments	(200)	-	(200)	-
Purchase of investment properties	-	(2,923)	-	-
Sale of investment property	8,958	-	542	-
Purchase of intangible assets	(43,179)	(36,924)	(43,179)	(36,924)
Net cash outflow on acquisition of subsidiaries	(500,000)	(620)	(500,000)	(1,475,041)
Cash outflow for investment in subsidiaries	(4,000)	(17,040)	(3,858,000)	(2,052,587)
Net cash inflow on disposal of subsidiary	-	-	97,993	-
Net cash used in investing activities	(7,961,662)	(8,388,661)	(3,911,541)	(11,686,700)

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

Statement of cash flows

TPI Polene Public Company Limited and its Subsidiaries

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	Year ended 31 December		Year ended 31 December	
	2016	2015 (Restated)	2016	2015 (Restated)
Cash flows from financing activities				
Finance cost paid	(1,684,769)	(1,569,024)	(1,673,336)	(1,396,598)
Dividend paid	(399,364)	(399,357)	(403,800)	(403,800)
Finance lease payments	(204,104)	(229,526)	(110,460)	(104,857)
Increase (decrease) in bank overdrafts and short-term loans				
from financial institutions	4,673,160	(1,820,352)	3,794,930	(1,277,290)
Proceeds from short-term loans from related parties	-	-	1,509,408	-
Repayment of short-term loans from related parties	-	-	(1,509,408)	-
Proceeds from long-term loans from financial institutions	2,656,665	2,469,556	160,037	1,997,469
Repayment of long-term loans from financial institutions	(428,018)	(11,855,441)	(428,018)	(8,326,451)
Proceeds from issue of debentures	5,445,000	21,555,000	5,445,000	21,555,000
Repayment of debenture	(3,000,000)	-	(3,000,000)	-
Net cash from financing activities	7,058,570	8,150,856	3,784,353	12,043,473
Net increase in cash and cash equivalents	1,029,105	917,324	1,642,011	429,975
Cash and cash equivalents at 1 January	1,695,178	762,149	928,804	492,443
Effect of exchange rate changes on				
balances held in foreign currencies	(13,129)	14,564	(18,542)	6,386
Cash and cash equivalents from changes in holding of				
investments in subsidiaries	754,441	1,141	-	-
Cash and cash equivalents at 31 December	3,465,595	1,695,178	2,552,273	928,804
Supplemental disclosure of cash flows information				
Other payable - plant and equipment	2,518,309	1,680,240	306,726	435,244

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

Notes to the financial statements

TPI Polene Public Company Limited and its Subsidiaries

Note	Contents
1	General information
2	Basis of preparation of the financial statements
3	Change in accounting policy
4	Significant accounting policies
5	Acquisition of subsidiary
6	Related parties
7	Cash and cash equivalents
8	Other investments
9	Trade accounts receivable
10	Inventories
11	Investments in associates and joint venture
12	Investments in subsidiaries
13	Long-term investments in related parties
14	Investment properties
15	Property, plant and equipment
16	Intangible assets
17	Deferred tax
18	Interest-bearing liabilities
19	Trade accounts payable
20	Other payables
21	Employee benefit obligations
22	Share capital
23	Treasury shares held by a subsidiary
24	Reserves
25	Segment information
26	Investment income
27	Other income
28	Selling expenses
29	Administrative expenses
30	Employee benefit expenses
31	Expenses by nature
32	Finance costs
33	Income tax
34	Promotional privileges
35	Basic earnings (loss) per share
36	Dividends
37	Financial instruments
38	Commitments with non-related parties
39	Contingent liabilities
40	Event after the reporting period
41	Thai Financial Reporting Standards (TFRS) not yet adopted

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 28 February 2017.

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 18 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. 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 and indirect subsidiaries as at 31 December 2016 and 2015 were as follows:

Name of the entity	Type of business	Country of incorporation	Ownership interest direct/indirect (%)	
			2016	2015
Direct subsidiaries				
TPI Concrete Co., Ltd.	Manufacturing and distributing ready mixed concrete	Thailand	99.99	99.99
TPI Polene Power Public Co., Ltd.	Distributing gasoline, diesel and natural gas /	Thailand	99.99	99.99
(formerly: TPI Polene Power Co.,Ltd.)	Manufacturing and distributing electricity and refuse derived fuel (RDF) and organics waste			
TPI All Seasons Co., Ltd.	Manufacturing and distributing melt sheets	Thailand	99.99	99.99
Thai Propoxide Co., Ltd.	Manufacturing electricity (dormant)	Thailand	99.99	99.99
TPI Polene Bio Organics Co., Ltd.	Manufacturing and distributing organic fertilizer	Thailand	99.99	99.99
TPI Refinery (1997) Co.,Ltd.	Petroleum exploration	Thailand	99.99	99.99
Thai Nitrate Co.,Ltd.	Manufacturing and distributing nitric acids and ammonium nitrate	Thailand	99.99	50.00*
TPI Intertrade Co.,Ltd.	Manufacturing electricity (dormant)	Thailand	99.97	99.97
TPI Commercial Co., Ltd.	Retailing business	Thailand	99.94	99.94
Zenith International Trading Co.,Ltd. (formerly:TPI Power Co.,Ltd.)	Export business (dormant)	Thailand	99.80	99.80
TPI Service Co., Ltd.	Construction service	Thailand	51.00	51.00
Indirect subsidiaries				
Polene Plastic Co., Ltd. (see note 12)	Export cement and plastic	Thailand	99.99	99.99
Mondo Thai Co., Ltd.	Property developing	Thailand	83.72	77.72

* Starting from 2 August 2016, the Group's consolidated financial statements included the financial statements of Thai Nitrate Co., Ltd. after the Company increased its equity interest from 50% to 99.99% (see note 5).

2 Basis of preparation of the financial statements

(a) *Statement of compliance*

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

The FAP has issued new and revised TFRS effective for annual accounting periods beginning on or after 1 January 2016. The initial application of these new and revised TFRS has resulted in changes in certain of the Group's accounting policies. The effects of these changes, where such effects are considered material to the financial statements, are disclosed in note 3.

In addition to the above new and revised TFRS, the FAP has issued a number of other new and revised TFRS which are effective for annual financial periods beginning on or after 1 January 2017 and have not been adopted in the preparation of these financial statements. Those new and revised TFRS that are relevant to the Group's operations are disclosed in note 41.

(b) *Basis of measurement*

The financial statements have been prepared on the historical cost basis except as stated in accounting policies.

(c) *Functional and presentation currency*

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

(d) *Use of estimates and judgements*

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

Information about assumption and estimation uncertainties that have a significant risk of resulting in a material adjustments to the amounts recognised in the financial statements is included in the following notes:

Note 5	Acquisition of subsidiary
Note 10	Allowance for decline in value of inventories adjusted to net realisable value
Note 15	Surplus on fixed assets revaluation and impairment test: key assumptions underlying recoverable amounts
Note 17	Recognition of deferred tax assets: availability of future taxable profit against which tax losses carried forward can be used
Note 21	Measurement of defined benefit obligations: key actuarial assumptions; and
Note 39	Contingent liabilities: key assumptions about the likelihood and magnitude of an outflow of resources.

Measurement of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following notes:

- Note 5 Acquisition of subsidiary;
- Note 14 Investment property;
- Note 15 Property, plant and equipment; and
- Note 37 Financial instruments

3 Change in accounting policy

Before 1 January 2016, the Group did not charge the depreciation of the surplus from revaluation to profit or loss in accordance with the Federation of Accounting Professions Announcement No.18/2554, regarding the recognition of revalued assets.

Effective from 1 January 2016, the Group has adopted accounting policy in accordance with Thai Accounting Standard No.16 and charged the depreciation of the surplus from revaluation to profit or loss. The effect of change recognized retrospectively in the financial statements as follows:

	(in thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Statement of comprehensive income for the year ended 31 December				
Increase in cost of sales of goods - depreciation on revaluation surplus	(1,295,420)	(1,978,966)	(1,295,420)	(1,978,966)
Decrease in share of profit of investments in joint venture	(18,805)	(37,612)	-	-
Increase in income tax benefit	259,084	395,793	259,084	395,793
Decrease in profit	(1,055,141)	(1,620,785)	(1,036,336)	(1,583,173)
Decrease in basic earnings per share (in Baht)	(0.053)	(0.081)	(0.051)	(0.078)

4 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements except as explained in note 3, which addresses changes in 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.

Business combinations

The Group applies the acquisition method for all business combinations when control is transferred to the Group other than those with entities under common control.

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 acquisition date is the date on which control is transferred to the acquirer. Judgment is applied in determining the acquisition date and determining whether control is transferred from one party to another.

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

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

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

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

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

Step acquisition

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

Acquisitions from entities under common control

Business combinations of entities or businesses under common control are accounted for using a method similar to the pooling of interest method and in accordance with the Guideline issued in 2009 by the FAP.

Subsidiaries

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

Non-controlling interests

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

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

Loss of control

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

Interests in equity-accounted investees

The Group's interests in equity-accounted investees comprise interests in associates and a joint venture.

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.

Interests in associates and joint ventures are accounted for using the equity method. They are recognised initially at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's 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.

Transactions eliminated on consolidation

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

(b) Foreign currencies

Foreign currency transactions

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

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

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

Non-monetary assets and liabilities measured at fair value in foreign currencies are translated to the functional currency at the exchange rates at the dates that fair value was determined.

Foreign exchange differences arising on translation are recognised in the 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 presented in the foreign currency translation reserve in equity until disposal of the investment, except to extent that the translation difference is allocated to non-controlling interest.

(c) Derivative financial instruments

Derivative and financing instruments are used to manage exposure to foreign exchange arising from operational activity and financing activity. Derivative financial instruments are not used for trading purposes.

Derivatives are recognised initially at fair value; attributable transaction costs are recognised in profit or loss when incurred. Subsequent to initial recognition, they are remeasured at fair value. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss.

The fair value of forward exchange contracts is based on their listed market price at the reporting date.

(d) Cash and cash equivalents

Cash and cash equivalents in the statements of cash flows comprise cash balances, call deposits and highly liquid short-term investments. Bank overdrafts that are repayable on demand are a component of financing activities for the purpose of the statement of cash flows.

(e) Trade and other accounts receivable

Trade and other accounts receivable are stated at their invoice value less allowance for doubtful accounts.

The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments. Bad debts are written off when incurred.

(f) Inventories

Inventories are measured at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost principle, and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. In the case of manufactured inventories and work-in-progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

(g) Investments

Investments in associates, subsidiaries and joint venture

Investments in associates, subsidiaries and joint venture in the separate financial statements of the Company are accounted for using the cost method. Investments in associates and joint ventures in the consolidated financial statements are accounted for using the equity method.

Investments in other debt and equity securities

Debt securities that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are stated at amortised cost, less any impairment losses. The difference between the acquisition cost and redemption value of such debt securities is amortised using the effective interest rate method over the period to maturity.

Marketable equity securities, other than those securities held for trading or intended to be held to maturity, are classified as available-for-sale investments. Available-for-sale investments are, subsequent to initial recognition, stated at fair value, and changes therein, other than impairment losses on available-for-sale monetary items, are recognised directly in equity. Impairment losses are recognised in profit or loss. When these investments are derecognised, the cumulative gain or loss previously recognised directly in equity is recognised in profit or loss.

Equity securities which are not marketable are stated at cost less any impairment losses.

The fair value of financial instruments classified as available-for-sale is determined as the quoted bid price at the reporting date.

Disposal of investment

On disposal of an investment, the difference between net disposal proceeds and the carrying amount together with the associated cumulative gain or loss that was reported in equity is recognised in profit or loss.

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

(h) Investment properties

Investment properties are stated 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 investment property includes the cost of materials and direct labour, and other costs directly attributable to bringing the investment property to a working condition for its intended use and capitalised borrowing costs.

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of condominium which are 20 years.

Reclassification to property, plant and equipment

When the use of a property changes such that it is reclassified as property, plant and equipment, its historical cost becomes its cost for subsequent accounting.

(i) Property, plant and equipment

Recognition and measurement

Owned assets

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses, except for certain buildings, machinery and equipment which are stated at their revalued amounts. The revalued amount is the fair value determined on the basis of the property's existing use at the date of revaluation less any subsequent accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised net within other income in profit or loss. When revalued assets are sold, the amounts included in the revaluation reserve are transferred to retained earnings.

Leased assets

Leases in terms of which the Group substantially assumes all the risk and rewards of ownership are classified as finance leases. Property, plant and equipment acquired by way of finance leases is capitalised at the lower of its fair value and the present value of the minimum lease payments at the inception of the lease, less accumulated depreciation and impairment losses. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the profit or loss.

Revalued assets

Revaluations are performed by independent professional valuers with sufficient regularity to ensure that the carrying amount of these assets does not differ materially from that which would be determined using fair values at the reporting date.

Any increase in value, on revaluation, is recognised in other comprehensive income and presented in the revaluation reserve in equity unless it offsets a previous decrease in value recognised in profit or loss in respect of the same asset. A decrease in value is recognised in profit or loss to the extent it exceeds an increase previously recognised in other comprehensive income in respect of the same asset. The revaluation surplus is utilised by reference to the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost and transferred directly to retained earnings. Upon disposal of a revalued asset, any remaining related revaluation surplus is transferred directly to retained earnings and is not taken into account in calculating the gain or loss on disposal.

Subsequent costs

The cost of replacing a part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

Exploration assets

The Company follows the full cost method of accounting for petroleum and natural gas properties and related expenses whereby all costs associated with the exploration for productive and non-productive wells are treated as capitalised and will be charged to profit or loss when the exploratory wells have not identified proved reserves or have identified proved reserves but have not been found to be commercially producible or have abandoned.

Costs of properties comprise total acquisition costs of petroleum rights or the portion of costs applicable to properties as well as the decommissioning costs.

Depreciation

Depreciation is calculated based on the depreciable amount, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment or on units of production method of relevant assets. The estimated useful lives are as follows:

Land improvement	5 years
Leasehold improvement	8 - 10 years
Buildings and structures	10 - 49 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 LDPE, construction materials and machine for melt sheets and mixer trucks calculate depreciation based on units of production.

No depreciation is provided on freehold land, assets under construction and installation, and major spare parts have not been issued.

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

(j) 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

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. 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. The expenditure capitalised includes the cost of materials, direct labour, overhead costs that are directly attributable to preparing the asset for its intended use, and capitalised borrowing costs. Other development expenditure is recognised in profit or loss as incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses.

Other intangible assets

Other intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

Amortisation

Amortisation is based on the cost of the asset, or other amount substituted for cost, less its residual value.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset.

The estimated useful lives for the current and comparative periods are as follows:

Concessions	Life of concessions :	13 - 25 years
Software licenses		3 - 12 years
Development assets		5 years

Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

(k) Impairment

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 asset's recoverable amounts are estimated.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. The impairment loss is recognised in profit or loss unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.

When a decline in the fair value of an available-for-sale financial asset has been recognised directly in equity and there is objective evidence that the value of the assets is impaired, the cumulative loss that had been recognised directly in equity is recognised in profit or loss even though the financial asset has not been derecognised. The amount of the cumulative loss that is recognised in profit or loss is the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss.

Calculation of recoverable amount

The recoverable amount of available-for-sale financial assets is calculated by reference to the fair value.

The recoverable amount of a non-financial asset is the greater of the assets' 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.

Reversals of impairment

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(l) Interest-bearing liabilities

Interest-bearing liabilities are recognised at cost.

(m) Trade and other accounts payable

Trade and other accounts payable are stated at cost.

(n) Employee benefits

Defined contribution plans

Obligations for contributions to defined contribution plans are expensed as the related service is provided.

Defined benefit plans

A defined benefit plan is a post-employment benefit plan. The Group's net obligation in respect of defined benefit legal severance pay plan is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The discount rate is the yield at the reporting date on government bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognized immediately in other comprehensive income. 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 recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(o) Provisions

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

(p) Treasury shares held by a subsidiary

When share capital recognised as equity is repurchased, the amount of consideration paid, including directly attributable costs, is classified as treasury shares held by a subsidiary and recognised as a deduction from equity. When treasury shares held by a subsidiary are sold, the amount received is recognised as an increase in equity by crediting the cost of the treasury shares held by a subsidiary sold, calculated using the weighted average method, to the treasury shares account. Surpluses on the sale of treasury

shares held by a subsidiary are taken directly to a separate category within equity, 'Surplus on treasury shares held by a subsidiary'. 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 held by a subsidiary.

(q) Revenue

Revenue excludes value added taxes and is arrived at after deduction of trade discounts and volume rebates.

Sale of goods and services rendered

Revenue is recognised in profit or loss when the significant risks and rewards of ownership have been transferred to the buyer. No revenue is recognised if there is continuing management involvement with the goods or there are significant uncertainties regarding recovery of the consideration due, associated costs or the probable return of goods. Service income is recognised as services are provided.

Loyalty programmes

The Company has a customer loyalty programme whereby customers are awarded credits (Points) entitling customers to the right to qualify for a free gift from the Company. The fair value of the consideration received or receivable in respect of the initial sale is allocated between the Points and the other components of the sale. The amount allocated to the Points is estimated by reference to the fair value of the free gift. The fair value is estimated based on the amount of the discount adjusted to take into account the expected forfeiture rate. Such amount is deferred and revenue is recognised only when the Points are redeemed and the Company has fulfilled its obligations to supply the products. The amount of revenue recognised in those circumstances is based on the number of Points that have been redeemed in exchange for discounted products, relative to the total number of Points that is expected to be redeemed. Deferred revenue is also released to profit or loss when it is no longer considered probable that the Points will be redeemed.

Investments

Revenue from investments comprises rental income from investment properties and dividend and interest income from investments and bank deposits.

Rental income

Rental income from investment property is recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income. Contingent rentals are recognised as income in the accounting period in which they are earned.

Dividend income

Dividend income is recognised in profit or loss on the date the Group's right to receive payments is established.

Interest income

Interest income is recognised in profit or loss as it accrues.

(r) Finance costs

Interest expenses and similar costs are charged to profit or loss for the period in which they are incurred, except to the extent that they are capitalised as being directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial year of time to be prepared for its intended use or sale.

(s) Lease payments

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognised in profit or loss as an integral part of the total lease expense, over the term of the lease.

Contingent lease payments are accounted for by revising the minimum lease payments over the remaining term of the lease when the lease adjustment is confirmed.

Determining whether an arrangement contains a lease

At inception of an arrangement, the Group determines whether such an arrangement is or contains a lease. A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to the Group the right to control the use of the underlying asset.

At inception or upon reassessment of the arrangement, the Group separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, an asset and a liability are recognised at an amount equal to the fair value of the underlying asset. Subsequently the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the Group's incremental borrowing rate.

(t) Income tax

Income tax expense for the year comprises current and deferred tax. Current and deferred tax are recognised in profit or loss except to the extent that they relate to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and differences relating to investments in subsidiaries and joint venture to the extent that it is probable that they will not reverse in the foreseeable future.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(u) Earnings per share

The Group presents basic earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the year, adjusted for own shares held.

(v) Segment reporting

Segment results that are reported to the Group's CEO (the chief operating decision maker) include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly corporate assets.

5 Acquisition of subsidiary

On 2 August 2016, the Company acquired an additional 2,343,750 shares of Thai Nitrate Co., Ltd. at the price of Baht 213.33 per share (par value of Baht 100 each), making total investment of Baht 500 million from the group of foreign company. As a result, the Company's interest in the said company increased from 50% to 99.99% of the paid-up share capital, and the status of that company has, therefore, changed from a joint venture to a subsidiary. The consolidated financial statements for the year ended 31 December 2016 included the statement of financial position and the statement of comprehensive income of Thai Nitrate Co., Ltd. from 2 August 2016 to 31 December 2016.

Taking control of Thai Nitrate Co., Ltd., the Company and the Group of foreign company agreed to settle their disputes where the Company and the shareholders of the foreign company mutually filed a petition to the Court in order to settle the dispute whether it be dispute under laws or pending cases between them in every courts involved (see note 39 (2)).

For the period from 2 August 2016 to 31 December 2016, Thai Nitrate Co., Ltd. contributed revenue of Baht 344 million and profit of Baht 59 million to the Group's results. If the acquisition had occurred on 1 January 2016, management estimates that consolidated revenue would have been Baht 988 million and consolidated profit for year ended 31 December 2016 would have been Baht 161 million. In determining these amounts, management has assumed that the fair value adjustments, determined provisionally, that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2016.

Under TFRS 3 Business Combinations, the acquisitions of Thai Nitrate Co., Ltd. is classified as a step acquisition. An independent appraiser has been appointed by the management to determine the fair value of the business. The Group hired an independent appraiser to determine the fair value of assets and liabilities acquired during the measurement period, which must not exceed one year from the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date. Finalisation of the valuation of net assets of Thai Nitrate Co., Ltd. which the Company acquired on 2 August 2016 was completed in November 2016.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquisition is remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit and loss. There was no significant change in the remeasurement of the fair value of investment in Thai Nitrate Co., Ltd. before changing status from joint venture to subsidiary and, therefore, the Group has not recognised any difference arising from the step-acquisition on the acquisition date in the consolidated statement of comprehensive income for the year ended 31 December 2016.

A gain on bargain purchase is measured as the fair value of the consideration transferred less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. The group recognised gain on bargain purchase in the consolidated statement of comprehensive income for the year ended 31 December 2016 of Baht 435 million.

The following summarises the major classes of consideration transferred, and the recognized amounts of assets acquired and liabilities assumed at the acquisition date:

Consideration transferred

	Fair value <i>(in thousand Baht)</i>
Cash	500,000
Total	<u>500,000</u>

Identifiable assets acquired and liabilities assumed

	Fair value <i>(in thousand Baht)</i>
Cash and cash equivalents	754,441
Trade account receivables	128,205
Inventories	167,970
Other current assets	57,792
Property, plant and equipment	955,372
Other non-current assets	1,790
Trade accounts payable	(26,550)
Other current liabilities	(72,818)
Other non-current liabilities	(119,806)
Total identifiable net assets	1,846,396
Less fair value of previously held equity interest	(911,406)
Net assets acquired	934,990
Gain on bargain purchase	(434,990)
Purchase consideration transferred	500,000
Net cash acquired with the subsidiary	754,441
Cash paid	(500,000)
Net cash inflows	<u>254,441</u>

Acquisition-related costs

The Group incurred acquisition-related costs of Baht 0.13 million related to external legal fees which have been included in administrative expenses in the Group's consolidated statement of comprehensive income.

6 Related parties

For the purposes of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control or joint control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are subject to common control or common significant influence. Related parties may be individuals or other entities.

Relationships with key management and related parties were as follows:

Name of entities	Country of incorporation/nationality	Nature of relationships
Key management personnel	Thailand	Persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of the Group.
TPI Concrete Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company
TPI Polene Power Public Co., Ltd. (formerly: TPI Polene Power Co., Ltd.)	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company
TPI All Seasons Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company
Thai Propoxide Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company
TPI Polene Bio Organics Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company (see note 12)
TPI Refinery (1997) Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company (see note 12)
Thai Nitrate Co., Ltd.	Thailand	Subsidiary, 99.99% shareholding, more than 50% of directors are representatives of the Company (see note 5, 12 and 39 (2))
TPI Intertrade Co., Ltd.	Thailand	Subsidiary, 99.97% shareholding, more than 50% of directors are representatives of the Company (see note 12)
TPI Commercial Co., Ltd.	Thailand	Subsidiary, 99.94% shareholding, more than 50% of directors are representatives of the Company
TPI Zenith International Trading Co., Ltd. (formerly: TPI Power Co., Ltd.)	Thailand	Subsidiary, 99.80% shareholding, more than 50% of directors are representatives of the Company (see note 12)
TPI Service Co., Ltd.	Thailand	Subsidiary, 51.00% shareholding, more than 50% of directors are representatives of the Company (see note 12)
Polene Plastic Co., Ltd.	Thailand	Indirect subsidiary, 99.99% shareholding held by Zenith International Trading Co., Ltd., more than 50% of directors are representatives of the Company (see note 12)
Mondo Thai Co., Ltd.	Thailand	Indirect subsidiary, 28.75% shareholding held by the Company and 54.52% shareholding held by TPI Concrete Co., Ltd., more than 50% of directors are representatives of the Company
BUI Life Insurance Public Co., Ltd.	Thailand	Associate, 25% shareholding, more than 20% of directors are representatives of the Company
United Grain Industry Co., Ltd.	Thailand	Associate, 19% shareholding, more than 20% of directors are representatives of the Company
Thai Special Steel Industry Public Co., Ltd.	Thailand	Indirect associate, 29.53% shareholding held by TPI Concrete Co., Ltd., more than 20% of directors are representatives of the Company

Name of entities	Country of incorporation/nationality	Nature of relationships
Thai Plastic Film Co., Ltd.	Thailand	Indirect associate, 99.99% shareholding held by United Grain Industry Co., Ltd., more than 20% of directors are representatives of the Company
Thai Plastic Products Co., Ltd.	Thailand	Indirect associate, 99.99% shareholding held by United Grain Industry Co., Ltd., more than 20% of directors are representatives of the Company
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

The pricing policies for transactions with related parties are explained further below:

Transactions	Pricing policies
Sale of goods	Market price
Transportation income	Market price
Energy service for electrical manufacturing income	Agreed price
Shared service income	Agreed price
Purchase of raw materials and spare parts	Market price
Purchase of electricity	Referred to market price
Purchase of refuse derived fuel (RDF)	Agreed price
Purchase of steam	Agreed price
Purchase of goods for sales promotion	Market price
Acquisition of investment	Book value
Sales of investment	Book value
Interest income	MLR-2% to MLR-1.5%
Interest expense	MLR-1.5%
Insurance premium	Market price
Paper bag production charge	2.0 - 2.6 Baht per bag

Significant transactions for the years ended 31 December with related parties were as follows:

Year ended 31 December	(in thousand Baht)			
	Consolidated financial statements		Separate financial statements	
Subsidiaries	2016	2015	2016	2015
Sales of goods	-	-	9,981,124	8,823,989
Transportation income	-	-	227,277	264,303
Purchase of raw materials and spare parts	-	-	2,718,785	3,284,706
Purchase of electricity	-	-	519,152	466,045
Purchase of refuse derived fuel (RDF)	-	-	7,165	43,148
Purchase of steam	-	-	26,723	12,702
Purchase of goods for sales promotion	-	-	3,739	452
Acquisition of investment	-	-	-	1,474,421
Sales of investment (see note 12)	-	-	97,993	-
Dividend income	-	-	3,153,305	-
Interest income	-	-	175,523	67,251
Interest expense	-	-	7,557	-
Other income	-	-	220,587	80,772
Administrative expenses	-	-	62,241	69,012

(in thousand Baht)

<i>Year ended 31 December</i>	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Joint venture				
Sales of goods	277	214	277	103
Purchase of raw materials	24,920	40,320	24,920	40,320
Other income	498	843	498	843
Associates				
Sale of goods	55,474	50,285	55,199	50,059
Purchase of raw materials	639,309	581,447	611,570	567,466
Insurance premium	16,288	10,238	12,066	13,178
Administrative expenses	1,073	960	-	-
Other related parties				
Sales of goods	2,684	8,320	1,547	7,073
Transportation income	226	327	226	327
Other income	114	81	114	81
Acquisition of investment	-	620	-	620
Insurance premium	166,541	155,486	120,767	121,662
Administrative expenses	102,091	93,847	88,859	73,129
Key management personnel				
Key management personnel compensation				
Short-term employee benefits	367,889	333,140	324,542	333,140
Post-employment benefits	15,984	14,100	14,431	14,100
Total key management personnel compensation	383,873	347,240	338,973	347,240

Balances as at 31 December with related parties were as follows:

(in thousand Baht)

<i>Trade accounts receivable - related parties</i>	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	304,119	883,941
TPI Polene Power Public Co., Ltd.	-	-	14,566	211
TPI All Seasons Co., Ltd.	-	-	153,891	62,318
Polene Plastic Co., Ltd.	-	-	874,328	1,885,878
TPI Polene Bio Organics Co., Ltd.	-	-	9,886	552
TPI Commercial Co., Ltd.	-	-	1,283	563
Thai Nitrate Co., Ltd.	-	-	86	-
Joint venture				
Thai Nitrate Co., Ltd.	-	26	-	4
Associates				
BUI Life Insurance Public Co., Ltd.	6	14	-	-
United Grain Industry Co., Ltd.	41	18	20	14
Thai Plastic Products Co., Ltd.	1,525	-	1,525	-
Other related parties				
Bangkok Union Insurance Public Co., Ltd.	29	11	5	-
Pornchai Enterprise Co., Ltd.	113	259	73	212
Lampand Food Products Co., Ltd.	3	-	3	-
Rayong Forest Co., Ltd.	338	1,048	-	-
Leophairatana Enterprise Co., Ltd.	87	11	-	-
Total	2,142	1,387	1,359,785	2,833,693

(in thousand Baht)

Loans to related parties	Interest rate		Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015	2016	2015
	(% per annum)					
Subsidiaries						
TPI Concrete Co., Ltd.	MLR-1.5	MLR-1.5	-	-	-	420,000
TPI Polene Power Public Co., Ltd.	MLR-1.5	MLR-1.5 to MLR-2.0	-	-	4,528,846	1,635,021
TPI Polene Bio Organics Co., Ltd.	MLR-1.5	-	-	-	70,037	-
TPI All Seasons Co., Ltd.	MLR-1.5	MLR-1.5 to MLR-2.0	-	-	41,153	17,000
TPI Refinery (1997) Co., Ltd.	MLR-1.5	MLR-1.5	-	-	-	1,294,000
TPI Intertrade Co., Ltd.	MLR-1.5	MLR-1.5 to MLR-2.0	-	-	1,412	5,281
TPI Service Co., Ltd.	MLR-1.5	-	-	-	1,000	-
			-	-	4,642,448	3,371,302
Accrued interest receivable			-	-	1,796	2,557
Total			-	-	4,644,244	3,373,859

As at 31 December 2016, all short-term loans and long-term loans to related parties are promissory notes which have repayment schedules on demand and in December 2018, respectively.

Movements during the years ended 31 December of loans to related parties were as follows:

(in thousand Baht)

Loans to related parties	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Subsidiaries				
At 1 January	-	-	3,371,302	304,109
Increase	-	-	6,331,692	6,308,281
Decrease	-	-	(5,060,546)	(3,241,088)
At 31 December	-	-	4,642,448	3,371,302
Receivables and advances to related parties - current				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	3,436	3,198
TPI Polene Power Public Co., Ltd.	-	-	104,351	60,652
TPI All Seasons Co., Ltd.	-	-	20,257	7,349
Thai Propoxide Co., Ltd.	-	-	-	130
Polene Plastic Co., Ltd.	-	-	7,953	6,484
TPI Polene Bio Organics Co., Ltd.	-	-	43,979	25,969
TPI Commercial Co., Ltd.	-	-	151	91
TPI Service Co., Ltd.	-	-	226	145
Thai Nitrate Co., Ltd.	-	-	163	-
Zenith International Trading Co., Ltd.	-	-	60	-
Mondo Thai Co., Ltd.	-	-	460	414
Joint venture				
Thai Nitrate Co., Ltd.	-	133	-	133
Associates				
BUI Life Insurance Public Co., Ltd.	4,161	3,433	3,712	3,068
United Grain Industry Co., Ltd.	3,203	1,346	-	-
Other related parties				
Bangkok Union Insurance Public Co., Ltd.	45,608	68,089	33,815	57,361
Pornchai Enterprise Co., Ltd.	1,181	900	416	358
Rayong Forest Co., Ltd.	67	69	67	69
Saraburi Ginning Mill Co., Ltd.	1	-	-	-
Total	54,221	73,970	219,046	165,421
Receivables and advances to related parties - non-current				
Subsidiary				
Thai Propoxide Co., Ltd.	-	-	421,984	421,984

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 2016, the outstanding amount of accounts receivable from the subsidiary from the sale of land total Baht 422 million and the deferred gain on the sale of Baht 35 million and deferred interest income of Baht 134 million in the statement of financial position of the separate financial statements.

(in thousand Baht)

Trade accounts payable - related parties	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Subsidiaries				
TPI Polene Power Public Co., Ltd.	-	-	4,210	12,223
Polene Plastic Co., Ltd.	-	-	782,721	649,757
TPI Polene Bio Organics Co., Ltd.	-	-	979	1,477
Thai Nitrate Co., Ltd.	-	-	8,389	-
Joint venture				
Thai Nitrate Co., Ltd.	-	5,152	-	5,152
Associate				
United Grain Industry Co., Ltd.	907	1,384	8	63
Thai Plastic Film Co., Ltd.	56,119	58,055	55,682	57,743
Thai Plastic Products Co., Ltd.	71,890	48,457	66,982	47,990
Total	128,916	113,048	918,971	774,405

Movements during the years ended 31 December of short-term loans from related parties were as follows:

(in thousand Baht)

Short-term loans from related parties	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Subsidiaries				
At 1 January	-	-	-	-
Increase	-	-	1,509,408	-
Decrease	-	-	(1,509,408)	-
At 31 December	-	-	-	-
Payables and advances from related parties				
Subsidiaries				
TPI Concrete Co., Ltd.	-	-	2,808	5,949
TPI Polene Power Public Co., Ltd.	-	-	63,693	35,847
TPI All Seasons Co., Ltd.	-	-	5,728	3,433
Polene Plastic Co., Ltd.	-	-	24	25,960
TPI Polene Bio Organics Co., Ltd.	-	-	14	136
Associates				
United Grain Industry Co., Ltd.	1,865	4,420	29	214
Thai Special Steel Industry Public Co., Ltd.	840	5,065	840	5,065
Thai Plastic Film Co., Ltd.	514	722	454	722
Thai Plastic Products Co., Ltd.	100	-	-	-
Other related parties				
Pornchai Enterprise Co., Ltd.	9,526	7,882	8,976	7,180
Bangkok Union Insurance Public Co., Ltd.	13,333	38,365	5,569	28,897
Lampang Food Products Co., Ltd.	-	1	-	1
Hong Yiah Seng Co., Ltd.	2,335	5,219	2,335	5,014
Total	28,513	61,674	90,470	118,418

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.

Significant details of long-term office building lease agreements with a related company as at 31 December were as follows:

Type of agreement	Prepaid rentals	Remaining prepaid rentals	
		2015	2014
		(in thousand Baht)	
The Company			
30 years lease agreement			
(3 years for original agreement)	143,517	108,997	110,592
30 years lease agreement			
(90 years for original agreement)	29,669	23,735	24,064
	<u>173,186</u>	<u>132,732</u>	<u>134,656</u>
Subsidiary			
30 years lease agreement			
(3 years for original agreement)	47,000	35,560	36,080
30 years lease agreement			
(90 years for original agreement)	11,659	9,327	9,457
	<u>58,659</u>	<u>44,887</u>	<u>45,537</u>
Total	<u>231,845</u>	<u>177,619</u>	<u>180,193</u>

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 2016, 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) Land lease agreement

The Company and its subsidiaries entered into several land and office building space lease agreements with related parties for 3 years and 30 years as stated in each agreement. The details as at 31 December were as follows:

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Non-cancellable operating lease commitments				
Within one year	87,115	58,618	63,158	48,724
After one year but within five years	95,971	31,436	46,472	30,076
After five years	162,433	-	20,578	21,594
Total	<u>345,519</u>	<u>90,054</u>	<u>130,208</u>	<u>100,394</u>

The Company and subsidiaries 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 2016 in amount of Baht 108.7 million (2015: nil).

As at 31 December 2016, the Company has guaranteed bank credit facilities and mortgaged land which was obligated by the Company as collateral on behalf of its subsidiary of Baht 117.5 million (2015: nil).

7 Cash and cash equivalents

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Cash on hand	10,042	10,378	6,618	3,437
Cash at banks - current accounts	149,137	176,875	105,264	74,252
Cash at banks - savings accounts	1,679,637	1,324,371	1,121,617	668,262
Cash at banks - savings accounts (private fund)	-	180,549	-	180,549
Highly liquid short-term investments	1,626,779	3,005	1,318,774	2,304
Total	3,465,595	1,695,178	2,552,273	928,804

The currency denomination of cash and cash equivalents as at 31 December were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Thai Baht (THB)	2,995,105	1,139,681	2,193,881	841,004
United States Dollar (USD)	151,182	551,968	40,650	86,970
EURO (EUR)	318,032	2,850	316,596	229
Others	1,276	679	1,146	601
Total	3,465,595	1,695,178	2,552,273	928,804

8 Other investments

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Current investments				
Fixed deposits with financial institutions (Private fund)	-	150,000	-	150,000
Fixed deposits with financial institutions	73,500	1,000	15,500	-
Marketable debt securities (Private fund)	2,169	529,958	2,169	529,958
	75,669	680,958	17,669	679,958
Other long-term investments				
Equity securities available-for-sale	292	262	292	262
Other non-marketable equity securities	1,596	1,596	1,596	1,596
Other debt securities held-to-maturity	34,229	34,320	17,055	17,076
	36,117	36,178	18,943	18,934
Total	111,786	717,136	36,612	698,892

During 2015, the Company set up private funds which are managed by 2 independent assets management companies. Those private funds have invested in fixed deposits with the financial institutions and debt securities which had high liquidity and rating as investment grade. As at 31 December 2016, value of private funds totalling Baht 2 million. (2015: Baht 820 million).

Other investments of the Group and the Company as at 31 December 2016 and 2015 were denominated entirely in Thai Baht.

Deposits at financial institutions and other debt securities held-to-maturity of the Group and the Company are pledged as collateral of Baht 27 million and Baht 17 million, respectively (2015: Baht 27 million and Baht 17 million, respectively).

Movements during the years ended 31 December of marketable equity securities were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Other long-term investments				
Equity securities available-for-sale				
At 1 January	262	187	262	187
Valuation adjustment	30	75	30	75
At 31 December	292	262	292	262

9 Trade accounts receivable

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2016	2015	2016	2015
Related parties	6	2,142	1,387	1,359,785	2,833,693
Other parties		3,139,617	2,637,587	812,228	877,261
Total		3,141,759	2,638,974	2,172,013	3,710,954
Less allowance for doubtful		(126,982)	(111,363)	(51,406)	(84,052)
Net		3,014,777	2,527,611	2,120,607	3,626,902
Bad and doubtful debts expense for the year					
(Reversal of)		9,833	8,950	(60)	(3,272)

Aging analyses for trade accounts receivable were as follows:

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
		2016	2015	2016	2015
Related parties					
Within credit terms		2,109	945	887,705	782,609
Overdue:					
Less than 3 months		12	442	383,024	2,017,909
3 - 6 months		16	-	37,662	33,175
6 - 12 months		-	-	51,116	-
Over 12 months		5	-	278	-
		2,142	1,387	1,359,785	2,833,693
Less allowance for doubtful accounts		-	-	-	-
		2,142	1,387	1,359,785	2,833,693
Other parties					
Within credit terms		2,841,741	2,346,541	694,793	713,002
Overdue:					
Less than 3 months		152,664	153,506	62,929	80,847
3 - 6 months		6,042	7,790	3,388	-
6 - 12 months		3,465	21,306	400	-
Over 12 months		135,705	108,444	50,718	83,412
		3,139,617	2,637,587	812,228	877,261
Less allowance for doubtful accounts		(126,982)	(111,363)	(51,406)	(84,052)
		3,012,635	2,526,224	760,822	793,209
Net		3,014,777	2,527,611	2,120,607	3,626,902

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 360 days.

The currency denomination of trade accounts receivable as at 31 December were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Thai Baht (THB)	2,284,952	2,045,206	2,106,048	3,578,506
United States Dollars (USD)	726,373	478,851	14,559	48,396
EURO (EUR)	3,452	3,554	-	-
Total	3,014,777	2,527,611	2,120,607	3,626,902

10 Inventories

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Finished goods	2,669,122	2,448,700	1,459,806	1,585,232
Work in process	2,609,860	2,120,922	2,523,113	1,754,568
Raw materials and chemicals	1,759,788	1,395,469	1,595,575	1,284,542
Packages	440,023	441,024	363,156	378,316
Oil and coal	1,226,280	1,430,924	1,219,506	1,425,546
Spare parts and general supplies	2,909,085	2,705,957	2,495,027	2,327,940
Goods in transit	279,954	526,390	127,602	410,826
	11,894,112	11,069,386	9,783,785	9,166,970
Less allowance for decline in value	(170,037)	(100,327)	-	(25,793)
Net	11,724,075	10,969,059	9,783,785	9,141,177
Inventories recognised as an expense in cost of sales of goods				
- Cost	24,189,625	22,999,746	19,688,689	18,578,410
- (Reversal of) write-down to net realisable value	126,089	(104,938)	29,925	(179,472)
Net	24,315,714	22,894,808	19,718,614	18,398,938

11 Investments in associates and joint venture

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Associates		(Restated)		
At 1 January	696,932	700,075	229,500	229,500
Share of net profit of investments in associates	22,485	18,790	-	-
Share of other comprehensive income				
(loss) of investments in associates	3,078	(21,933)	-	-
At 31 December	722,495	696,932	229,500	229,500
Joint venture				
At 1 January	885,770	899,406	284,409	284,409
Share of net profit (loss) of investment in joint venture	25,636	(13,636)	-	-
Reclassification to subsidiary (see note 12)	(911,406)	-	(284,409)	-
At 31 December	-	885,770	-	284,409
Total				
At 1 January	1,582,702	1,599,481	513,909	513,909
Share of net profit of investments in associates and joint venture	48,121	5,154	-	-
Share of other comprehensive income				
(loss) of investments in associates	3,078	(21,933)	-	-
Reclassification to subsidiary (see note 12)	(911,406)	-	(284,409)	-
At 31 December	722,495	1,582,702	229,500	513,909

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 2016, the Group's cumulative share of unrecognized loss was Baht 978 million (2015: Baht 975 million), of which the Group's share of loss for the year ended 31 December 2016 was Baht 3 million (2015: Baht 42 million). The Group has no obligation in respect of this loss.

Investments in associates and joint venture as at 31 December were as follows:

	Consolidated financial statements							
	Ownership interest		Paid-up Capital		Cost		Equity method	
	2016	2015	2016	2015	2016	2015	2016	2015
	(%)				(in thousand Baht)			
Associates								
BUI Life Insurance Public Co., Ltd.	25.00	25.00	500,000	500,000	125,000	125,000	132,650	134,177
United Grain Industry Co., Ltd.	19.00	19.00	550,000	550,000	104,500	104,500	589,845	562,755
					229,500	229,500	722,495	696,932
Indirect associate								
Thai Special Steel Industry Public Co., Ltd.	29.53	29.53	4,220,000	4,220,000	1,246,200	1,246,200	-	-
Total - Associates					1,475,700	1,475,700	722,495	696,932
Joint venture								
Thai Nitrate Co., Ltd. (see note 12 and 39 (2))	-	50.00	-	468,750	-	284,409	-	885,770
Total - Joint venture					-	284,409	-	885,770
Total					1,475,700	1,760,109	722,495	1,582,702

	Separate financial statements					
	Ownership interest		Paid-up Capital		Cost	
	2016	2015	2016	2015	2016	2015
	(%)				(in thousand Baht)	
Associates						
BUI Life Insurance Public Co., Ltd.	25.00	25.00	500,000	500,000	125,000	125,000
United Grain Industry Co., Ltd.	19.00	19.00	550,000	550,000	104,500	104,500
					229,500	229,500
Joint venture						
Thai Nitrate Co., Ltd. (see note 12 and 39 (2))	-	50.00	-	468,750	-	284,409
					-	284,409
Total					229,500	513,909

No dividend distribution from investments in associates and joint venture held by the Group and the Company during years ended 31 December 2016 and 2015.

None of the Group's and the Company's associates and joint venture are publicly listed and consequently do not have published price quotations.

The following table summarises the financial information of the joint venture as included in their own financial statements. The table also reconciles the summarized financial information to the carrying amount of the Group's interest in this company.

	(in thousand Baht)	
	2016	2015
Revenue	645,111	918,208
Profit from continuing operations	58,048	48,102
Other comprehensive income (loss)	(6,120)	(75,224)
Total comprehensive income (loss)	51,928	(27,122)
Attributable to investee's shareholders	51,928	(27,122)
Current assets	1,108,408	949,043
Non-current assets	957,162	1,014,331
Current liabilities	(99,368)	(65,949)
Non-current liabilities	(119,806)	(125,733)
Net assets	1,846,396	1,771,692
Attributable to investee's shareholders	1,846,396	1,771,692
Group's interest in net assets of investee at 1 January	885,770	899,406
Total comprehensive income (loss) attributable to the Group	25,964	(13,561)
Group's interest in net assets of investee at end of year	911,734	885,845
Elimination of unrealised profit on upstream sales (purchases of goods from joint venture)	(328)	(75)
Reclassify to subsidiary (see note 12)	(911,406)	-
Carrying amount of interest in investee at 31 December	-	885,770

Immaterial associates

The following is summarized financial information for the Group's interest in immaterial associates based on the amounts reported in the Group's consolidated financial statements:

	(in thousand Baht)	
	Immaterial Associates	
	2016	2015
Carrying amount of interests in immaterial associates	722,495	696,932
Group's share of:		
- Profit from continuing operations	22,485	18,790
- Other comprehensive income (loss)	3,078	(21,933)
- Total comprehensive income (loss)	<u>25,563</u>	<u>(3,143)</u>

12 Investments in subsidiaries

	(in thousand Baht)	
	Separate financial statements	
	2016	2015
At 1 January	8,675,389	5,147,761
Increase	3,858,000	3,527,628
Decrease	(118,452)	-
Gain control of joint venture (see note 5)	<u>784,409</u>	<u>-</u>
	13,199,346	8,675,389
Less allowance for impairment of investments	<u>(382,000)</u>	<u>-</u>
At 31 December	<u>12,817,346</u>	<u>8,675,389</u>

TPI Polene Power Public Co., Ltd.

On 29 May 2015, the Company's Board of Directors' meeting passed the resolution to approve payment for assessable capital stock of TPI Polene Power Public Co., Ltd. of 31.53 million ordinary shares at Baht 23.75 each, in the amount of Baht 748.84 million and approved payment for increasing of share capital with fully paid up of the subsidiary company of 10 million ordinary shares at par value of Baht 100 each, in the amount of Baht 1,000 million which was paid to the subsidiary company in June 2015.

TPI All Seasons Co., Ltd.

On 29 May 2015, the Company's Board of Directors' meeting passed the resolution to approve payment for assessable capital stock of TPI All Seasons Co., Ltd. of 20 million ordinary shares at Baht 4.50 each, in the amount of Baht 90 million and approved payment for increasing of share capital with fully paid up of the subsidiary company of 21.38 million ordinary shares at par value of Baht 10 each, in the amount of Baht 213.75 million which was paid to the subsidiary company in June 2015.

TPI Refinery (1997) Co., Ltd.

On 29 January 2016, the Company's Board of Directors's meeting passed the resolution to approve payment for increasing of share capital in TPI Refinery (1997) Co., Ltd. with fully paid up of 129.90 million ordinary shares at par value of Baht 10 each, in the amount of Baht 1,299 million which was fully paid to the subsidiary in February 2016.

On 26 June 2015, the Company's Board of the Directors' meeting passed the resolution to approve the acquisition of shares in TPI Refinery (1997) Co., Ltd., the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 16 July 2015, the Company obtained control of that company by acquiring 99,995 shares or equivalent to 99.99% of the paid-up share capital at the price of Baht 6.20 per share, in the amount of Baht 0.62 million from a related company, thereby become a subsidiary of the Company.

TPI Concrete Co., Ltd.

On 29 April 2016, the Company's Board of Directors's meeting passed the resolution to approve payment for increasing of share capital in TPI Concrete Co., Ltd. with fully paid up of 11.60 million ordinary shares at par value of Baht 100 each in the amount of Baht 1,160 million which were fully paid to the subsidiary in May 2016.

TPI Polene Bio Organics Co., Ltd.

On 29 April 2016, the Company's Board of Directors's meeting passed the resolution to approve payment for increasing of share capital in TPI Polene Bio Organics Co., Ltd. with fully paid up of 13.00 million ordinary shares at par value of Baht 100 each in the amount of Baht 1,300 million which were fully paid to the subsidiary in May 2016.

On 28 August 2015, the Company's Board of the Directors' meeting passed the resolution to approve the acquisition of shares in TPI Polene Bio Organics Co., Ltd., the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 1 September 2015, the Company obtained control of that company by acquiring 19,999,996 shares or equivalent to 99.99% of the paid-up share capital at the price of Baht 67.72 per share, in the amount of Baht 1,354.40 million from a subsidiary, thereby become a subsidiary of the Company.

Polene Plastic Co., Ltd.

On 15 July 2016, the Company sold 99,993 shares of Polene Plastic Co., Ltd. or equivalent to 99.99% of the paid-up share capital at the price of Baht 980 per share, in the amount of Baht 97.99 million to a subsidiary.

On 28 August 2015, the Company's Board of the Directors' meeting passed the resolution to approve the acquisition of shares in Polene Plastic Co., Ltd., the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 1 September 2015, the Company obtained control of that company by acquiring 99,993 shares or equivalent to 99.99% of the paid-up share capital at the price of Baht 1,184.60 per share, in the amount of Baht 118.45 million from a subsidiary, thereby become a subsidiary of the Company.

TPI Intertrade Co., Ltd.

On 24 July 2015, the Company's Board of the Directors' meeting passed the resolution to approve the acquisition of shares in TPI Intertrade Co., Ltd., the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 27 July 2015, the Company obtained control of that company by acquiring 9,997 shares or equivalent to 99.97% of the paid-up share capital at the price of Baht 0.01 per share, in the amount of Baht 99.97 from related personnels, thereby become a subsidiary of the Company.

Zenith International Trading Co., Ltd.

On 29 July 2016, the Company's Board of Directors' meeting passed the resolution to approve payment for increasing of share capital in Zenith International Trading Co., Ltd. (formerly: TPI Power Co., Ltd.) with fully paid up of 990,000 ordinary shares at par value of Baht 100 each, in the amount of Baht 99 million which was fully paid to the subsidiary in August 2016.

On 24 July 2015, the Company's Board of the Directors' meeting passed the resolution to approve the acquisition of shares in Zenith International Trading Co., Ltd., the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 27 July 2015, the Company obtained control of that company by acquiring 9,980 shares or equivalent to 99.80% of the paid-up share capital at the price of Baht 71.32 per share, in the amount of Baht 0.71 million from a subsidiary, thereby become a subsidiary of the Company.

TPI Service Co., Ltd.

On 28 August 2015, the Company's Board of the Directors' meeting passed the resolution to approve the acquisition of shares in TPI Service Co., Ltd., the main objective is to restructure the shareholding of the Group to support business expansion. Thereafter, on 1 September 2015, the Company obtained control of that company by acquiring 5,100 shares or equivalent to 51.00% of the paid-up share capital at the price of Baht 168.12 per share, in the amount of Baht 0.86 million from a subsidiary, thereby become a subsidiary of the Company.

Thai Nitrate Co., Ltd.

On 2 August 2016, the Company purchased 2,343,750 ordinary shares of Thai Nitrate Co., Ltd. from the group of foreign company in the total amount of Baht 500 million. As a consequence, the Company's interest in such company increased from 50% to 99.99% of the paid-up share capital, and the status of that company has changed from a joint venture to a subsidiary (see note 5).

Mondo Thai Co., Ltd.

During 2015, the Group made an additional investment by acquiring 8,520 shares or equivalent to 23.67% of the paid-up share capital at the price of Baht 2,000 per share, in the amount of Baht 17.04 million from other parties via a direct subsidiary. As a result, the Group's equity interest in that company increased from 54.05% to 77.72% of the paid-up share capital.

During 2016, the Group made an additional investment by acquiring 2,000 shares or equivalent to 5.55% of the paid-up share capital at the price of Baht 2,000 per share, in the amount of Baht 4.00 million from other parties via a direct subsidiary. As a result, the Group's equity interest in that company increased from 77.72% to 83.27% of the paid-up share capital.

Other

During 2016, TPI Polene Power Public Co., Ltd. (“TPIPP”), the Company’s subsidiary with 99.99% of shares held by the Company, filed an application for offering of newly-issued shares with the Office of the Securities and Exchange Commission (the “Office of the SEC”). Concurrently, the Company filed its registration statement for offering of securities with the Office of the SEC, because the Company may consider making a public offering of its shares in TPIPP concurrently with TPIPP’s Initial Public Offering (“IPO”). However, the Company will continue to be the majority, controlling shareholder of TPIPP after the IPO.

Investments in subsidiaries as at 31 December 2016 and 2015, dividend income from those investments for the years then ended, were as follows:

Separate financial statements											
Ownership interest		Paid-up capital		Cost		Impairment		At cost - net		Dividend income	
2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
(%)											
(in thousand Baht)											
Subsidiaries											
TPI Concrete Co., Ltd.		99.99	2,000,000	840,000	1,999,999	839,999	-	-	1,999,999	839,999	-
TPI Polene Power Public Co., Ltd.											
(formerly: TPI Polene Power Co., Ltd.)		99.99	5,900,000	5,900,000	5,899,999	5,899,999	-	-	5,899,999	5,899,999	2,551,750
TPI All Seasons Co., Ltd.		99.99	450,000	450,000	450,000	450,000	-	-	450,000	450,000	-
TPI Polene Bio Organics Co., Ltd.		99.99	3,300,000	2,000,000	2,654,400	1,354,400	(382,000)	-	2,272,400	1,354,400	-
TPI Refinery (1997) Co., Ltd.		99.99	1,300,000	1,000	1,299,620	620	-	-	1,299,620	620	-
Thai Propoxide Co., Ltd.		99.99	250	250	250	250	(250)	(250)	-	-	-
Polene Plastic Co., Ltd.		-	-	10,000	-	118,452	-	-	-	118,452	99,993
Thai Nitrate Co., Ltd.		99.99	468,750	-	784,409	-	-	-	784,409	-	501,562
TPI Intertrade Co., Ltd.		99.97	100	100	-	-	-	-	-	-	-
TPI Commercial Co., Ltd.		99.94	100	100	-	-	-	-	-	-	-
Zenith International Trading Co., Ltd.											
(formerly: TPI Power Co., Ltd.)		99.80	100,000	1,000	99,712	712	-	-	99,712	712	-
TPI Service Co., Ltd.		51.00	1,000	1,000	857	857	-	-	857	857	-
Mondo Thai Co., Ltd.		28.75	36,000	36,000	10,350	10,350	-	-	10,350	10,350	-
Total					13,199,596	8,675,639	(382,250)	(250)	12,817,346	8,675,389	3,153,305

13 Long-term investments in related parties

	Type of business	Relationship	Ownership interest		Paid-up Capital		Consolidated and Separate financial statements	
			2016	2015	2016	2015	2016	2015
			(%)		(in thousand Baht)			
Related parties								
Pornchai Enterprise Co., Ltd.	Real estate and service rental	Shareholder	0.65	0.65	4,599,920	4,599,920	45,653	45,653
TPI Holding Co., Ltd.	Holding company	Shareholder	0.001	0.001	4,044,573	4,044,573	217	217
Total							45,870	45,870

14 Investment properties

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Cost				
At 1 January	634,519	633,631	447,528	447,528
Additions	4,211	2,923	-	-
Decreases	(11,527)	-	(802)	-
Reclassification from (to) property, plant and equipments	-	(2,035)	67,879	-
At 31 December	627,203	634,519	514,605	447,528
Depreciation and impairment losses				
At 1 January	18,137	13,863	-	-
Depreciation charge for the year	1,000	1,000	-	-
(Reversal of) impairment losses	(3,874)	3,274	-	-
At 31 December	15,263	18,137	-	-
Net book value				
At 1 January	616,382	619,768	447,528	447,528
At 31 December	611,940	616,382	514,605	447,528

Investment properties were revalued as at 31 December 2016 and 2015 by a firm of professional valuers, at open market values on an existing use basis. The appraised value of the Group and the Company were Baht 892 million and Baht 602 million, respectively (2015: Baht 892 million and Baht 472 million, respectively).

Investment properties include land for rent, freehold land and condominiums.

Measurement of fair value

Fair value hierarchy

The fair value of investment property was determined by property valuers, having appropriate recognised professional qualifications and recent experience in the location and category of the property being valued. The valuers provide the fair value of the Group's investment property portfolio on a regular basis.

The fair value measurement of all investment property has been categorised as level 3 fair value based on the inputs to the valuation technique used.

Valuation technique and significant unobservable inputs

The following table shows the valuation technique used in measuring the fair value of investment property, as well as the significant unobservable inputs used.

Valuation technique

Discounted cash flows; The valuation model considers the present value of net cash flows to be generated from the property, taking into account expected rental growth rate. The expected net cash flows are discounted using risk-adjusted discount rates. Among other factors, the discount rate estimation considers the quality of its location (prime vs secondary), tenant credit quality and lease terms.

Market approach

Significant Unobservable inputs

- Contractually agreed lease income over the remaining period.
- Risk-adjusted discount rates

The adjusted quoted price and the actual selling price of comparable investment properties.

15 Property, plant and equipment

(in thousand Baht)

Consolidated financial statements

Cost/revaluation

At 1 January 2015	2,864,343	9,059,996	6,808,329	36,176,910	22,704,075	6,003,626	637,419	454,862	1,504,234	222,611	913,817	28,574,721	115,924,943
Additions	72,461	14,309	-	17,573	-	339,909	-	20,557	969	-	294,991	6,796,725	7,557,494
Transfers - net	-	1,475,887	-	8,242,504	-	93,763	-	21,220	-	28,845	-	(9,862,219)	-
Disposals	-	(13,251)	-	(93,367)	-	(64,627)	-	(15,670)	(2,292)	-	-	-	(189,207)
Reclassification from investment properties	2,035	-	-	-	-	-	-	-	-	-	-	-	2,035
At 31 December 2015 and 1 January 2016	2,938,839	10,536,941	6,808,329	44,343,620	22,704,075	6,372,671	637,419	480,969	1,502,911	251,456	1,208,808	25,509,227	123,295,265
Additions	26,788	11,124	-	190,922	-	414,648	-	33,807	9,857	-	21,277	8,983,380	9,691,803
Acquisition through business combinations	235,308	101,484	-	609,410	-	3,858	-	2,162	15	-	-	3,135	955,372
Transfers - net	-	4,896,674	-	18,600,558	-	1,532,978	-	98,732	(137,944)	64,263	-	(25,055,261)	-
Disposals	-	(23,634)	-	(46,474)	-	(8,762)	-	(7,022)	(8,068)	-	-	-	(93,960)
At 31 December 2016	3,200,935	15,522,589	6,808,329	63,698,036	22,704,075	8,315,393	637,419	608,648	1,366,771	315,719	1,230,085	9,440,481	133,848,480

Depreciation and impairment losses

At 1 January 2015	-	4,475,248	634,619	19,367,479	3,196,318	4,404,827	144,655	352,832	974,144	-	-	6,686	33,556,808
Depreciation charge for the year	-	291,559	317,310	1,442,714	1,599,363	280,670	62,293	38,768	38,069	-	-	-	4,070,746
Disposals	-	(12,820)	-	(68,918)	-	(60,376)	-	(15,505)	(2,281)	-	-	-	(179,900)
At 31 December 2015 and 1 January 2016	-	4,753,987	951,929	20,721,275	4,795,681	4,625,121	206,948	376,095	1,009,932	-	-	6,686	37,447,854
Depreciation charge for the year	12	430,745	318,179	1,542,743	925,180	391,402	52,061	40,578	37,911	-	-	-	3,738,811
Transfers - net	-	-	-	-	-	32,165	-	-	(32,165)	-	-	-	-
Disposals	-	(18,034)	-	(34,735)	-	(7,227)	-	(6,884)	(4,260)	-	-	-	(71,140)
At 31 December 2016	12	5,166,698	1,270,108	22,229,283	5,720,861	5,041,461	259,009	409,789	1,011,418	-	-	6,686	41,115,325

Net book value

At 1 January 2015

Owned assets	2,864,343	4,584,748	6,173,710	16,338,528	19,507,757	1,598,799	482,764	87,349	93,462	222,611	913,817	28,568,035	81,445,923
Assets under finance lease	-	-	-	470,903	-	-	-	14,681	436,628	-	-	-	922,212
	2,864,343	4,584,748	6,173,710	16,809,431	19,507,757	1,598,799	482,764	102,030	530,090	222,611	913,817	28,568,035	82,368,135

At 31 December 2015 and 1 January 2016

Owned assets	2,938,839	5,782,954	5,856,400	23,310,128	17,908,394	1,747,550	430,471	96,748	83,353	251,456	1,208,808	25,502,541	85,117,642
Assets under finance lease	-	-	-	312,217	-	-	-	8,126	409,626	-	-	-	729,969
	2,938,839	5,782,954	5,856,400	23,622,345	17,908,394	1,747,550	430,471	104,874	492,979	251,456	1,208,808	25,502,541	85,847,611

At 31 December 2016

Owned assets	3,200,923	10,355,891	5,538,221	41,253,436	16,983,214	3,273,932	378,410	197,086	78,476	315,719	1,230,085	9,433,795	92,239,188
Assets under finance lease	-	-	-	215,317	-	-	-	1,773	276,877	-	-	-	493,967
	3,200,923	10,355,891	5,538,221	41,468,753	16,983,214	3,273,932	378,410	198,859	355,353	315,719	1,230,085	9,433,795	92,733,155

(in thousand Baht)

Separate financial statements

Cost/revaluation												
At 1 January 2015	2,505,677	8,452,960	6,808,329	28,097,444	22,704,075	5,810,800	637,419	367,872	1,441,914	138,008	23,869,700	100,834,988
Additions	56,258	-	-	2,662	-	343,347	-	16,559	6,956	-	4,288,543	4,714,325
Transfers-net	-	1,399,808	-	4,470,078	-	79,710	-	20,317	-	57,403	(6,027,316)	-
Disposals	-	-	-	(92,012)	-	(64,261)	-	(11,587)	(2,292)	-	-	(170,152)
At 31 December 2015 and 1 January 2016	2,561,935	9,852,768	6,808,329	32,478,172	22,704,075	6,169,596	637,419	393,161	1,446,578	195,411	22,130,927	105,378,371
Additions	38,277	-	-	13,580	-	392,578	-	29,001	9,025	-	2,465,560	2,943,021
Transfers-net	-	4,726,289	-	16,425,511	-	1,528,264	-	96,990	(137,944)	37,857	(22,676,967)	-
Disposals	-	-	-	(28,231)	-	(7,959)	-	(5,782)	(7,402)	-	-	(49,374)
Reclassification to investment properties	(67,879)	-	-	-	-	-	-	-	-	-	-	(67,879)
At 31 December 2016	2,532,333	14,579,057	6,808,329	48,889,032	22,704,075	8,082,479	637,419	513,370	1,310,257	233,268	1,919,520	108,209,139
Depreciation and impairment losses												
At 1 January 2015	-	4,110,329	634,619	15,973,125	3,196,318	4,297,361	144,655	280,892	953,076	-	-	29,590,375
Depreciation charge for the year	-	234,508	317,310	933,509	1,599,363	269,737	62,293	33,043	31,574	-	-	3,481,337
Disposals	-	-	-	(87,563)	-	(60,010)	-	(11,472)	(2,281)	-	-	(161,326)
At 31 December 2015 and 1 January 2016	-	4,344,837	951,929	16,819,071	4,795,681	4,507,088	206,948	302,463	982,369	-	-	32,910,386
Depreciation charge for the year	-	364,518	318,179	989,890	925,180	375,084	52,061	35,102	33,186	-	-	3,093,200
Transfers-net	-	-	-	-	-	32,165	-	-	(32,165)	-	-	-
Disposals	-	-	-	(17,028)	-	(3,526)	-	(5,634)	(3,594)	-	-	(29,782)
At 31 December 2016	-	4,709,355	1,270,108	17,791,933	5,720,861	4,910,811	259,009	331,931	979,796	-	-	35,973,804
Net book value												
At 1 January 2015	2,505,677	4,342,631	6,173,710	12,124,319	19,507,757	1,513,439	492,764	72,299	52,209	138,008	23,869,700	70,792,513
Owned assets	-	-	-	-	-	-	-	14,681	436,629	-	-	451,310
Assets under finance lease	2,505,677	4,342,631	6,173,710	12,124,319	19,507,757	1,513,439	492,764	86,980	488,838	138,008	23,869,700	71,243,823
At 31 December 2015 and 1 January 2016	2,561,935	9,856,400	5,856,400	15,659,101	17,908,394	1,662,508	430,471	82,572	54,583	195,411	22,130,927	72,050,233
Owned assets	-	-	-	-	-	-	-	8,126	409,626	-	-	417,752
Assets under finance lease	2,561,935	5,507,931	5,856,400	15,659,101	17,908,394	1,662,508	430,471	90,698	464,209	195,411	22,130,927	72,467,985
At 31 December 2016	2,532,333	9,869,702	5,538,221	31,097,099	16,983,214	3,171,668	378,410	179,666	53,584	233,268	1,919,520	71,956,685
Owned assets	-	-	-	-	-	-	-	1,773	276,877	-	-	278,650
Assets under finance lease	2,532,333	9,869,702	5,538,221	31,097,099	16,983,214	3,171,668	378,410	181,439	330,461	233,268	1,919,520	72,235,335

The gross amount of the Group and the Company's fully depreciated plant and equipment that was still in use as at 31 December 2016 amounted to Baht 10,868 million and Baht 7,691 million, respectively (2015: Baht 6,835 million and Baht 4,338 million, respectively).

Security

At 31 December 2016 the Group and Company's land, buildings, machinery and equipment with a net book value of Baht 29,385 million and Baht 29,385 million, respectively (2015: Baht 15,332 million and Baht 15,332 million, respectively) are mortgaged or pledged as collateral for the long-terms loan.

Property, plant and equipment under construction

A subsidiary prepared Code of Practice report of the Power Plant 70 Megawatts in accordance with the condition of the Office of National Environmental Board and sent to Energy Regulatory Commission ("ERC") for consideration. Subsequently, the ERC sent a letter to notifying that a subsidiary has to conduct the Environmental Impact Assessment report ("EIA report"). A subsidiary filed an appeal letter and the ERC has approved the extension for the signing of Power Purchase Agreements with Electricity Generating Authority of Thailand. At the present, a subsidiary is in the process of preparing EIA report and expects to send the EIA report for consideration within March 2017.

Capitalised borrowing costs relating to the acquisition of the construction of new factory of the Group and the Company as at 31 December 2016 are Baht 101 million and Baht 70 million, respectively (2015: Baht 640 million and Baht 531 million, respectively), with capitalization in the consolidated financial statements the separate financial statements of MLR-1.75 to MLR-2, 3M EURIBOR+1.65%, 6M EURIBOR+1.1%, 6M USD LIBOR+2.2% (2015: MLR-1.5% to MLR-0.75%, 3M EURIBOR+1.65%, 6M EURIBOR+1.1% and 6M USD LIBOR+2.2%).

Surplus on fixed assets revaluation

In December 2012, the Company hired a foreign independent appraiser, to appraise the value of certain items of its manufacturing plant, machinery and factory equipment of cement and dry mortar including distribution terminals. The value of these assets, the original cost of which was Baht 30,365 million (book value of Baht 13,973 million), was appraised at USD 1,280 million, equivalent to reappraisal book value of Baht 39,402 million, calculated using the rate of Baht 30.7775 to USD 1 at the appraisal date. The appraised value is based on the Replacement Time Value, taking into consideration the replacement value and the remaining life of an asset which is the current acquisition cost of assets with the same layout, capacity and technological standard as the assets valued, including capitalised interest costs. As a result of this reappraisal, the carrying amounts of total assets and equity of the Group and the Company at that date increased by Baht 25,429 million (compared with the original cost). As at 31 December 2016, the remaining portion of surplus on assets revaluation of the Group and the Company amounted to Baht 19,246 million (2015: Baht 20,278 million).

However, buildings, machinery and equipment as of appraisal date with book value of Baht 2,145 million have not been revalued by independent appraisers as the nature and use in the Company's operations is different from the revalued assets.

In addition, in December 2012, the Company hired a foreign independent appraiser, to appraise the value of its LDPE and EVA plastic manufacturing plant and machinery. The value of these assets, the original cost of which was Baht 3,897 million (book value of Baht 1,258 million), was appraised at USD 195 million, equivalent to reappraisal book value of Baht 6,001 million, calculated using the rate of Baht 30.7775 to USD 1 at the appraisal date. The appraised value is based on the *Fair Market Value* which is the current acquisition cost of assets with the same layout, capacity and technological standard as the assets valued, including capitalized interest costs. As a result of this reappraisal, the carrying amounts of total assets and equity at that date increased by Baht 4,743 million in the consolidated and the separate financial statements (compared with the original cost). As at 31 December 2016, the remaining portion of surplus on assets revaluation of the Group and the Company amounted to Baht 3,654 million (2015: Baht 3,917 million).

Measurement of fair value

Fair value hierarchy

The fair value of manufacturing plant, machinery and factory equipment was determined by property valuers, having appropriate recognised professional qualifications and recent experience in the location and category of the property being valued. The valuers provide the fair value of the Group's manufacturing plant, machinery and factory equipment portfolio on a regular basis.

The fair value measurement for manufacturing plant, machinery and factory equipment has been categorised as a Level 3 fair value based on the inputs to the valuation technique used.

Impairment testing for carrying amount of property plant and equipment

The recoverable amount was based on its value in use, determined by discounting future cash flows to be generated from the continuing use of assets.

Five years of cash flows were included in the discounted cash flow model. A long-term growth rate into perpetuity has been determined using the long-term compound annual Earnings Before Interest, Taxes, Depreciation, and Amortisation (EBITDA) growth rate estimated by management. Budgeted EBITDA was based on expectations of future outcomes taking into account past experience, adjusted for anticipated revenue growth. Revenue growth was projected taking into account the average growth levels experienced and the estimated sales volume and price growth for the next five years.

Based on the impairment testing by the discounted cash flow method using the estimated post-tax rates referred to weighted average cost of capital (WACC), the recoverable amount was estimated to be higher than its carrying amount and no impairment was required to these financial statements.

Exploration assets

For the exploration assets which the net book value as at 31 December 2016 of Baht 1,230 million. In August 2016, a subsidiary has granted an extension of time until February 2020 for petroleum exploration. Base on the study of the consulting company and the assessment of a subsidiary, the area has high petroleum potential. If a subsidiary continue to explore and drill for the well, it is highly probable to find petroleum.

At present, a subsidiary is studying the petroleum of petroleum exploration by studying the information of existing well to identify the position of exist well. The management believe that the investment in the petroleum exploration of this two wells is still value and the subsidiary is still in the process of exploration above. Hence, the cost associated with the exploration will be recognised as expense to profit or loss in the period when there is no discovery of proved reserves and no future exploration and assessment plan.

16 Intangible assets

(in thousand Baht)

	Consolidated and Separate financial statements			
	Cost of raw material resources and cost of concessions	Software licenses	Development assets	Total
<i>Cost</i>				
At 1 January 2015	700,353	41,157	-	741,510
Additions	34,211	2,713	-	36,924
At 31 December 2015 and 1 January 2016	734,564	43,870	-	778,434
Additions	-	4,551	38,628	43,179
At 31 December 2016	734,564	48,421	38,628	821,613
<i>Amortisation</i>				
At 1 January 2015	474,816	41,157	-	515,973
Amortisation for the year	28,249	191	-	28,440
At 31 December 2015 and 1 January 2016	503,065	41,348	-	544,413
Amortisation for the year	28,152	722	3,893	32,767
At 31 December 2016	531,217	42,070	3,893	577,180
<i>Net book value</i>				
At 1 January 2015	225,537	-	-	225,537
At 31 December 2015 and 1 January 2016	231,499	2,522	-	234,021
At 31 December 2016	203,347	6,351	34,735	244,433

17 Deferred tax

Deferred tax assets and liabilities as at 31 December were as follows:

(in thousand Baht)

	Consolidated financial statements			
	Assets		Liabilities	
	2016	2015	2016	2015
Total	820,741	448,247	(5,305,601)	(5,431,820)
Set off of tax	(596,271)	(264,675)	596,271	264,675
Net deferred tax assets (liabilities)	224,470	183,572	(4,709,330)	(5,167,145)

(in thousand Baht)

	Separate financial statements			
	Assets		Liabilities	
	2016	2015	2016	2015
Total	712,655	314,180	(5,246,307)	(5,476,535)
Set off of tax	(712,655)	(314,180)	712,655	314,180
Net deferred tax liabilities	-	-	(4,533,652)	(5,162,355)

Movements in total deferred tax assets and liabilities during the year were as follows:

(in thousand Baht)

Consolidated financial statements					
	At 1 January 2016	(Charged) / credited to:		Acquired in business combination	At 31 December 2016
		Profit or loss	Other comprehensive income	(Note 5)	
		(Note 33)			
Deferred tax assets					
Allowance for doubtful account receivables	26,071	(7,528)	-	10,930	29,473
Allowance for decline in value of inventories	5,159	(1,405)	-	370	4,124
Allowance for impairment of assets	3,228	(735)	(6)	-	2,487
Provision for sales discount and sales promotional	9,347	4,739	-	-	14,086
Employee benefit obligations	260,763	8,293	(6,703)	5,756	268,109
Loss carry forward	143,679	358,313	-	-	501,992
Others	-	-	-	470	470
Total	448,247	361,677	(6,709)	17,526	820,741
Deferred tax liabilities					
Amortisation gap of concessions	(6,555)	620	-	-	(5,935)
Financial lease	(110,244)	(30,953)	-	-	(141,197)
Depreciation gap of assets	(475,968)	(3,253)	-	-	(479,221)
Revaluation on assets	(4,839,053)	262,696	-	(102,891)	(4,679,248)
Total	(5,431,820)	229,110	-	(102,891)	(5,305,601)
Net	(4,983,573)	590,787	(6,709)	(85,365)	(4,484,860)

(in thousand Baht)

Consolidated financial statements			
(Charged) / credited to:			
At 1 January 2015	Profit or loss	Other comprehensive income (Note 33) (Restated)	At 31 December 2015
Deferred tax assets			
Allowance for doubtful account receivables	49,486	(23,415)	26,071
Allowance for decline in value of inventories	41,053	(35,894)	5,159
Allowance for impairment of assets	2,589	654	3,228
Provision for sales discount and sales promotional	7,687	1,660	9,347
Employee benefit obligations	217,524	9,566	260,763
Loss carry forward	14,126	129,553	143,679
Others	(783)	783	-
Total	331,682	82,907	33,658
Deferred tax liabilities			
Amortisation gap of concessions	(7,068)	513	(6,555)
Financial lease	(79,625)	(30,619)	(110,244)
Depreciation gap of assets	(508,398)	32,430	(475,968)
Revaluation on assets	(5,234,846)	395,793	(4,839,053)
Total	(5,829,937)	398,117	-
Net	(5,498,255)	481,024	33,658

(in thousand Baht)

Separate financial statements			
(Charged) / credited to:			
At 1 January 2016	Profit or loss	Other comprehensive income (Note 33)	At 31 December 2016
Deferred tax assets			
Allowance for doubtful account receivables	23,529	(6,529)	17,000
Allowance for decline in value of inventories	5,159	(5,159)	-
Allowance for impairment of assets	1,005	76,440	77,439
Provision for sales discount and sales promotional	8,679	4,639	13,318
Employee benefit obligations	231,935	5,400	235,646
Loss carry forward	43,873	325,379	369,252
Total	314,180	400,170	(1,695)
Deferred tax liabilities			
Amortisation gap of concessions	(6,555)	620	(5,935)
Financial lease	(60,217)	(19,690)	(79,907)
Depreciation gap of assets	(570,711)	(9,786)	(580,497)
Revaluation on assets	(4,839,052)	259,084	(4,579,968)
Total	(5,476,535)	230,228	-
Net	(5,162,355)	630,398	(1,695)

		<i>(in thousand Baht)</i>	
		Separate financial statements	
		(Charged) / credited to:	
		Other comprehensive	
		income	
		(Note 33)	
		(Restated)	
	At 1 January 2015	Profit or loss	At 31 December 2015
Deferred tax assets			
Allowance for doubtful account receivables	46,468	(22,939)	23,529
Allowance for decline in value of inventories	41,053	(35,894)	5,159
Allowance for impairment of assets	1,020	-	1,005
Provision for sales discount and sales promotional	6,834	1,845	8,679
Employee benefit obligations	192,189	10,027	231,935
Loss carry forward	-	43,873	43,873
Others	(378)	378	-
Total	287,186	(2,710)	314,180
Deferred tax liabilities			
Amortisation gap of concessions	(7,068)	513	(6,555)
Financial lease	(45,850)	(14,367)	(60,217)
Depreciation gap of assets	(597,558)	26,847	(570,711)
Revaluation on assets	(5,234,845)	395,793	(4,839,052)
Total	(5,885,321)	408,786	(5,476,535)
Net	(5,598,135)	406,076	29,704

Deferred tax assets arising from unused tax losses that has not been recognised in the consolidated financial statements and separate financial statements as at 31 December 2016 amounted to Baht 137.0 million and Baht 15.8 million, respectively (2015: Baht 128.1 million and Baht 9.2 million, respectively).

The tax losses expire in 2017 to 2021. The deductible temporary differences do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profit will be available against which the Group can utilise the benefits therefrom.

18 Interest-bearing liabilities

	<i>(in thousand Baht)</i>			
	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Current				
Short-term loans from financial institutions				
unsecured	5,609,638	923,136	4,718,066	923,136
Short-term loans from financial institutions	5,609,638	923,136	4,718,066	923,136
Current portion of long-term loans from financial institutions				
secured	906,485	404,436	741,485	404,436
Current portion from financial institutions	906,485	404,436	741,485	404,436
Current portion of debentures	3,000,000	3,000,000	3,000,000	3,000,000
Current portion of finance lease liabilities	87,480	203,797	40,155	110,152
Total current interest-bearing liabilities	9,603,603	4,531,369	8,499,706	4,437,724
Non-current				
Long-term loans from financial institutions				
secured	8,002,058	6,504,022	5,670,430	6,504,022
Long-term loans from financial institutions	8,002,058	6,504,022	5,670,430	6,504,022
Debentures	29,000,000	26,555,000	29,000,000	26,555,000
Finance lease liabilities	3,134	90,921	3,134	43,597
Total non-current interest-bearing liabilities	37,005,193	33,149,943	34,673,564	33,102,619
Total	46,608,795	37,681,312	43,173,270	37,540,343

The periods to maturity of interest-bearing liabilities, excluding finance lease liabilities, as at 31 December were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Within one year	9,516,123	4,327,572	8,459,551	4,327,572
After one year but within five years	26,099,341	21,939,712	24,120,941	21,939,712
After five years	10,902,717	11,119,310	10,549,489	11,119,310
Total	46,518,181	37,386,594	43,129,981	37,386,594

Secured interest-bearing liabilities as at 31 December were secured on the following net book value assets:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Land and buildings	7,934,120	7,901,193	7,934,120	7,901,193
Investment properties	117,492	-	117,492	-
Machinery and equipment	21,332,966	7,430,782	21,332,966	7,430,782
Total	29,384,578	15,331,975	29,384,578	15,331,975

As at 31 December 2016 the Group and the Company had unutilised credit facilities totalling Baht 997 million and Baht 138 million, respectively (2015: Baht 382 million and Baht 326 million, respectively).

Finance lease liabilities

Finance lease liabilities as at 31 December were payable as follows:

(in thousand Baht)

	Consolidated financial statements					
	2016			2015		
	Future minimum lease payments	Interest	Present value of minimum lease payments	Future minimum lease payments	Interest	Present value of minimum lease payments
Within one year	90,749	3,269	87,480	216,846	13,049	203,797
After one year but within five years	3,297	163	3,134	94,046	3,125	90,921
Total	94,046	3,432	90,614	310,892	16,174	294,718

(in thousand Baht)

	Separate financial statements					
	2016			2015		
	Future minimum lease payments	Interest	Present value of minimum lease payments	Future minimum lease payments	Interest	Present value of minimum lease payments
Within one year	42,235	2,080	40,155	116,950	6,798	110,152
After one year but within five years	3,297	163	3,134	45,533	1,936	43,597
Total	45,532	2,243	43,289	162,483	8,734	153,749

The currency denomination of interest-bearing liabilities as at 31 December was as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Thai Baht (THB)	39,272,908	30,772,854	36,728,955	30,631,885
United States Dollars (USD)	1,497,725	658,007	678,857	658,007
EURO (EUR)	5,838,162	6,250,451	5,765,458	6,250,451
Total	46,608,795	37,681,312	43,173,270	37,540,343

Loan from financial institutions

On 25 January 2013 and 26 March 2013, the Company had signed 4 facility agreements for investment in the Fourth Cement Plant Project. As at 31 December 2016, 3 facility agreements remained and total amount was equivalent to Baht 6,608 million (2015: 3 facility agreements totaling Baht 6,123 million). The Company fulfilled the condition precedent of the Facility Agreements which enable the Company to disburse the loan from such Facility Agreements since 27 March 2013, as following financial institutions:

1. Foreign financial institutions in the total amount of Euro 114.5 million covered by Euler Hermes Deutschland AG (German Export Credit Agency of the German Ministry of Finance);
2. Foreign financial institution in the total amount of Euro 26.4 million covered by the Office of National Du Ducroire or ONDD (Belgian Export Credit Agency);
3. Foreign financial institution in the total amount of Euro 13.0 million covered by the Office of National Du Ducroire or ONDD (Belgian Export Credit Agency); and
4. Domestic financial institutions in the total amount of Baht 5,500 million. (Fully paid in 2015)

The Company had signed the addition loans agreements from domestic and foreign financial institutions to increase investment for the project in the amount of Baht 600 million (Fully paid in 2015), Euro 8 million and USD 20.6 million

As at 31 December 2016, the Company had long-term loans from financial institutions of Baht 6,222 million (2015: Baht 6,908 million) for the project. Principal repayment shall be made in 6 - 12 years by half year repayment commencing the earlier of; 6 month from receiving of plant acceptance certificates or 3.5 years from the effective date of facility agreement. As at 31 December 2016, the Company has fully utilised its credit facilities. Interest rates for project is according to agreement rate (See note 37).

On 9 March 2016, a subsidiary had signed loan agreement in the amount of Baht 3,300 million with local financial institutions for investment in Alternative Fuel Power Plant with total capacity of 70 megawatt, with the term of 7 years. First principle installment repayment shall be made after 2 years. Interest rate is as specified in agreement. As at 31 December 2016, a subsidiary had long-term loan from financial institutions of Baht 2,497 million.

On 22 August 2013, a subsidiary has signed facility agreement in the amount of Baht 4,700 million with local financial institutions, with the term of 7 years. Principle repayment shall be made in after 2 years. Interest rate is according to agreement rate for investment (See note 37) in Alternative Fuel Power Plant and Waste Heat Recovery Power Plant with total capacity of 90 megawatt. As at 31 December 2015, the balance of loan under this facility was nil as it was fully paid in 2015.

Long-term borrowings as mentioned above are secured by related land, buildings and equipment of each project. The credit utilisation agreements contain covenants with which the Group has to comply, pertaining to matters such as maintaining of certain financial ratios, maintaining of percentage of shares held by the major shareholder, and remaining as a public company listed on the Stock Exchange of Thailand.

Debentures

As at 31 December 2016, the Company had the unsecured, unsubordinated debentures in registered form with debentures holders' representative, payable quarterly totalling Baht 32,000 million (2015: Baht 29,555 million) as follows:

Issued Date	Consolidated and Separate financial statements							
	The period to maturity within one year		The period to maturity over one year		Total		Interest Rate	Term
	2016	2015	2016	2015	2016	2015		
	(in thousand Baht)							(%p.a.)
30 May 2013	-	3,000,000	-	-	-	3,000,000	5.20	3 years
17 January 2014	3,000,000	-	-	3,000,000	3,000,000	3,000,000	5.00	3.5 years
17 January 2014	-	-	2,000,000	2,000,000	2,000,000	2,000,000	5.30	4.5 years
22 January 2015	-	-	3,000,000	3,000,000	3,000,000	3,000,000	4.85	4 years
22 January 2015	-	-	3,000,000	3,000,000	3,000,000	3,000,000	5.20	5 years
5 August 2015	-	-	3,000,000	3,000,000	3,000,000	3,000,000	4.10	3 years
5 August 2015	-	-	2,750,000	2,750,000	2,750,000	2,750,000	4.40	4 years
5 August 2015	-	-	2,205,000	2,205,000	2,205,000	2,205,000	4.65	5 years
5 August 2015	-	-	3,600,000	3,600,000	3,600,000	3,600,000	4.90	6 years
5 August 2015	-	-	4,000,000	4,000,000	4,000,000	4,000,000	5.20	7 years
1 April 2016	-	-	1,600,000	-	1,600,000	-	4.35	5 years
1 April 2016	-	-	1,200,000	-	1,200,000	-	4.60	6 years
1 April 2016	-	-	2,645,000	-	2,645,000	-	4.80	7 years
Total	3,000,000	3,000,000	29,000,000	26,555,000	32,000,000	29,555,000		

19 Trade accounts payable

(in thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2016	2015	2016	2015
Related parties	6	128,916	113,048	918,971	774,405
Other parties		2,085,414	2,410,890	1,676,034	1,854,761
Total		2,214,330	2,523,938	2,595,005	2,629,166

The currency denomination of trade accounts payable as at 31 December was as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Thai Baht (THB)	2,083,039	2,308,261	2,594,342	2,628,498
United States Dollars (USD)	97,535	208,621	663	668
EURO (EUR)	18,937	7,056	-	-
Others	14,819	-	-	-
Total	2,214,330	2,523,938	2,595,005	2,629,166

20 Other payables

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Accrued expenses	730,115	1,014,311	587,050	866,549
Deposit from sales	358,024	309,401	320,662	182,564
Guarantee and deposits	293,637	281,024	268,250	254,016
Retention payable	173,130	376,341	124,788	348,321
Machine Payable	2,518,309	1,680,240	306,726	435,244
Others	728,487	562,243	553,055	401,213
Total	4,801,702	4,223,560	2,160,531	2,487,907

21 Employee benefit obligations

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Statement of financial position Obligations for:				
Post-employment benefits	1,373,924	1,317,394	1,178,236	1,159,678
Total	1,373,924	1,317,394	1,178,236	1,159,678
Year ended 31 December				
Statement of comprehensive income:				
Recognised in profit or loss:				
Post-employment benefits	76,495	75,931	60,212	59,687
Total	76,495	75,931	60,212	59,687
Recognised in other comprehensive income:				
Actuarial (gains) losses recognised in the year	(35,061)	166,457	(8,443)	148,597

Legal severance pay plan

The Group and the Company operate defined benefit plans based on the requirement of Thai Labour Protection Act B.E. 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service.

The defined benefit plans expose the Group to actuarial risks, such as longevity risk, currency risk, interest rate risk and market (investment) risk.

Movement in the present value of the defined benefit obligations.

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Defined benefit obligations at 1 January	1,317,394	1,087,648	1,159,678	960,946
Include in profit or loss:				
Current service cost and interest on obligation 76,495	75,931	60,212	59,687	
Included in other comprehensive income				
Actuarial gain (loss)	(35,061)	166,457	(8,443)	148,597
Other				
Benefit paid by the plan	(13,684)	(12,642)	(13,297)	(9,552)
Transfer of employee benefit obligations	-	-	(19,914)	-
Acquisition through business combination (see note 5)	28,780	-	-	-
Defined benefit obligations at 31 December	1,373,924	1,317,394	1,178,236	1,159,678

Actuarial gains and losses recognised in other comprehensive income were mainly arose from the change of discount rate and future salary growth.

Actuarial assumptions

The following were the principal actuarial assumptions at the reporting date (expressed as weighted averages).

(%)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Discount rate	3.38 - 3.49	3.55 - 4.64	3.38 - 3.46	3.55 - 3.74
Future salary growth	5.10 - 7.72	2.55 - 7.43	5.10 - 7.72	5.21 - 7.43

Assumptions regarding future mortality have been based on published statistics and mortality tables.

At 31 December 2016, the weighted-average duration of the defined benefit obligation was 22 years (2015: 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>(in thousand Baht)</i>			
	Consolidated financial statements		Separate financial statements	
	Increase	Decrease	Increase	Decrease
Defined benefit obligation 31 December 2016				
Discount rate (1% movement)	(121,292)	173,674	(113,425)	149,759
Future salary growth (1% movement)	119,440	(132,126)	132,554	(113,825)
Defined benefit obligation 31 December 2015				
Discount rate (1% movement)	(142,527)	170,847	(123,364)	147,587
Future salary growth (1% movement)	150,923	(129,895)	130,491	(112,094)

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

22 Share capital

	<i>Par value per share (in Baht)</i>	<i>(thousand shares / thousand Baht)</i>			
		2016		2015	
		Number	Amount	Number	Amount
Authorised					
At 31 December					
- ordinary shares	1	<u>24,815,000</u>	<u>24,815,000</u>	<u>24,815,000</u>	<u>24,815,000</u>
Issued and paid-up					
At 31 December					
- ordinary shares	1	<u>20,190,000</u>	<u>20,190,000</u>	<u>20,190,000</u>	<u>20,190,000</u>

23 Treasury shares held by a subsidiary

The meeting of the Plan Administrator held on 3 March 2003 approved the donation of 20 million ordinary shares at Baht 10 per share of the Company by assigning a subsidiary company to purchase shares of the Company on the Stock Exchange of Thailand at a price per share not exceeding Baht 17 and paid advances to the subsidiary company of Baht 393 million. In the first quarter of 2003, the subsidiary made purchases of the Company's shares on the Stock Exchange of Thailand 20 million shares totaling Baht 333.25 million. These shares are intended to be donated.

As at 31 December 2016 and 2015, the remaining balance of the treasury shares held by subsidiaries of 222.16 million shares at Baht 1 per share at cost of Baht 359.24 million is presented as a separate category within equity and recognised as a deduction from equity in the consolidated financial statements.

24 Reserves

Reserves comprise:

Appropriations of profit

Legal reserve

Section 116 of the Public Companies Act B.E. 2535 requires that a public company shall allocate not less than 5% of its annual net profit, less any accumulated losses brought forward, to a reserve account ("legal reserve"), until this account reaches an amount not less than 10% of the registered authorised capital. The legal reserve is not available for dividend distribution.

Other components of equity

Fair value changes in available-for-sale investments

The fair value changes in available-for-sale investments account within equity comprises the cumulative net change in the fair value of available-for-sale investments until the investments are derecognised or impaired.

Revaluation surplus

The revaluation surplus account within equity comprises the cumulative net change in the valuation of property, plant and equipment included in the financial statements at valuation until such property, plant and equipment is sold or otherwise disposed of.

Movements in reserves

Movements in reserves are shown in the statement of changes in equity.

25 Segment information

The Group has four reportable segments, as described below, which are the Group's strategic divisions. The strategic divisions offer different products and services, and are managed separately because they require different technology and marketing strategies. For each of the strategic divisions, the chief operating decision maker (CODM) reviews internal management reports on at least a quarterly basis. The following summary describes the operations in each of the Group's reportable segments.

- Construction Materials
- Petrochemical & Chemicals
- Energy & Utilities
- Agriculture

Information regarding the results of each reportable segment is included below. Performance is measured based on segment profit before tax, as included in the internal management reports that are reviewed by the Group's CODM. Segment profit before tax is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

(a) Reportable segment results

	Revenue from external customers		Inter-segment revenue		Total segment revenue		Reportable segment profit (loss) before income tax	
	2016	2015	2016	2015	2016	2015	2016	2015 (Restated)
Construction Materials	18,556,750	18,237,937	7,035,489	6,408,871	25,592,239	24,646,808	(3,141,157)	(2,301,563)
Petrochemical & Chemicals	6,759,341	6,803,148	5,675,678	5,793,109	12,435,019	12,596,257	193,044	(69,738)
Energy & Utilities	3,714,303	1,989,637	576,516	560,789	4,290,819	2,550,426	1,813,117	915,895
Agriculture	97,821	104,441	106,996	118,111	204,817	222,552	(253,594)	(118,711)
Total	29,128,215	27,135,163	13,394,679	12,880,880	42,522,894	40,016,043	(1,388,590)	(1,574,117)
Other loss							(9,390)	(2,188)
							(1,397,980)	(1,576,305)
Elimination of inter-segment loss							(120,514)	(144,038)
Gain on bargain purchase (see note 5)							434,990	-
Loss before income tax expense for the year							(1,083,504)	(1,720,343)

(b) Reportable segment financial position

(in thousand Baht)

	Segment assets	
	2016	2015 (Restated)
Construction Materials	88,835,847	86,697,763
Petrochemical & Chemicals	10,861,078	10,279,961
Energy & Utilities	18,059,593	11,399,155
Agriculture	2,534,211	4,076,617
Others	421,309	423,520
	120,712,038	112,877,016
Unallocated assets	1,797,657	2,299,798
Total	122,509,695	115,176,814
Elimination of inter-segment assets	(6,975,422)	(7,531,772)
Total assets	115,534,273	107,645,042

Geographical segments

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment assets are based on the geographical location of the assets.

Geographical information

(in thousand Baht)

	Revenues	
	2016	2015
Thailand	19,834,519	19,119,267
China	3,148,714	3,333,538
Bangladesh	2,157,579	955,034
Others	3,987,403	3,727,324
Total	29,128,215	27,135,163

The Group generates revenue from current assets located principally in Thailand.

26 Investment income

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2016	2015	2016	2015
Dividend income					
Subsidiaries	6	-	-	3,153,305	-
Other parties		13	5	13	5
		13	5	3,153,318	5
Interest income					
Subsidiaries	6	-	-	175,523	67,251
Other parties		28,183	42,480	22,107	40,069
Private fund		-	17,664	-	17,664
		28,183	60,144	197,630	124,984
Others					
Other investment income		6,027	16,144	15,890	24,613
		6,027	16,144	15,890	24,613
Total		34,223	76,293	3,366,838	149,602

27 Other income

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Rental trucks income	127,744	148,440	134,894	155,640
Income from sale of spare parts	19,464	39,076	44,005	39,076
Sale steam	9,241	11,002	9,241	11,002
Share services income	-	-	129,039	55,740
Others	185,925	485,344	193,434	409,325
Total	342,374	683,862	510,613	670,783

28 Selling expenses

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Delivery expenses	2,344,408	2,313,814	2,232,832	2,220,474
Personnel expenses	609,438	641,090	494,849	533,005
Depreciation and amortization	144,203	100,240	135,615	91,162
Maintenance expenses	37,107	21,902	35,688	20,469
Others	556,652	602,979	426,313	467,021
Total	3,691,808	3,680,025	3,325,297	3,332,131

29 Administrative expenses

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Personnel expenses	989,292	903,987	816,235	784,501
Depreciation and amortization	21,214	23,038	14,873	20,909
Maintenance expenses	27,355	52,918	26,615	52,421
Others	634,008	420,780	898,294	321,548
Total	1,671,869	1,400,723	1,756,017	1,179,379

30 Employee benefit expenses

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Management				
Wages and salaries	327,090	308,688	298,867	308,688
Pension costs - defined benefit plans	15,984	14,100	14,431	14,100
Others	40,799	24,452	25,675	24,452
	383,873	347,240	338,973	347,240
Other employees				
Wages and salaries	4,623,303	4,562,782	3,622,916	3,629,683
Pension costs - defined benefit plans	60,511	61,831	45,781	45,587
Others	201,867	179,489	114,715	103,982
	4,885,681	4,804,102	3,783,412	3,779,252
Total	5,269,554	5,151,342	4,122,385	4,126,492

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 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.

31 Expenses by nature

The statements of income include an analysis of expenses by function. Expenses by nature disclosed in accordance with the requirements of various TFRS were as follows:

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015 (Restated)	2016	2015 (Restated)
Included in cost of sales of goods:				
Changes in inventories of finished goods and work in progress	(709,360)	(620,222)	(643,119)	(492,381)
Raw materials and consumables used	12,514,097	13,592,192	7,497,341	8,306,279
(Reversal of) loss on decline in value of inventories	126,089	(104,938)	(29,925)	(179,472)
Depreciation of property, plant and equipment	2,288,402	1,973,917	1,656,914	1,394,715
Amortisation of intangible assets	27,197	24,025	27,197	24,025
Included in selling expenses:				
Depreciation of property, plant and equipment	139,345	100,240	131,563	91,162
Amortisation of land leasehold rights	807	1,190	-	-
Included in administrative expenses:				
Depreciation of property, plant and equipment	15,644	18,623	9,303	16,494
Amortisation of intangible assets	5,570	4,415	5,570	4,415

32 Finance costs

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2016	2015	2016	2015
Interest expense :					
Related party		-	-	7,557	-
Bank loan and overdrafts		202,594	663,146	164,436	492,304
Debentures		1,545,790	994,534	1,545,790	994,534
Total interest expense		1,748,384	1,657,680	1,717,783	1,486,838
Others		2,211	-	-	-
		1,750,595	1,657,680	1,717,783	1,486,838
Less: amounts included in the cost of qualifying assets:					
- Construction contracts work in progress	15	(101,347)	(639,535)	(70,350)	(531,161)
Net		1,649,248	1,018,145	1,647,433	955,677

33 Income tax

Income tax recognised in profit or loss

(in thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2016	2015	2016	2015
			(Restated)		(Restated)
Current tax expense					
Current year		28,232	1,344	-	-
Adjustment of under provided in prior years		510	16,279	-	17,553
		28,742	17,623	-	17,553
Deferred tax expense					
Movements in temporary differences	17	(590,787)	(481,024)	(630,398)	(406,076)
		(590,787)	(481,024)	(630,398)	(406,076)
Total income tax benefit		(562,045)	(463,401)	(630,398)	(388,523)

Income tax recognised in other comprehensive income

(in thousand Baht)

	Consolidated financial statements					
	2016			2015		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Net change in fair value of available-for-sale investment	42	(6)	36	103	(15)	88
Share of other comprehensive loss of investments in associates and joint venture	3,078	-	3,078	(21,933)	-	(21,933)
Defined benefit plan actuarial gains (losses)	35,061	(6,703)	28,358	(166,457)	33,673	(132,784)
Total	38,181	(6,709)	31,472	(188,287)	33,658	(154,629)

(in thousand Baht)

	Separate financial statements					
	2016			2015		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Net change in fair value of available-for-sale investment	30	(6)	24	76	(15)	61
Defined benefit plan actuarial gains (losses)	8,443	(1,689)	6,754	(148,597)	29,719	(118,878)
Total	8,473	(1,695)	6,778	(148,521)	29,704	(118,817)

Reconciliation of effective tax rate

	Consolidated financial statements			
	2016		2015 (Restated)	
	Rate (%)	(in thousand Baht)	Rate (%)	(in thousand Baht)
Loss before income tax expense		(1,083,504)		(1,720,343)
Income tax using the Thai corporation tax rate	20	(216,701)	20	(344,069)
Income not subject to tax		(98,547)		(5,779)
Profit was derived from promoted activities		(350,403)		(173,724)
Expenses not deductible for tax purposes		56,590		71,976
Current year losses for which no deferred tax asset was recognised		46,506		62,780
Loss on disposal of investments under common control		-		(90,864)
Under provided in prior years		510		16,279
Total	(52)	(562,045)	(27)	(463,401)

	Separate financial statements			
	2016		2015	
	Rate (%)	(in thousand Baht)	Rate (%)	(in thousand Baht)
Loss before income tax expense		(314,494)		(2,350,349)
Income tax using the Thai corporation tax rate	20	(62,899)	20	(470,070)
Income not subject to tax		(628,636)		(4,620)
Expenses not deductible for tax purposes		49,370		58,953
Current year losses for which no deferred tax asset was recognised		11,767		9,661
Over provided in prior years		-		17,553
Total	(200)	(630,398)	(17)	(388,523)

Income tax reduction

Revenue Code Amendment Act No. 42 B.E. 2559 dated 3 March 2016 grants a reduction of the corporate income tax rate to 20% of net taxable profit for accounting periods which begin on or after 1 January 2016.

34 Promotional privileges

By virtue of the provisions of the Industrial Investment Promotion Act of B.E. 2520, the Group has been granted privileges by the Board of Investment relating to chemical products, natural gas stations, power plants, plastic film products, organic fertilizer, concrete roof tile, masterbatch, compound plastic and compound rubber. The privileges granted include:

- exemption from payment of import duty on machinery and equipment approved by the Board;
- exemption from payment of corporate income tax for certain operations for a period of 3 - 8 years from the dates on which the income is first derived from such operations;
- a 50% reduction in the normal income tax rate on the net profit derived from certain operations for a period of 5 years, commencing from the expiry date in (b) above; and
- a deduction of twice the actual transportation, electrical and water supply expenses for a period of 10 years from the respective revenues and a 25% reduction of the capital expenditure for the installation or the construction of the facilities in addition to the normal depreciation.

As a promoted company, the Company and its subsidiaries must comply with certain terms and conditions prescribed in the promotional certificates.

Summary of revenue from promoted and non-promoted businesses:

(in thousand Baht)

	Consolidated financial statements					
	2016			2015		
	Promoted business	Non-promote business	Total	Promoted business	Non-promote business	Total
Export sales	95,209	9,201,073	9,296,282	46,423	7,893,427	7,939,850
Local sales	4,084,034	29,142,578	33,226,612	2,393,776	29,682,417	32,076,193
Eliminations	(720,029)	(12,674,650)	(13,394,679)	(707,484)	(12,173,396)	(12,880,880)
Total	3,459,214	25,669,001	29,128,215	1,732,715	25,402,448	27,135,163

(in thousand Baht)

	Separate financial statements					
	2016			2015		
	Promoted business	Non-promote business	Total	Promoted business	Non-promote business	Total
Export sales	46,652	1,095,578	1,142,230	-	1,053,034	1,053,034
Local sales	296,311	20,522,030	20,818,341	366,749	19,799,412	20,166,161
Total	342,963	21,617,608	21,960,571	366,749	20,852,446	21,219,195

35 Basic earnings (loss) per share

The calculations of basic earnings (loss) per share for the years ended 31 December 2016 and 2015 were based on the profit (loss) 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:

(in thousand Baht / thousand shares)

	Consolidated financial statements		Separate financial statements	
	2016	2015 (Restated)	2016	2015 (Restated)
Profit (loss) attributable to ordinary shareholders of the Company (Basic)	(521,314)	(1,257,112)	315,903	(1,961,826)
Number of ordinary shares outstanding at 1 January	20,190,000	20,190,000	20,190,000	20,190,000
Effect of own shares held by subsidiaries	(222,164)	(222,164)	-	-
Weighted average number of ordinary shares outstanding (basic)	19,967,836	19,967,836	20,190,000	20,190,000
Earnings (loss) per share (basic) (in Baht)	(0.026)	(0.063)	0.016	(0.097)

36 Dividends

At the annual general meeting of the shareholders of the Company held on 29 April 2016, the shareholders approved the appropriation of dividend of Baht 0.02 per share, amounting to Baht 403.80 million. The dividend was paid to the shareholders in May 2016.

At the annual general meeting of the shareholders of the Company held on 21 April 2015, the shareholders approved the appropriation of dividend of Baht 0.02 per share, amounting to Baht 403.80 million. The dividend was paid to the shareholders in May 2015.

37 Financial instruments

Financial risk management policies

The Group is exposed to normal business risks from changes in market interest rates and currency exchange rates and from non-performance of contractual obligations by counterparties. The Group does not hold or issue derivative financial instruments for speculative or trading purposes.

Risk management is integral to the whole business of the Group. The Group has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The management continually monitors the Group's risk management process to ensure that an appropriate balance between risk and control is achieved.

Capital management

The Board of Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board monitors the return on capital, which the Group defines as result from operating activities divided by total shareholders' equity, excluding non-controlling interests and also monitors the level of dividends to ordinary shareholders.

Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Group's operations and its cash flows because loan interest rates are mainly floating. The Group is primarily exposed to interest rate risk from its borrowings.

The effective interest rates of interest-bearing financial liabilities as at 31 December and the periods in which those liabilities mature or re-price were as follows:

	Effective Interest rate	Consolidated financial statements			
		Within 1 year	After 1 year but within 5 years	After 5 years	Total
2016	(% per annum)	(in thousand Baht)			
Current					
Short-term loans from financial institutions	2.00 to 2.24	5,609,638	-	-	5,609,638
Current portion of long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20, MLR-1.75	906,485	-	-	906,485
Current portion of debentures	5.00	3,000,000	-	-	3,000,000
Non-current					
Long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20 MLR-1.75	-	4,944,341	3,057,717	8,002,058
Debentures	4.10 to 5.30	-	21,155,000	7,845,000	29,000,000
Total		9,516,123	26,099,341	10,902,717	46,518,181
2015					
Current					
Short-term loans from financial institutions	2.20 to 2.60	923,136	-	-	923,136
Current portion of long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20	404,436	-	-	404,436
Current portion of debentures	5.20	3,000,000	-	-	3,000,000
Non-current					
Long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20	-	2,984,712	3,519,310	6,504,022
Debentures	4.10 to 5.30	-	18,955,000	7,600,000	26,555,000
Total		4,327,572	21,939,712	11,119,310	37,386,594

	Effective Interest rate (% per annum)	Separate financial statements			
		Within 1 year	After 1 year but within 5 years	After 5 years	Total
2016					
Current					
Short-term loans from financial institutions	2.00 to 2.24	4,718,066	-	-	4,718,066
Current portion of long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20	741,485	-	-	741,485
Current portion of debentures	5.00	3,000,000	-	-	3,000,000
Non-current					
Long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20	-	2,965,941	2,704,489	5,670,430
Debentures	4.10 to 5.30	-	21,155,000	7,845,000	29,000,000
Total		8,459,551	24,120,941	10,549,489	43,129,981
2015					
Current					
Short-term loans from financial institutions	2.20 to 2.60	923,136	-	-	923,136
Current portion of long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20	404,436	-	-	404,436
Current portion of debentures	5.20	3,000,000	-	-	3,000,000
Non-current					
Long-term loans from financial institutions	3M EURIBOR+1.65, 6M EURIBOR+1.10, 6M USD LIBOR+2.20	-	2,984,712	3,519,310	6,504,022
Debentures	4.10 to 5.30	-	18,955,000	7,600,000	26,555,000
Total		4,327,572	21,939,712	11,119,310	37,386,594

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.

At 31 December, the Group and the Company were exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

	Note	Consolidated financial statements		Separate financial statements	
		2016	2015	2016	2015
United States Dollars					
Cash and cash equivalents	7	151,182	551,968	40,650	86,970
Trade accounts receivable	9	726,373	478,851	14,559	48,396
Interest-bearing liabilities	18	(1,497,725)	(658,007)	(678,857)	(658,007)
Trade accounts payable	19	(97,535)	(208,621)	(663)	(668)
Other payables - machines		(2,248,539)	(1,406,779)	(59,122)	(170,015)
		(2,966,244)	(1,242,588)	(683,433)	(693,324)
EURO					
Cash and cash equivalents	7	318,032	2,850	316,596	229
Trade accounts receivable	9	3,452	3,554	-	-
Interest-bearing liabilities	18	(5,838,162)	(6,250,451)	(5,765,458)	(6,250,451)
Trade accounts payable	19	(18,937)	(7,056)	-	-
Other payables - machines		(268,724)	(273,461)	(246,764)	(265,229)
		(5,804,339)	(6,524,564)	(5,695,626)	(6,515,451)
Others					
Cash and cash equivalents	7	1,276	679	1,146	601
Machine Payable		(840)	-	(840)	-
		436	679	306	601
Gross financial position exposure		(8,770,147)	(7,766,473)	(6,378,753)	(7,208,174)
Foreign currency forward contracts		309,388	-	320,042	-
Net exposure		(8,460,759)	(7,766,473)	(6,058,711)	(7,208,174)

At 31 December 2016, the Group had selling forward contracts of USD 0.3 million equivalent Baht 10.7 million (2015: nil).

At 31 December 2016, the Group had buying forward contracts of EUR 8.5 million equivalent Baht 320.0 million (2015: nil).

Credit risk

Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the Group as and when they fall due.

Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Credit evaluations are performed on obtaining sufficient collateral from customers before commencing trading. The collateral include bank guarantees, bill of exchange aval by banks, cash guarantees, or the personal guarantee by a creditworthy person. At the reporting date there were no significant concentrations of credit risk. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the statement of financial position. However, due to the large number of parties comprising the Group's customer base, Management does not anticipate material losses from its debt collection.

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.

Fair values of financial assets and liabilities

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy for financial instruments measured at fair value. It does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

Consolidated financial statements					
		Fair value			
	Carrying value	Level 1	Level 2	Level 3	Total
(in thousand Baht)					
31 December 2016					
Financial assets/Financial liabilities measured at fair value					
Marketable debt securities (Private fund)	2,169	-	2,169	-	2,169
Equity securities available-for-sale	292	292	-	-	292
Foreign currency forward contracts	-	-	164	-	164
Financial assets/Financial liabilities not measured at fair value					
Current portion of debentures	3,000,000	-	3,028,712	-	3,028,712
Debentures	29,000,000	-	29,166,459	-	29,166,459
31 December 2015					
Financial assets/Financial liabilities measured at fair value					
Marketable debt securities (Private fund)	529,958	-	529,958	-	529,958
Equity securities available-for-sale	262	262	-	-	262
Financial assets/Financial liabilities not measured at fair value					
Current portion of debentures	3,000,000	-	3,024,529	-	3,024,529
Debentures	26,555,000	-	26,874,854	-	26,874,854

Separate financial statements					
		Fair value			
	Carrying value	Level 1	Level 2	Level 3	Total
(in thousand Baht)					
31 December 2016					
Financial assets/Financial liabilities measured at fair value					
Marketable debt securities (Private fund)	2,169	-	2,169	-	2,169
Equity securities available-for-sale	292	292	-	-	292
Foreign currency forward contracts	-	-	18	-	18
Financial assets/Financial liabilities not measured at fair value					
Current portion of debentures	3,000,000	-	3,028,712	-	3,028,712
Debentures	29,000,000	-	29,166,459	-	29,166,459
31 December 2015					
Financial assets/Financial liabilities measured at fair value					
Marketable debt securities (Private fund)	529,958	-	529,958	-	529,958
Equity securities available-for-sale	262	262	-	-	262
Financial assets/Financial liabilities not measured at fair value					
Current portion of debentures	3,000,000	-	3,024,529	-	3,024,529
Debentures	26,555,000	-	26,874,854	-	26,874,854

Measurement of fair values

Valuation techniques

The following tables show the valuation techniques used in measuring Level 2 fair values.

Type	Valuation technique
Marketable debt securities	Thai Bond Market Association Government Bond Yield Curve as of the reporting date.
Foreign currency forward contracts	<i>Market comparison technique:</i> The fair values are based on broker quotes. Similar contracts are traded in an active market and the quotes reflect the actual transactions in similar instruments.
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.

38 Commitments with non-related parties

(in thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2016	2015	2016	2015
Capital commitments				
Contracted but not provided for				
Agreements for construction, machine and equipment	<u>6,619,364</u>	<u>9,049,169</u>	<u>1,152,809</u>	<u>836,867</u>
Non-cancellable operating lease commitments				
Within one year	90,626	84,950	46,940	40,417
After one year but within five years	<u>109,371</u>	<u>108,368</u>	<u>64,656</u>	<u>58,155</u>
Total	<u>199,997</u>	<u>193,318</u>	<u>111,596</u>	<u>98,572</u>
Other commitments				
Unused letters of credit	346,121	745,333	123,431	265,647
Purchase agreement for raw material	64,452	510,740	-	-
Bank guarantees	<u>351,366</u>	<u>313,849</u>	<u>301,148</u>	<u>243,199</u>
Total	<u>761,939</u>	<u>1,569,922</u>	<u>424,579</u>	<u>508,846</u>

39 Contingent liabilities

As at 31 December 2016, the Company had the major lawsuits as follows:

- 1) In 2011, an overseas company as the plaintiff filed its complaint against the Company with the Central Intellectual Property and International Trade for sea freight and interest in the amount of Baht 5.4 million. On 30 December 2011, the Court issued its judgment of dismissal of the complaint of the overseas company. The overseas company, subsequently, appealed to the Supreme Court on 23 April 2012. On 14 February 2017, the Supreme Court rendered its judgment which upholds the Court's judgment (to dismiss the complaint). The Company thus shall not be liable for any reimbursement.
- 2) 2.1) As of 23 July 2010, there was a case in which a foreign company (Plaintiff) sued a joint venture of the Company (1st Defendant) and others (2nd to 5th Defendants) at the Southern Bangkok Civil Court ("the Court"). The Court has since ruled that the five Defendants shall record the name and address of the office of the Plaintiff in the shareholders registry, and list the shareholders of the 1st Defendant. These five Defendants had testified that the Plaintiff is not a shareholder of the 1st Defendant and without authorisation to pursue such matter. It was requested that such claim be dismissed. The Company (co-defendant) is one of the shareholders of the 1st Defendant that joined the case to be a co-defendant and to counterclaim, asking the Court to rule that the Plaintiff and/or another foreign company (a shareholder of the 1st Defendant) could act jointly or on behalf of the other, in transferring 1.8 million shares, which were held by one of the shareholders of the 1st Defendant, at the price of Baht 191.7 million, to the co-defendant or a designated person of the co-defendant. This is because one of the shareholders of the 1st Defendant breached the terms and conditions of the joint venture agreement between the 1st Defendant and the co-defendant, and a shareholder of a 1st Defendant (the Black Case No. 1367/2553 of the Southern Bangkok Civil Court).

On 5 October 2011, such claim was dismissed by the Court, who ruled that the Plaintiff shall transfer 1.8 million shares to the co-defendant or a designated person of the co-defendant at a price not exceeding the net asset value, calculated based on the date of transfer, deducted by the amount of dividend, Baht 887.1 million. If the Plaintiff fails to carry out such transfer, the judgement of the Court shall represent the intention of the Plaintiff. The 1st Defendant shall record such shares in the name of the co-defendant, or a designated person of the co-defendant, in the shareholders registry, and list the shareholders of the 1st Defendant. The co-defendant shall be responsible for effectuating the payment of the share price to the Plaintiff. Also, the Court has read the judgement to the parties and the Plaintiff shall, within 30 days, comply with the judgement. If the Plaintiff fails to comply, there could be a confiscation, arrest or imprisonment, pursuant to the Civil Procedure Code. The Plaintiff, the five Defendants, and the co-defendant, have been informed of such order since 5 October 2011. All parties shall comply with the judgement and complete their actions by Friday, 4 November 2011.

On 21 October 2011, the Plaintiff filed an appeal, a petition for a stay of execution and a petition for a stay of execution in an emergency case.

Later, on 11 July 2013, the Appeal Court rendered the judgment in the lawsuit filed by the foreign company for recordal of its name and address in the joint venture's shareholders registry and dismissed the counterclaim of the Company. On 13 August 2013, the Company appealed against the Appeal Court's decision to the Supreme Court. The case is now pending in the Supreme Court.

On 27 August 2013, the foreign company submitted the judgment of the Appeal Court to register its name and address in the book record and the list of shareholders of the joint venture. As a result, the Company's share ratio is diluted from 89% to 50%.

On 2 August 2016, prior to the date to read judgment of the Supreme Court, the foreign company, joint venture and Company have agreed to execute the compromise agreement to settle all the disputes; the Supreme Court therefore rendered its judgment in accordance with such agreement. The consideration of the case ended as of 29 September 2016.

2.2) On 26 December 2012, the foreign company filed a complaint with the Southern Bangkok Civil Court against the Company and other 13 defendants on the grounds of tort, director's liability, return of properties and request for damages. The Plaintiff claimed inter alia that the extraordinary general meeting no. 1/2555 of the joint venture approving payment of dividends in the amount of approximately Baht 445 million to the Company is illegal and that the Company returns the said dividends together with the interest thereon at the rate of 7.5% per annum to the foreign company. The Court ordered temporary dismissal of the case awaiting the decision in the Black Case No. 1367/2553 of the Southern Bangkok Civil Court. By the conversation assumption, dividends received from the joint venture related to the increase in share holding were recorded as other payables account in the financial statements.

On 2 August 2016, the foreign company, Company and other 13 defendants have come to an agreement. The foreign company withdrew its complaint against the Company and other 13 defendants. Accordingly, the Court issued an order allowing the Plaintiff to withdraw the complaint and dismissed the case. The consideration of the case ended.

2.3) On 7 August 2013, the foreign company filed a lawsuit against the joint venture to invalidate the resolution of the extraordinary general meeting no. 1/2556 of the joint venture claiming that the meeting was held by the directors who have been removed and that the meeting was against the temporary protection ordered by the Southern Bangkok Civil Court.

Thereafter on 2 October 2013, the Company as a major shareholder of the joint venture who has attended and cast the votes in the said meeting interpleaded as a third party in order to protect and enforce the Company's rights. The Company requested the Court to rule that the calling of the meeting, the meeting, and the voting in the said meeting is in accordance with the provisions of the articles of association and the law.

The Court rejected the Company's interpleading. The Company appealed with the Appeal Court on 14 November 2013. On 16 July 2014, the Appeal Court upheld the order of rejection to the Company's interpleading. The Company filed the appeal with the Supreme Court on 30 October 2014. The case in relation to interpleading is under the consideration of the Supreme Court. The Court postpone the date to determine the legal issue of the Supreme Court from 30 May 2016 to 3 August 2016. Thereafter, the Court had cancelled the said appointment as the parties had already agreed to settle the dispute on 2 August 2016.

On 2 August 2016, the foreign company, joint venture and Company have come to an agreement. The foreign company withdrew its complaint while the Company withdrew its cross-claim. The Court then issued an order allowing the foreign company to withdraw its complaint and the Company to withdraw its cross-claim and therefore dismiss the case. The consideration of the case ended.

2.4) On 22 October 2013, the foreign company as a plaintiff filed a lawsuit against the Company, the joint venture and other parties, totalling 14 persons for invalidation the resolution of the extraordinary general meeting of the joint venture claiming that the meeting was illegal. The Plaintiff requested temporary protection prohibiting the defendants from registering such resolution or using the resolution for any purposes. The Court rejected such request on 27 January 2014. The Defendant requested the Court to temporarily dismiss this case awaiting the decision in the Black Case No. 1367/2553 Red Case No. 1856/2554 of the Southern Bangkok Civil Court. The Plaintiff objected to such request. On 26 March 2014, the Court ordered the case to be proceeded and passed a judgment of the case on 24 December 2014 to revoke the resolution of the extraordinary general meeting on 11 October 2013. The Company filed an appeal on 21 January 2015. This case is under the consideration of the Appeal Court. The Court fixed the date of rendering the Appeal Court's decision to be on 24 August 2016. Thereafter, the Court had cancelled the said appointment as the parties had already agreed to settle the dispute on 2 August 2016.

On 23 August 2016, the Appeal Court rendered the judgment in accordance with the parties' desire. The consideration of the case ended.

2.5) On 11 December 2013, the Company as a plaintiff filed a lawsuit against the foreign company for invalidation of the invitation letter for the extraordinary general meeting no. 4/2556 of the joint venture which called the meeting on 11 December 2013 in Oslo, Norway. The plaintiff claimed that the invitation letter was illegally issued and the persons issuing such letter are not the directors of the joint venture. The Court ordered temporary dismissal of the case awaiting the decision in the Black Case No. 1367/2553 of the Southern Bangkok Civil Court.

On 2 August 2016, the Company and foreign company have come to an agreement. The Company withdrew its complaint against the foreign company. The Court issued an order allowing the Company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.6) On 10 January 2014, the Company as a plaintiff filed a lawsuit against the foreign company and its relevant parties, totalling 8 persons for invalidation of resolution of the extraordinary general meeting no. 4/2556 of the joint venture on 11 December 2013 in Oslo, Norway. The Court ordered temporary dismissal of this case until the result of the Black Case No. 1367/2553 of the Southern Bangkok Civil Court is known.

On 2 August 2016, the Company and foreign company and its relevant parties, totalling 8 persons, have come to an agreement. The Company withdrew its complaint against the foreign company and 8 of its relevant parties. The Court issued an order allowing the Company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.7) On 28 February 2014, the foreign company as a plaintiff filed a lawsuit against the Company and the joint venture for invalidation of the resolution of the extraordinary general meeting of the joint venture on 20 December 2013. The Court scheduled the presentation of witnesses on 26 June and 7 July 2015 for the Plaintiff's witnesses as well as 8 and 10 July 2015 for the Defendant's witnesses. On 26 June 2015, the Court issued an order to temporarily dismiss the case pending the outcome of the case, black case No. 1367/2553 of the Southern Bangkok Civil Court.

On 2 August 2016, the foreign company, Company and joint venture have come to an agreement. The foreign company withdrew its complaint against the Company and joint venture. The Court issued an order allowing the foreign company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.8) On 3 March 2014, the foreign company as a plaintiff filed a lawsuit against the Company and the joint venture for invalidation of the resolution of the extraordinary general meeting of the joint venture on 4 February 2014. The Court scheduled the presentation of the Plaintiff's witnesses on 23 and 30 January 2015 for the presentation of the Defendant's witnesses on 3 and 10 March 2015. On 23 January 2015, the date of presentation of the Plaintiff's witness, the Court issued an order to temporarily dismiss the case pending the outcome of the case, black case No. 1367/2553 of the South Civil Court.

On 2 August 2016, the foreign company, Company and joint venture have come to an agreement. The foreign company withdrew its complaint against the Company and joint venture. The Court issued an order allowing the foreign company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.9) On 16 May 2014, the foreign company as a plaintiff filed another lawsuit against the Company and the joint venture for invalidation of the resolution of the extraordinary general meeting of the joint venture company on 23 April 2014. The presentation of the Plaintiff's witnesses was on 21 - 22 April 2015 while the presentation of the Defendant's witnesses will be on 9 - 10 June 2015. On the date of presentation of the plaintiff's witness on 21 April 2015, the Court issued an order to temporarily dismiss the case pending the outcome of the case, black case No. 1367/2553 of the Southern Bangkok Civil Court.

On 2 August 2016, the foreign company, Company and joint venture have come to an agreement. The foreign company withdrew its complaint against the Company and joint venture. The Court issued an order allowing the foreign company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.10) On 19 September 2014, the foreign company as a plaintiff filed another lawsuit against the Company and the joint venture for invalidation of the resolution of the extraordinary general meeting of the joint venture company on 27 August 2014. The Court the presentation of witnesses on 21 - 22 July 2015 for the Plaintiff's witnesses as well as 23 - 24 July 2015 for the Defendant's witnesses. On the date of presentation of the plaintiff's witness on 22 July 2015, the Court issued an order to temporarily dismiss the case pending the outcome of the case, black case No. 1367/2553 of the Southern Bangkok Civil Court.

On 2 August 2016, the foreign company, Company and joint venture have come to an agreement. The foreign company withdrew its complaint against the Company and joint venture. The Court issued an order allowing the foreign company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.11) On 14 November 2014, the foreign company as a plaintiff filed a lawsuit against the Company and the joint venture for invalidation of the resolution of extraordinary general meeting of the joint venture on 31 October 2014. During the hearing before the witness presentation, the Court dismissed the case temporarily, pending the outcome of the case, black case No. 1367/2553 of the Southern Bangkok Civil Court.

On 2 August 2016, the foreign company, Company and joint venture have come to an agreement. The foreign company withdrew its complaint against the Company and joint venture. The Court issued an order allowing the foreign company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

2.12) On 18 February 2015, the Company filed a lawsuit against the joint venture and its relevant parties for invalidation of the resolution of the extraordinary general meeting of the joint venture on 19 January 2015 in Oslo, Norway. The Court set the date to determine the legal issue on 16 June 2015. On 16 June 2015, the Court issued an order to temporarily dismiss the case pending the outcome of the case, black case No. 1367/2553 of the Southern Bangkok Civil Court.

On 2 August 2016, the Company, joint venture and its relevant parties have come to an agreement. The Company withdrew its complaint against the joint venture and its relevant parties. The Court issued an order allowing the Company to withdraw the complaint and therefore dismissed the case. The consideration of the case ended.

On 19 March 2015, the Company filed a lawsuit against the joint venture and its foreign affiliates to demand for a transfer of the joint venture's shares unlawfully held by its foreign affiliates to the Company, together with returning the dividend and the interest of the dividend of Baht 98.46 million to the Company. The Court postpone the date to determine the legal issue on 30 May 2016 to 3 August 2016 for service of summons to the parties and to wait for the result of the negotiation for settlement between parties. Thereafter, the Court had cancelled the said appointment as the parties had already agreed to settle the dispute on 2 August 2016.

On 2 August 2016, the Company and the group of foreign company agreed to settle their disputes where the Company and shareholders of the foreign company mutually filed a petition to the Court in order to settle the dispute whether it be dispute under laws or pending cases between them in every court involved. The Company also purchased 2,343,750 shares of a joint venture at the price of Baht 213.33 per share (par value of Baht 100 each), making total investment of Baht 500 million from the group of foreign company and reimbursed disputed dividend to the joint venture of Baht 195 million (the Company recorded the receipt of such dividend as other payables account). As a result, the Company's equity interest in a joint venture increased from 50% to 99.99%. Consequently, the status was changed from a joint venture to a subsidiary (see note 5).

- 3) The Company, the government authority and a government officer were sued by the Claimant that the Claimant processed of 8 plots of land under utilization certificates. Issuance of concession by the government authority was not legitimate and overlapped 8 plots of land of the Claimant.

The Central Administrative Court had considered and adjudged on 5 July 2012 that Issuance of concession by the government authority was legitimate and did not overlap 8 plots of land of the Claimant. The Complaint was therefore dismissed.

The Claimant filed an appeal to the Supreme Administrative Court. This case is in the process of consideration for acceptant of the appeal by the Central Administrative Court.

- 4) On 8 July 2015, Department of Primary Industries and Mines, Ministry of Industry, by the public prosecutor from Saraburi province, filed a lawsuit against the Company the Case No.Sor Wor.4/2559 of the Civil Court (previously the Black Case No. 776/2558 of Saraburi Province Court) for violation in relation to its operation of mining outside its concession areas with damage claimed in the total amount of Baht 4,067 million. The Company opines that it has not committed any offence as accused by the public prosecutor. The above problem land, which has access to public way, is owned by other person, not by the Company. The outcome of lawsuit is uncertain because this case is in process of consideration by the Court.

On 25 November 2015, the public prosecutor filed a motion to the Appeal Court requesting for the transfer of the case to the Civil Court. Later on 30 August 2016, the Appeal Court has an order to transfer lawsuit to be under the jurisdiction of the Environmental Division of the Civil Court as the above mentioned case is considered to be an environmental lawsuit and set the hearing date to be taken on 6 February 2017 awaiting the decision to be given on the Black Case No. Por 287/2559 and Por 288/2559 of Saraburi Province Court.

On 6 February 2017, the defendant submit a petition asking the Court to postpone the process of consideration. The Court then ordered the postponement of the hearing date to be taken on 20 March 2017 together with the Case No.Sor Wor.5/2559 and Sor Wor 6/2559.

In addition on 24 March 2016, Department of Primary Industries and Mines, the Ministry of Industry, by the public prosecutor from Saraburi province, filed 2 lawsuits against the Company the Case No. Sor Wor.6/2559 and Sor Wor.5/2559 of the Civil Court (previously the Black Case No. Por 287/2559 and Por 288/2559, respectively, under the civil case) for the violation in relation to its operation of mining outside its concession areas claiming for the damages having the additional claimed amount at Baht 328 million and the breach of the terms and conditions of the Company's concession area claiming for the damages having the claimed amount at Baht 1,671 million. The Company opines that it is not guilty as claimed by the public prosecutor. At present, the outcome of lawsuit is uncertain because this case is in process of consideration by the Court.

On 14 December 2016, the Appeal Court has ordered the transfer of such lawsuits to be under the jurisdiction of the Civil Court which has already set the hearing date to be taken on 20 March 2017.

- 5) In September 2015, the Company and its subsidiary were called by a company to enter into the arbitration process as a joint party, with respect to the damage claim in the total amount Baht 179 million for expenses and fee payment in which the Company and its subsidiary had not committed any wrongdoing. The Company and its subsidiary were not parties to the contract and did not agree to enter into the arbitration process with the said company. The Company and its subsidiary sent a written notice to refuse to enter into the arbitration process. On 13 December 2016, the arbitrator has given partial ruling that the case where the Company was called to enter into is not under his jurisdiction to arbitrate. However, the Arbitrator will continue to consider other petitions and the liabilities for expenses. In this Stage, the Company is not liable for any incurred damages.

40 Event after repoting period

At the meeting of the Board of Directors of the Company held on 23 February 2017, the Company's Board of Directors approved the submission for approval at the annual general meeting of the shareholders of the Company the appropriation of dividends from the Company's retained earnings at Baht 0.02 per share, totalling Baht 403.8 million. This dividend is subject to the approval of the Company's shareholders at the annual general meeting.

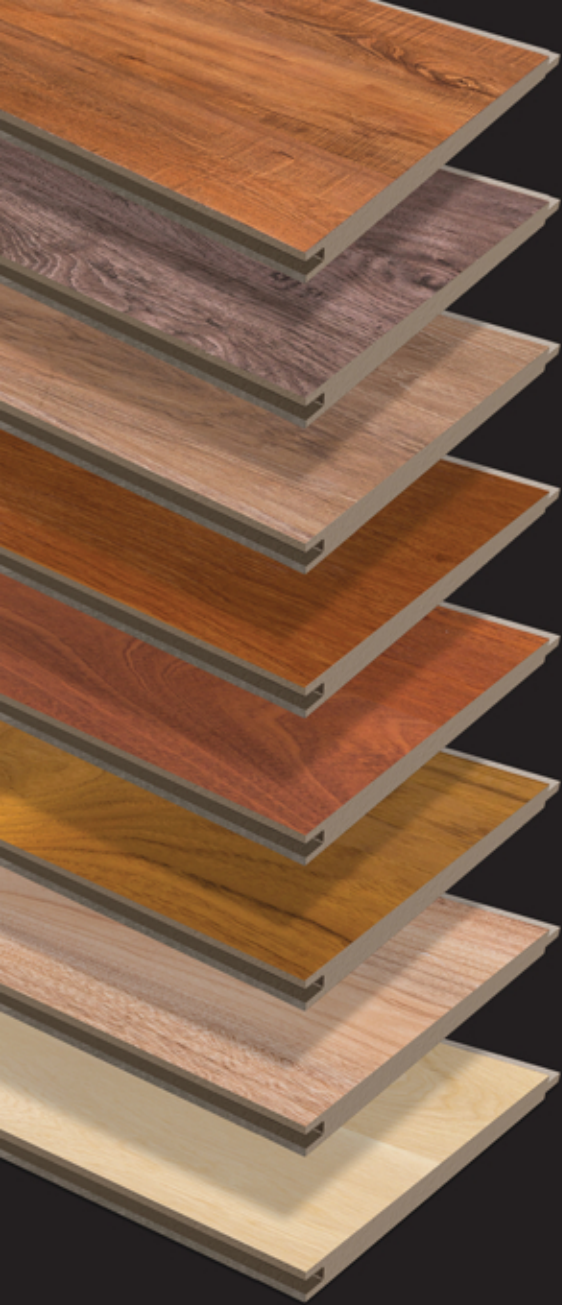
41 Thai Financial Reporting Standards (TFRS) not yet adopted

A number of new and revised TFRS have been issued but are not yet effective and have not been applied in preparing these financial statements. Those new and revised TFRS that may be relevant to the Group's operations, which become effective for annual financial periods beginning on or after 1 January 2017, are set out below. The Group does not plan to adopt these TFRS early.

TFRS	Topic
TAS 1 (revised 2016)	Presentation of Financial Statements
TAS 2 (revised 2016)	Inventories
TAS 7 (revised 2016)	Statement of Cash Flows
TAS 8 (revised 2016)	Accounting Policies, Changes in Accounting Estimates and Errors
TAS 10 (revised 2016)	Events After the Reporting Period
TAS 12 (revised 2016)	Income Taxes
TAS 16 (revised 2016)	Property, Plant and Equipment
TAS 17 (revised 2016)	Leases
TAS 18 (revised 2016)	Revenue
TAS 19 (revised 2016)	Employee Benefits
TAS 21 (revised 2016)	The Effects of Changes in Foreign Exchange Rates
TAS 23 (revised 2016)	Borrowing Costs
TAS 24 (revised 2016)	Related Party Disclosures
TAS 26 (revised 2016)	Accounting and Reporting by Retirement Benefit Plans
TAS 27 (revised 2016)	Separate Financial Statements
TAS 28 (revised 2016)	Investments in Associates and Joint Ventures
TAS 33 (revised 2016)	Earnings Per Share
TAS 34 (revised 2016)	Interim Financial Reporting
TAS 36 (revised 2016)	Impairment of Assets
TAS 37 (revised 2016)	Provisions, Contingent Liabilities and Contingent Assets
TAS 38 (revised 2016)	Intangible Assets
TAS 40 (revised 2016)	Investment Property
TAS 104 (revised 2016)	Troubled Debt Restructuring
TAS 105 (revised 2016)	Accounting for Investments in Debt and Equity Securities
TAS 107 (revised 2016)	Financial Instruments: Disclosure and Presentation
TFRS 3 (revised 2016)	Business Combinations
TFRS 5 (revised 2016)	Non-current Assets Held for Sale and Discontinued Operations
TFRS 6 (revised 2016)	Exploration for and Evaluation of Mineral Assets
TFRS 8 (revised 2016)	Operating Segments
TFRS 10 (revised 2016)	Consolidated Financial Statements
TFRS 11 (revised 2016)	Joint Arrangements
TFRS 12 (revised 2016)	Disclosure of Interests in Other Entities
TFRS 13 (revised 2016)	Fair Value Measurement
TSIC 27 (revised 2016)	Evaluating the Substance of Transactions in the Legal Form of a Lease
TSIC 29 (revised 2016)	Disclosure - Service Concession Arrangements
TFRIC 1 (revised 2016)	Changes in Existing Decommissioning, Restoration and Similar Liabilities
TFRIC 4 (revised 2016)	Determining Whether an Arrangement Contains a Lease
TFRIC 5 (revised 2016)	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds

TFRS	Topic
TFRIC 10 (revised 2016)	Interim Financial Reporting and Impairment
TFRIC 12 (revised 2016)	Service Concession Arrangements
TFRIC 13 (revised 2016)	Customer Loyalty Programmes
TFRIC 14 (revised 2016)	TAS 19 (revised 2016) <i>Employee Benefits</i> - The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction
TFRIC 21 (revised 2016)	Levies
FAP Announcement no. 5/2559	Accounting guidance for derecognition of financial assets and financial liabilities

The Group has made a preliminary assessment of the potential initial impact on the consolidated and separate financial statements of those new and revised TFRS and expects that there will be no impact on the financial statements in the period of initial application.



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