



รายงานประจำปี 2561

ANNUAL REPORT 2018

บริษัท ทิรไทย จำกัด (มหาชน)
Tirathai Public Company Limited

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Financial Highlights

(Million Baht)

Profit and Loss Statement

	2016	2017	2018
Total Revenue	2,577.33	2,448.03	2,636.62
Revenue from Sales & Service	2,536.52	2,429.77	2,615.91
Gross Profit - Sale & Service & Construction Contract	642.75	488.45	572.86
EBITDA	192.89	50.94	146.88
EBIT	125.81	(32.33)	58.81
Net Profit attributable to equity holders of parent	61.22	(68.70)	(30.76)

Balance Sheet

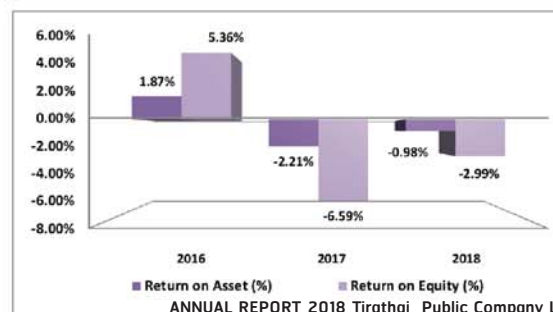
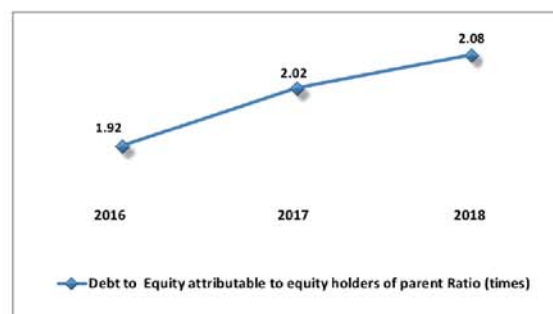
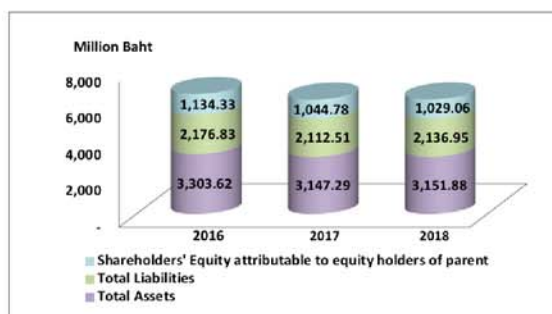
Total Assets	3,303.62	3,147.29	3,151.88
Total Liabilities	2,176.83	2,112.51	2,136.95
Shareholders' Equity attributable to equity holders of parent	1,134.33	1,044.78	1,029.06

Financial Ratio

Gross Profit Margin - Sales & Service & Construction Contract (%)	25.34%	20.10%	21.90%
Net Profit Margin attributable to equity holders of parent to total revenue (%)	2.38%	-2.81%	-1.17%
Return on Asset (%)	1.87%	-2.21%	-0.98%
Return on Equity (%)	5.36%	-6.59%	-2.99%
Debt to Equity attributable to equity holders of parent Ratio (times)	1.92	2.02	2.08

Unit: Baht/share

Registered Capital	359.20	359.20	359.20
Paid up Capital	308.01	308.01	308.01
Par Value	1.00	1.00	1.00
Book Value Per Share	3.66	3.36	3.34
Earning Per Share	0.20	(0.22)	(0.10)
Dividend Per Share	0.13	-	-



Message from the Chairman

In 2018, the transformer markets for both government and private sectors were sluggish due to the change in government purchase policy from traditional process to E-Bidding which resulted in delay in government procurement. Moreover, the transformer market competition continued to be fierce since 2017 and thus adversely impacted government and private sector transformer orders. However, the Company received many more transformer orders from projects from abroad which helped increase income of transformer business. The service income and contract-based income in 2018 slightly decreased from 2017 because cost of goods sold as well as selling and administration expense of subsidiaries increased and thus resulted in a net loss in 2018 for the Company and subsidiaries.

The Company expects that transformer demand in 2019 will increase because government budget allocation is back to normal as the PDP2015 policy will increase demand for new power plant construction for alternative energy sources nationwide. In response to MEA and PEA' policies on the Underground Cable Projects in Bangkok and provinces with famous tourist attractions, the Company launched new special underground transformer – Unit Substation. The government budget for high voltage cable of EGAT during 2016 - 2020 is approximately 10,000 million baht or averaging 2,500 million a year of which the Company's market share is approximately 25% to 30%.

For export market, the Company plans to target growing sectors by foreign investors especially construction, plastic and petrochemical industries that require renewable energy power plants, and solar power plants with government's supports in CLMV, the Philippines and Malaysia where the Group's Transformer products are well recognized.

For Non-Transformer business, the government big project market continued to slow down during 2017 to 2018, so the Group received fewer orders. However, it is expected that the government bidding will be back to normal in 2019. The amount to be placed for bidding is about 1,857 million baht in 2019 and 2020, the Group's market share of which is approximately 15%-20%.

Due to the cooperation, determination, and continued development for better business operations by the management and all employees, I believe that Tirathai Group has a good opportunity to succeed further. The Group has good vision, mission and policies that are suitable and consistent with current economic, social and environment situation. It will make strategic adaptation in line with the changing situation and make improvement for effective management together with other measures to manage risks. Moreover, the Group will pursue good governance so as to ascertain a sustainable development and enhance confidence for all stakeholders.



Lastly, I, on behalf of Board of Directors would like to express my sincere gratitude to all shareholders, customers, business partners for trusts and supports to the Group. Also, I would like to express my appreciation to the management and every employee who have cooperated and contributed to the Group. I believe that with both the management and all employees' working experience and with efficient management as well as good corporate governance, the Group will be able to grow with stability, sustainability and achieve the goals of the Group for the best interest of shareholders in the long run.

Dr. Pisit Leeahtam
Chairman of the Board of Directors

Message from the Managing Director

In 2018, the transformer industry outlook of government, private, and export sectors deteriorated because government policy of bidding process was changed from the traditional process to e-bidding process on August 23rd '2017 resulted that government officers must make understanding of new bidding process which made slowing budget utilization in year 2017 and 2018. Consequently, the transformer orders by the government and private sectors were decreased from 1,625 million baht in 2017 to 931 million baht in 2018. For export sector, the export order improved from 174 million baht in 2017 to 789 million baht in 2018 due to large project in Singapore counting at 51% of total export orders. The Company's transformer backlog as of December 31st 2018 was 1,039 million baht which 788 million baht and 251 million was delivered in 2019 and 2020 respectively. Since the Company delivered high gross profit margin transformers especially export sector resulted in gross profit margin of transformer business increased from 16.77% in 2017 to 18.76% in 2018.

However, the Company forecasted that transformer demand in 2019 has still improved because the government budget utilization is back normally. The demand of private sector will increase because infrastructure investment by the government and the Company launches new product, Unit Substation, to serve the Underground Cable Project by MEA. For export sector, the Company has policy to expand export market to growing market area especially construction, plastic and petrochemical industries and renewable energy power plants and solar power plants that are supported by government and foreign investments such as CLMV, the Philippines, and Malaysia which generally acknowledges the Company's transformer quality.

For existing government and private sectors, the Company has still focused on engineering to order product with low competition. Moreover, the announcement of PDP2015 to be effective on June 30th 2015 will enhance higher transformer demand substantially because high voltage transmission towers to support ASIAN GRID requires power transformers rated 500/230/115 KV. Based on the government's investment budget of high voltage transmission towers projects of EGAT over the year 2016-2020 for 10,000 million baht or average 2,500 million baht, the Company shall have market shares about 25%-30%. Especially, on March 4th, 2019, the Company and EGAT signed the contract of 268 million baht for 6 units of 333.33 MVA 500kV power transformer for Transmission System Development Project for the Northeast Region, Lower



North Region, Central Region, and Bangkok Metropolitan for System Security Enhancement (TIEC) in accordance with PDP2015. Its contract value is about 268 million baht. The power transformers will be delivered in 2020. These power plants are largest voltage which the Company is one of two manufactures in Thailand.

For non-transformer business, in 2019, these businesses will have average growth at 6% which will adjust their strategies in accordance with their business condition with an average gross profit margin 25%-30%.

However, in 2019 the Company forecasts that price competition should range from neutral to high. In order to reduce its risk, the Company will focus on engineering to order product with low competition in domestic and foreign markets to increase opportunity to take profit and deploy all procedures to manage more cost effective to maintain at least average 20% net profit margin.

On behalf of all executives and employee, we are all committed and dedicated to operate the business according to Vision and Mission as declared with corporate governance for sustainable growth and added value to the business eventually beneficial for shareholders and all stakeholders.

(Mr. Sumpun Vongphan)
Managing Director

Report of the Audit Committee

The Board of Directors of Tirathai Public Company Limited appointed Audit Committee, consisting of Mr. Pisit Leeahtam, as the Chairman, and Mr. Annop Tegajarin and Mr. Singha Nikornpun as the Audit Committee.

The 3 Audit Committee are well qualified and independent as per the announcement of Stock Exchange of Thailand in terms of qualification scope of work of the Audit Committee with SET's regulation. The committee has reviewed the appropriateness and effectiveness of the Company's internal control system based on the information provided by internal auditor, report of external auditor and the management. The committee also provided advices to the management to ensure more efficiency and effective in line with the best practices for the Audit Committee of the Stock Exchange of Thailand.

The Audit Committee have engaged in an importance good corporate governance, The Audit Committee are independent in providing opinions and suggestions in order to improve the company's operation in terms of good management practices, internal control and risk management in the most effective and efficient to the company.

In 2018, Audit Committee convened 4 meetings with management, internal and external auditors for consideration and performing of the followings:

1. Reviewed the Company's quarterly and annual financial statements prior to propose to the Board of Directors to ensure that they are prepared in accordance with generally accepted accounting principle and are accurate and sufficient disclosure as regulated by the officials.

2. Supervised the disclosure of information on related transactions or possible conflict of interest to ensure transparency, correctness and adequacy.

3. Reviewed the adequacy and appropriateness of the internal control system and monitor the operation in compliance with the laws and related rules and regulations of good corporate governance by considering the audit report in line with the approved audit plan. The audit Committee is also follow up the improvements has been made as suggested in the report of audit. As the result of the audit, there were no indicator of corruption or fraud that may cause the serious damages. The Committee agreed to the facts that the Company has proper internal audit control system with the appropriate acceptable level.

4. Oversee and assess the Company's internal audit operation closely in order to make sure that the auditor are fully independent, reviewed and considered the annual internal audit plans, and reviewed the audit results to ensure the Company's efficient internal control.

5. Consider and nominate the appointment of the Company's external auditors and their annual remuneration to the Board for consideration and propose to get shareholders approval at the Annual General Meeting.

6. Review the charter of audit committee to comply with the Good Corporate Governance in accordance with the Stock Exchange of Thailand requirements.

7. Report the operation result to the Board of Director on quarterly basis and providing with useful opinions and suggestions for the administration of the management for further consideration and take proper improvements. Besides, the Audit Committee also provide self-assessment on the performance of the Audit Committee to lead into better operational developments.

8. Review the charter of Audit Committee to comply with the Good Corporate Governance in accordance with the Stock Exchange of Thailand requirements.

The Audit Committee has performed the assigned duties with full knowledge, ability, and carefulness with independent and to express straight forward opinions without limit on the perception of the information from the management, operator and involve parties with transparency, verifiable, and good governance to maximize the benefits for the company and stakeholders.

In conclusion, from the review and consideration of all the matters Audit Committee have proceeded over the year 2018 the Audit Committee agreed that the Company and its subsidiaries have proper Internal Audit Control System and risk management to reasonable have the confidence to the creditability of the Financial Statement and good Corporate Governance in accordance with the Stock Exchange of Thailand requirements and that this audit report has been reviewed and approved by the Audit Committee dated February 28, 2019



Dr. Pisit Leeahtam
Chairman of the Audit Committee

Report of Nominating Committee

Dear Shareholders:

In 2018, the Board of Directors has appointed the Nominating Committee, consisting of 3 Board of Directors' members, to perform their duties of nominating the Company's Directors; for transparency and fair treatment to all stakeholders; for efficiency of its corporate activities; and in compliance with the Good Corporate Governance Policy of the Company and with the Principle of Good Corporate Governance of the Stock Exchange of Thailand (SET). Each director of the Nominating Committee shall assume the office for a term of one year, which will be completed in February 28, 2019.

The Nominating Committee has determined the qualifications of Directors to be nominated according to structure, size and composition of the Board as specified by the Board of Directors and select the persons who have the said qualifications and propose those names to Board of Directors for consideration.

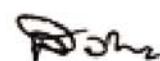
The Nominating Committee has convened one meeting in 2018, with the records of attendance of each director as follows:

Name	Position	Attendance/Total Meetings
1. Mr. Singha Nikornpun	Chairman	1/1
2. Mr. Charuvit Suanmalee	Nominating Committee	1/1
3. Mr. Tai Chong Yi	Nominating Committee	1/1

Mission of the Nominating Committee for the year 2018 is summarized as follows:

At Nominating Committee's Meeting No. 1/2018 held on 14 February 2018, it was considered and nominated directors to replace those retiring from the office and proposed their names to Board of Directors for consideration at Board of Director Meeting No.1/2018 held on 20 February 2018.

On behalf of Nominating Committee



Mr. Singha Nikornpun
Chairman of the Nominating



Executive Director

Details of Executive Director and Controlling Shareholders of the Company as of December 31st 2016

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Master of Economics / The Netherlands School of Economics, Erasmus University, The Netherlands - Directors Certification Program(DCP), 2002 Corporate Governance for Capital Market Intermediaries (CGI2/2015)	0.016%	2010- Present	- Chairman of the Board	Thai Tank Terminal Co., Ltd.
			2005- Present	- Chairman of Audit Committee/ Director	Tirathai Public Company Limited
			2004- Present	- Chairman of the Board	Prueksa Real Estate Plc.
			2004- Present	- Chairman of Audit Committee/ Director	Global Connections Plc.
			2007- Present	- Director	OHTL Plc.
			2001- Present	- Vice Chairman of the Board/ Chairman of Audit Committee	KGI Securities (Thailand) Plc.
			2004- Present	- Chairman of the Board/ Chairman of Audit Committee	Quality Mineral Plc.
			2006- Present	- Director	Jardine Pacific (Thailand) Ltd.
			2008- Present	- Director	P. Planner Co., Ltd.
			2006- Present	- Director	Jardine Engineering Services Co., Ltd.
			2006- Present	- Director	Amair Co., Ltd.
			2006- Present	- Director	C. Liner Co., Ltd.
1. Dr. Pisit Leeahtam Chairman/Independent Director Chairman of the Audit Committee Being appointed to Director on July 5th. 2005 Age (68)			2006- Present	- Director	GS Property Plc.
			2006- Present	- Director	Chaopraya Development Corporation Limited.
			2006- Present	- Country Chairman	Jardine Matherson (Thailand) Ltd.
			2005- Present	- Director	Dumex (Thailand) Limited
			2010-2010	- Nominating Committee	Tirathai Public Limited

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Bachelor of Engineering (Electrical) Chulalongkorn University - The Role of Chairman(RCM), 2005 Directors Accreditation Program(DAP), 2004 Directors Certification Program(DCP), 2004 Finance for Non-Finance Director(FN), 2004 Successful Formulation and Execution of Strategy (SEF), 5/2009 -The Role of Compensation Committee RCC12/2011 - How to Measure the Success of Corporate Strategy , HMS 2/2013	13.02%	2011- Present	- Chairman of the Board	Tirathai Public Company Limited
			2005- Present	- Managing Director	
			2005- Present	- Executive Director	
			2014- 2015	- Nominating Committee	
			2005- 2007	- Chairman of Nominating Committee	Tirathai Public Company Limited
			2005- 2007	- Engineering Department Manager	

2. Mr. Sumpun Vongphan
 Director
 (Authorized binding signature)
 Being appointed to Director
 on July 5th. 2005
 Age (66)

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
 3. Mr. Upakrom Thaweepoke Director (Authorized binding signature jointly with Mr. Sumpun) Being appointed to Director on July 5th. 2005 Age (66)	- Bachelor of Engineering (Industrial) Chulalongkorn University - Directors Accreditation Program(DAP),2004 - Directors Certification Program (DCP), 2004 - Audit Committee Program (ACP), 2008 - Developing Corporate Governance Policy, 2008 - Chartered Director Class (CDC), 2008 - Successful Formulation & Execution the Strategy, 4/2009 - Monitoring the System of Internal Control and Risk Management, 5/2009 - Monitoring the Internal Audit Function, 5/2009 - Monitoring the Quality of Financial Reporting, 7/2009 - M&A- Finding Opportunity during Crisis, 2009 - Thai Institute of Directors (IOD) - CEO Seminar: Understanding IFRS Financial Statement, Federation of Accounting Professions (FAP), 2012 - CEO/CFO Conference : Being AEC Professional, FAP, 2012 - KBANK Seminar – AEC Plus : Your Business to the New Frontier, 2012 - Financial Instruments for Director (FID), 3/2013 - CEO Forum 6/2013 (MAI) : Sustainable Business with CSR - Monitoring Fraud Risk Management, MFM 10/2013 - How to Measure the Success of Corporate Strategy , HMS 2/2013 - Risk Management Program for Corporate Leaders (RCL3/2016)	1.78%	2008- Present	- Finance, Accounting and Information Technology Manager	Tirathai Public Company Limited
			2005- Present 2011- 2011 2005- 2007	- Company Secretary - Director - Nominating Committee - Deputy Managing Director (Finance and Marketing) - Finance and Accounting Manager	
			1992- Present	- Director	Bangkok Engineering Consultant Co., Ltd.

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
 4. Mr. Charuvit Suanmalee Director (Authorized binding signature jointly with Mr. Sumpun); to Being appointed to Director on July 5th. 2005 Age (68)	- Bachelor of Engineering (Industrial) Adamson University, Phillippine - Directors Accreditation Program(DAP),2004	2.77%	2005- Present 2005- 2012	- Executive Director - Production Manager	Tirathai Public Company Limited



Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Bachelor of Engineering (Electrical) King Mongkut's University of Technology Thonburi - Master of Arts Program in Integrated Conflict Management Kasetsart University - Directors Accreditation Program(DAP),2004 - Finance for Non-Finance Director(FN),2004	0.37%	2008 - Present 2005 - Present 2006 - 2008	- Sales Manager - Executive Director - Marketing Manager	Tirathai Public Company Limited

5. Mr. Ouichau Siriwanjana
Director
(Authorized binding signature
jointly with Mr. Sumpun)
Being appointed to Director
on July 5th. 2005
Age (64)

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Master of Business Administration Thammasat University - Bachelor of Engineering (Electrical) Chulalongkorn University - Directors Accreditation Program(DAP),2004 - Directors Certification Program(DCP),2004	0.73%	2011 - Present 2008 - Present 2005 - 2007	- Executive Director - Planning Procurement & Logistics Manager - Deputy Managing Director (Operations) - Quality Assurance Manager	Tirathai Public Company Limited

6. Mr. Ampornrat Poolcharoen
Director
(Authorized binding signature
jointly with Mr. Sumpun)
Being appointed to Director
on July 5th. 2005
Age (67)

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name



- Bachelor of Business Administration (Finance and Banking)
Bangkok University
- Directors Accreditation Program(DAP),2004/
- Company Secretary Program,2005
Anti-Corruption the Practical Guide (ACPG 20/2015)

2.27%

2008- Present

2005- 2007

- Human Resource and Office
Administra Manager
- General Administration Manager

Tirathai Public Company Limited

7. Mrs. Sunan Santichotinan
Director
(Authorized binding signature
jointly with Mr. Sumpun)
Being appointed to Director
on July 5th. 2005
Age (67)

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name



- Master Degree of Management D86
Sasin Graduate Institute of Business Administration
Chulalongkorn University
- Directors Accreditation Program(DAP),2006/

0.01%

2005- Present

2012- Present

2009- Present

2010- 2010

2007- 2008

- Director
- Nominating Committee
- Executive Vice President
- Nominating Committee
- Nominating Committee

Tirathai Public Company Limited

AIRA SECURITIES PUBLIC COMPANY LIMITED

Tirathai Public Company Limited

8. Mr. Tai Chong Yih
Director
Being appointed to Director
on July 5th. 2005
Age (58)



Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Master of Engineering, Electric Power, Rensselaer Polytechnic Institute, Troy, New York, USA - Bachelor of Electrical Engineering (Electrical Power) Faculty of Engineering Chulalongkorn University - Certificate Program The Capital Market College (SCB) Class 17 - Certificate Program Thailand and the ASEAN Economic Community, Class 2, King Prajadhipok's Institute - Training courses Assessor Course ISO / IEC 17025, Thai Industrial Standards Institute, Ministry of Industry - Training courses (Calibration and Traceability of Measurement, Institute of Metrology - APLAC Workshop on Measurement Uncertainty, Hong Kong Special Administrative Region of the People's Republic of China - Thammasat University Management Development for Organization Transformation Training Program - <u>Doing for society and the country</u> - Qualified Committee on the National Standards Committee - Advisor and Subcommittee for Knowledge Testing Electrical Engineering Council of Engineers - Subcommittee set up standards for electrical and mechanical products, Thai Industrial Standards Institute Ministry of Industry	0.00%	2018- Present	Independent Director	Tirathai Public Company Limited
			2014- 2016	Governor of the Metropolitan Electricity Authority	Metropolitan Electricity Authority
			2011- 2014	Executive 13 Deputy Governor, Corporate Administration	Metropolitan Electricity Authority
			2010- 2011	Executive 12, Assistant Governor of Service Distribution System	Metropolitan Electricity Authority
			2008- 2010	Executive 11, Director of Design and Control Department	Metropolitan Electricity Authority
			2007- 2008	Executive 10, Assistant Director of Design and Control Department	Metropolitan Electricity Authority
			2005- 2007	Executive 10, Director of the Electrical Equipment Division, Research and Development Division	Metropolitan Electricity Authority

9. Mr. Somchai Rojrungrasinkul
Independent Director
Being appointed to Director
On February 20th. 2018

Age (62)

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Master Degree of Business Administration, Abilene Christian University, Dallas, Texas, USA. - Bachelor Degree in Finance and Banking, Kasetsart University - Capital Market Academy Leadership Program - Politics and governance in Democratic Systems for Executive #8, King Prajadhipok's Institute - Advanced Management for Bankers, Wharton School, University of Pennsylvania, U.S.A. - Financial Institution Governance Program, FGP 3/2011 - Role of The Compensation Committee Program (RCC) - Director Certificate Program (DCP) - Improving Board Decisions (IBD) - Director Certification Program Update (DCPU 2/2014) - Advanced Audit Committee Program (AACP 15/2014) - Anti-Corruption for Executive Program (ACEP 10/2014) - Role of the Chairman Program (RCP 33/2014) - Successful Formulation and Execution of Strategy (SFE 25/2015) - Successful Formulation and Execution of Strategy (SFE 27/2016) - Ethical Leadership Program (ELP4/2016)	0.00%	2013- Present	- Independent Director/ Audit Committee	TMB Public Company Limited
			2012- Present	- Independent Director/ Audit Committee	Tirathai Public Company Limited
			2008- Sept. 2012	- President of Deposit Protection Agency	Deposit Protection Agency
				Important Work Experiences	Government Pension Fund
				- Deputy Secretary General (Investment)	Deutsche Bank, Bangkok Nakornthon Bank
				- Deputy General Manager	Thai Bond Market Association
				- Senior V.P. Treasurer, Head of Correspondence Banking	
				- Vice President/Chairman of Audit Committee	
				- Chairman	Thai Administration Services Co., Ltd.
				- Chairman	Fitch Ratings Co., Ltd.
				- Chairman	GPF Property Management Co., Ltd.
				- Director	Saha Thai Steel Pipe Public Co., Ltd.
				- Director	Thai Property Advisory Co., Ltd.
				- Director	LMG Insurance Co., Ltd.
				- Independent Director/ Audit Committee	IFS Capital (Thailand) Public Co., Ltd.

10. Mr. Singha Nikornpun
Independent Director
Audit Committee
Being appointed to Director
On November 12th. 2012
Age (65)

Name Last Name Position	Education / IOD	Percent of Shareholding	Previous Experience over the Past 5 Years		
			Period	Position	Company Name
	- Bachelor of Engineering Chulalongkorn University	0.08%	2016- Present	- Director/Independent Director	Tirathai Public Company Limited
			2009- 2011	- Consultant	Siam Cement Group
			2009- 2011	- Managing Director	Concrete Product and Aggregate Co.,Ltd.

11. Mr. Annop Tagajarin
Independent Director
Being appointed to Director
On November 8, 2016
Age (69)





Tirathai Public Company Limited has been certified Green Label Transformer

Mr. Ouichai Siriwanjana, Director of the company as representative received Certificates from Mr. Prasert Bunsumpun, President of Thailand Business Council for Sustainable Development and Mrs. Nisakorn Kositrat, Director of Thailand Environment Institute Foundation at Centara Grand at Central Plaza Ladprao Bangkok on June 26, 2018

วันที่ 5 ม

ศูนย์นิทรรศการและการ

**Tirathai Public Company Limited
received reward White Flag,
Green Star, Environmental
Good Governance
Project, 2018**



Ms. Sunan Santichotinan, Director of the company received reward White Flag, Green Star, Environmental Good Governance Project, 2018 which is a collaboration between IEAT, community, government sector, journalists, and private organizations in examining the environmental and safety performance in the workplace in order to evaluate the project performance and that Tirathai are able to pass the "excellent" assessment criteria for the 4th time at BITEC - Bangkok International Trade & Exhibition Centre Bangna on March 5, 2018

Company visits and Faculty of education viewed

In 2018, Tirathai Public Company Limited had the opportunity to welcome the Association, State Enterprise, and various organizations including university students total 10 groups as follows:

**Ubon Ratchathani University
on January 11, 2018**



1.

Thai Standards and Quality Association on February 5, 2018

2.



3.



National Science and
Technology Development
Agency : NSTDA
on February 7, 2018

Provincial Electricity Authority (PEA) on February 27, 2018



Students from Rajaman-
gala University of Tech-
nology Thanyaburi on
March 3, 2018

Southeast Asia University (SAU) on March 10, 2018



King Mongkut's Institute of Technology Ladkrabang on April 27, 2018



Department of Industrial Works on May 18, 2018

8.

Metropolitan Electricity Authority (MEA) on July 31, 2018



9.



Students from Chulalongkorn University on November 6, 2018

10.



VISION & MISSION



VISION

To be a leading transformer manufacturer, distributor and comprehensive services provider in Asia and Oceania and to seek opportunities of joint venture in related energy business. These will be supported with quality performance serving customer's demand on the basis of corporate good governance and social responsibility.

MISSION

BUSINESS

- To utilize technical expertise to collaborate with customers in order to design and manufacture transformers of quality suitable for their system and nature of work. Also to develop a complete range of service system to support customers' electrical system maintenance.
- To expand the market structure covering countries in Asia and Oceania.
- To increase distribution channels of energy generating and distributing equipment and to enter joint ventures in energy generating system projects.

CUSTOMER

- To serve customers' need by focusing on quality, reasonable price, in time delivery and good service.
- To be strongly intent on being the first choice of customers at any time when they demand transformer products and services.

HUMAN RESOURCES

- To encourage, develop and retain people to obtain their expertise and to build up their spirits of Teamwork, Quality, Integrity and Customer focus.

CORPORATE GOVERNANCE

- To have credibility to the shareholders and treat all stakeholders with fairness.

CORPORATE SOCIAL RESPONSIBILITY

- To be a good member of the society and perform business with responsible concern for the public.

Note: Vision issued at 9, February 2010
Mission issued at 31, March 2010

Major Shareholders and Dividend Policy

List of the top 10 shareholders and shareholding ratio, share distribution report and list of major shareholders as of 28 December 2018

	Major Shareholders	# Shares	% share
1.	Mr. Sampan Vongphan	40,109,927	13.02%
2.	CIMB SECURITIES (SINGAPORE) PTE., LTD	23,834,870	7.74%
3.	Mr. Wiboon Wongserbchart	10,099,400	3.28%
4.	Mr. Sutthisak Mahitthivanicha	8,878,000	2.88%
5.	Mr. Charuvit Suanmalee	8,521,014	2.77%
6.	Mrs. Sunan Santichotinan	6,991,809	2.27%
7.	Mr. Upakrom Thaweepoke	5,488,558	1.78%
8.	Mr. Somchai Patpai	5,429,150	1.76%
9.	Mr. Somchai Sukjitnittayakarn	5,351,940	1.74%
10.	Mr. Kanta Vongphan	4,407,241	1.43%
	Other Shareholders	188,896,363	61.33%
	Total	308,008,272	100%

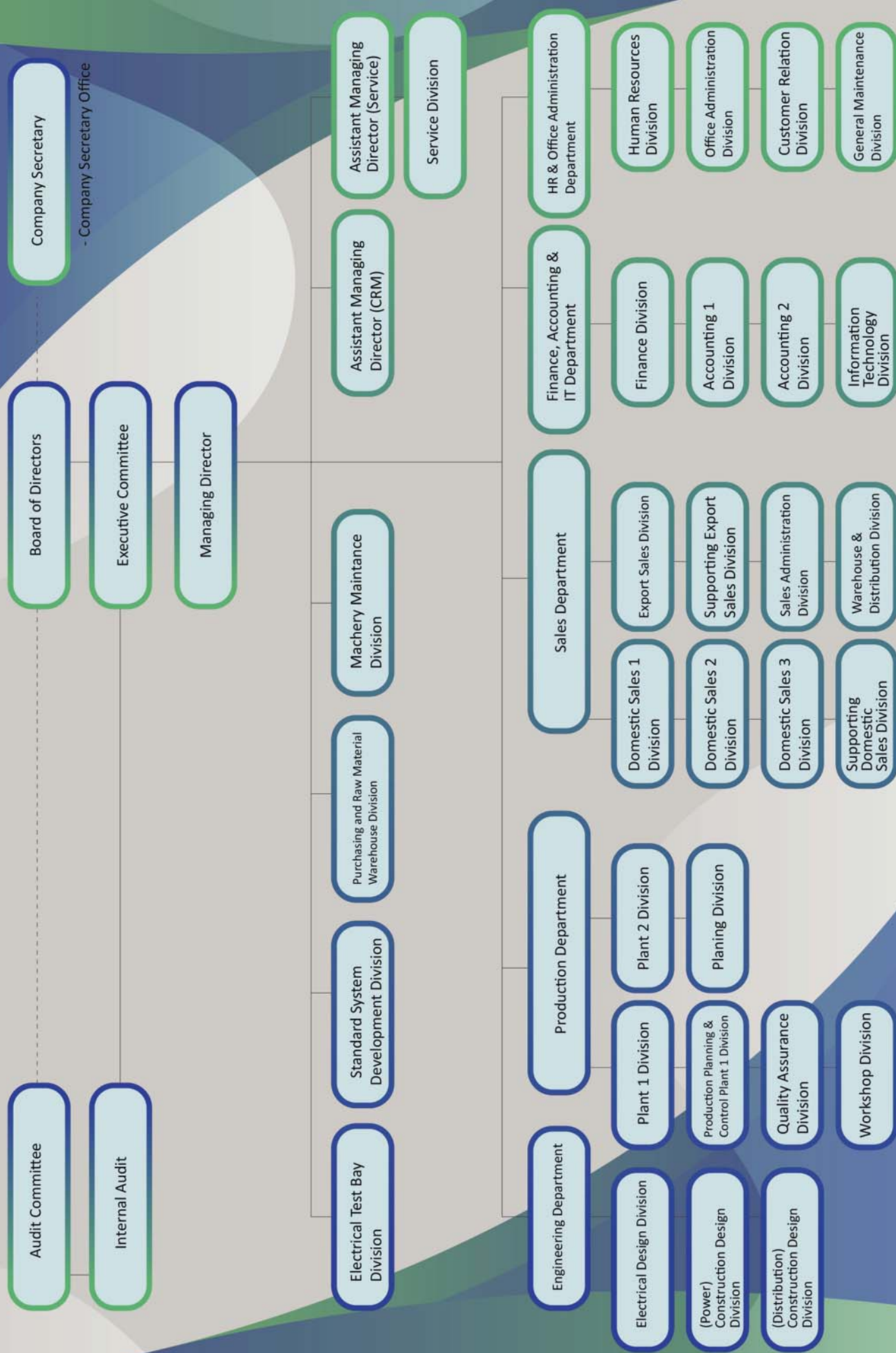
Note: : The 1st, 5th, 6th and 7th in the shareholders' list are the Executives and Directors of the Company. The 2nd is the custodian (foreign juristic company) of Mr. Tai Chong Yih, who is a director of the Company

Dividend Policy

The Company has the policy to pay dividend at the rate not less than 50% of net profit after tax and legal reserve. However, the dividend payment has to pass the shareholders' resolution at the AGM.



Organization Chart



Management

Management Structure

Structure of the Company's committees consists of 4 committees including the Board of Directors, the Audit Committee, the Nominating Committee, and the Executive Committee, whose names and scope of authority are as follows:

Board of Directors

As of December 31st, 2018, the Board of Directors consists of 11 members; each of them shall assume the office for a term of three years:

			Term to end by
1. Dr. Pisit	Leeahtam	Chairman/ Independent Director/ Chairman of the Audit Committee	21/4/2020
2. Mr. Sumpan	Vongphan	Vice Chairman	28/4/2021
3. Mr. Upakrom	Thaweephoke	Director	21/4/2019
4. Mr. Charuvit	Suanmalee	Director	21/4/2020
5. Mr. Ouichai	Siriwajana	Director	21/4/2019
6. Mr. Ampornrat	Poolcharoen	Director	28/4/2021
7. Ms. Sunan	Santichotinan	Director	21/4/2020
8. Mr. Tai Chong	Yih	Director	28/4/2021
9. Mr. Somchai	Rojrungrasinkul	Independent Director	21/4/2019
10. Mr. Singha	Nikornpun	Independent Director/Audit Committee	21/4/2019
11. Mr. Annop	Tagajarin	Independent Director/Audit Committee	28/4/2021

By Mrs. Chotika Meewongvanich, Secretary to the Board of Directors

Authorized Directors

Authorized directors binding the Company include Mr. Sampan Vongphan; jointly sign their names with Mr. Upakrom Thaweephoke or Mr. Ampornrat Poolcharoen or Mr. Charuvit Suanmalee or Mr. Ouichai Siriawajana or Ms. Sunan Santichotinan, totally 2 persons, with the company common's seal being affixed.

Scope of Authority of the Board of Directors

1. Operate the Company's businesses in accordance with the law, objectives and regulations of the Company, as well as resolutions of the shareholders' meetings, with honesty, integrity, and carefully protect the interest of the Company
2. Make plans and determine policies on the business management of the Company, and audit the operating result of the Company
3. Prescribe rules and regulations of the Company
4. The Board of Directors may appoint the Executive Committee or authorize one or several director(s) or other person(s) to take any action(s) in lieu of the Board of Directors, thus, within the scope of the authority of the Board of Directors; and shall be entitled to terminate, revoke, amend, or change the said authorization
5. Consider and approve other significant deals in connection with the Company, or as it deemed appropriate to carry out such deals for the benefits of the Company

Exception to the authority of the following actions, which will be taking only after receiving a prior approval from the shareholders' meeting. Thus, any transactions which any director or parties who may have conflict of interests or being stakeholder(s) or may have conflict of interests in any other nature with the Company, the said director shall have no voting right over such transactions.

- Transactions which are required by law to receive resolutions from the shareholders' meeting such as transfer or sales of business, increase of capital, merger, etc.;

- Transactions in which any director is a stakeholder and being required by law or regulations of the Stock Exchange of Thailand to receive prior approval from the shareholders' meeting;



Audit Committee

As of December 31st, 2018, the Audit Committee of the Company consists of 3 members; each of them shall assume the office for a term of three years:

			Term to end by
1. Dr. Pisit	Leeahtam	Chairman of Audit Committee	28/2/2020
2. Mr. Singha	Nikornpun	Audit Committee	28/2/2020
3. Mr. Annop	Tagajarin	Audit Committee	28/2/2020

By Mr. Amornphong Nuanvivat, Secretary to the Audit Committee

Authority of the Audit Committee

1. To review the Company's financial transactions to ensure that it is accurate and adequate.
2. To review the Company's internal control system and internal audit system to ensure that they are suitable and efficient, to consider an internal audit unit's independence, as well as to approve the appointment, transfer and dismissal of the chief of an internal audit unit or any other unit in charge of internal audit.
3. To review and ensure the company abide by laws and regulations of The Securities and Exchange, The Stock Exchange of Thailand, as well as, rules or laws relating to the Company's business.
4. To consider, select, and nominate an external auditor of the Company, including recommendation of remuneration for the external auditor. In addition, to attend a meeting with the auditor without the presence of the management as least once a year.
5. To consider the Connected Transaction or transactions that may lead to conflict of interest. To comply with the laws and regulations of the Stock Exchange of Thailand. This is to ensure that the transaction is reasonable and maximize the benefit of the Company.
6. To prepare the report of the Audit Committee and disclose in the Company's annual report. The report must sign by the Chairman of the Audit Committee and should consist of the following:
 - (a) an opinion on the accuracy, completeness and creditability of the Company's financial report
 - (b) an opinion on the adequacy of the Company's internal control system,
 - (c) an opinion on the compliance with the law and regulations of The Securities and Exchange, and regulations of The Stock Exchange of Thailand or the laws relating to the Company's business,
 - (d) an opinion on the suitability of an auditor,
 - (e) an opinion on the transactions that may have conflicts of interests,
 - (f) The number of the Audit Committee meetings, and the attendance of each audit committee,
 - (g) an opinion or observation about the Audit Committee performance of duties in accordance with the charter and,
 - (h) Other transactions which, according to the Audit Committee's opinion, should be known to the shareholders and general investors, subject to the scope of duties and responsibilities assigned by the Company's board of directors
7. To perform any other duties assigned by the Company's board of director, with the approval of the Audit Committee.

Nominating Committee

As of December 31st, 2018, the Nominating Committee of the Company consists of the following members; each of them shall assume the office for a term of one year:

			Term to end by
1. Mr. Singha	Nikornpun	Chairman of the Nominating Committee	28/2/2019
2. Mr. Charuvit	Suanmalee	Nominating Committee	28/2/2019
3. Mr. Tai	Chong YI	Nominating Committee	28/2/2019

Authority of the Nominating Committee

1. Determine the qualifications of the Directors nomination according to structure, size and composition of the Board as specified by the Board of Directors
2. Recruit and nominate appropriate persons to be the directors according to the qualifications as specified by the Board and propose to the Board of Directors for consideration

Executive Committee

As of December 31st, 2018, the Executive Committee of the Company consists of 5 members; each of them shall assume the office for a term of one year:

			Term to end by
1. Mr. Sumpan	Vongphan	Chairman	28/2/2019
2. Mr. Upakrom	Thaweephoke	Executive Director	28/2/2019
3. Mr. Charuvit	Suanmalee	Executive Director	28/2/2019
4. Mr. Ouichai	Siriwajana	Executive Director	28/2/2019
5. Mr. Ampornrat	Poolcharoen	Executive Director	28/2/2019



Authority of the Executive Committee

1. Oversee the business operations of the Company in accordance with its business policies, business plans, and business strategies as approved by the Board of Directors
2. Authorize the expenses or payments in related to the business operations or investment in new projects or new purchase or sale of fixed assets of the Company, loans; with the amount limit not over 200 million Baht
3. Authorize the order confirmation, quotations, execution of contracts or loans, guaranty, or any juristic act in normal course of business of the Company, with the amount limit not over 1,000 million baht
4. Determine the structure of organization and management covering the details of selection, training, employment, and termination of the employees
5. Determine the employees' welfare in accordance with circumstances, traditions, and the applicable law
6. Consider the execution of contracts of the Company and its subsidiary relating to finance, loans, and guaranty with the amount limit of 5 million Baht each
7. Consider each agenda prior to seek for Board of Directors' approval
8. Recommend the Board of Directors to give approvals on goals, business policies, business plans, business strategies, management power, annual expense budget, scope of authority of the Managing Director
9. Perform other duties as assigned by the Board of Directors
10. Supervise the business operations of the Company in accordance with the law, objectives and regulations of the Company, as well as resolutions of the shareholders' meetings

The above delegation to the Executive Committee must be under the criteria of law, and rules and regulations of the Company. In case of any actions which have or may have benefits or interests of any Executive Director or parties in conflict (as per the Announcement of the Securities and Exchange Commission), the Executive Committee shall propose the said transactions to the Board of Directors for further consideration. Whereas, such Executive Director and parties who may have conflicts of interest shall have no voting right in the Board of Directors' Meeting.

The Management

As of December 31st, 2018, the Management of the Company consists of 7 members, as follows:

1. Mr. Sumpan	Vongphan	Managing Director
2. Mr. Yossagorn	Burakamkowitz	Assistant Managing Director (CRM)
3. Mr. Upakrom	Thaweepoke	Finance, Accounting and Information Technology Manager/Company Secretary
4. Mr. Ampornrat	Poolcharoen	Production Manager
5. Mr. Ouichai	Siriwajana	Marketing Manager
6. Ms. Sunan	Santichotinan	Human Resources & Office Administration Manager
7. Mr. Somsak	Kooamornpatana	Engineering Manager

Authority of the Managing Director

1. Operate and manage the business operations of the Company in accordance with the business policies, business plans, and business strategies, as approved by the Board of Directors
2. Authorize the expenses or payments under projects or investment or buy or sale of fixed assets of the Company, as approved by the Executive Committee
3. Authorize the general expenses of the business operations of the Company within the amount limit not over 1.0 million Baht each; exception to Raw Material Purchase, Contractors, and temporary employees in order to fulfill the contract
4. Authorize or assign any other person as the Managing Director may see fit to perform the duties on his behalf in matters as deemed appropriate in accordance with the law, rules and regulations of the Company
5. Perform other duties as assigned by the Board of Directors and/or by the Executive Committee on a case-by-case basis
6. Approve and authorize the engagement of agreement binding the general business operations of the Company; whereas, the credit limit is in accordance with the approval authority, which have been approved by the Board of Directors; so as to the total amount limit may be adjusted as deemed by the discretion of the Board of Directors

The above authorization to the Managing Director must comply with the rules and regulations of the Company. In any case, the director who may have conflict of interests or parties who have been in conflict with the Managing Director shall have no authorization to do so. The Managing Director shall present the issue to the Board of Directors for further consideration.

Nomination of Directors and the Management

The selection of directors of the Company must be through the nomination process of the Nominating Committee. The Nominating Committee shall select candidates to assume the office of the Board of Directors by taking into the



considerations of knowledge, abilities, and business-related experiences or may consider from the experienced major shareholders of the Company. However, the appointment of new directors shall be considered by the Board of Directors' meeting attended by the Audit Committee.

In addition, the appointment of the new Board of Directors shall be approved by the resolution of the shareholders' meeting according to the Company's Regulations prescribing that the shareholders' meeting shall elect the directors according to the criteria and procedures, as follows:

- (a) A shareholder shall have one vote per one share
- (b) Each shareholder shall use all of his/her votes under (a) to elect one or several person(s) as directors without dividing any portions of his/her votes to any person
- (c) The person who receives the highest number of votes in descending order is the one who has elected as the number of directors to be elected or elected at that time. In the case where a person who has elected in the next order has the same number of votes in excess of the number of directors to be elected, the Chairman shall have the casting vote.

At every Annual General Meeting (AGM), One-third of directors must be released from office. In case, the number of directors cannot be divided into three portions, the approximate number to one-third of the directors shall be released from office. Directors to be released from office in the first year and in the second year after the Company's registration shall be selected by drawing lots. Meanwhile, in the following years, directors who have longest been in office will be released from office. Retiring directors may be re-elected.

Criteria for Selection of Audit Committee/Independent Directors

The Audit Committee consists of three independent committees, with a term of office of three years. The Company has a policy to nominate a member of the Audit Committee whose qualifications shall be as follows:

1. Hold shares not exceeding 1% of the paid-up capital of the Company
2. A director who is not involved in the management of the Company and its related companies
3. A director who is not an employee, employee or advisor receiving a regular salary from the Company, related companies Or major shareholders of the Company.
4. A director who has no interest or either direct or indirect stake in the financial and management of the company, Affiliate Company, Or major shareholders of the Company.
5. A director who has no interest or stakes in accordance with Section 4. Prior to the past 2 years, to be appointed as a member of the Audit Committee.
6. A director who is not a related person or a close relative of the management or major shareholders of the Company.
7. A director who has not been appointed as a representative to protect the interests of the Company's directors, major shareholders or shareholders who are related to the major shareholders of the Company.
8. To perform the duty to express opinion or report the performance according to the duties assigned by the Board of Directors. It is not under the control of management or major shareholders of the Company, including those related or close relatives of such person.

In addition, the Company has considered other qualifications, such as experience, knowledge, expertise and ethics, to maximize benefit to the Company.

Nomination of the Management

The Board of Directors and the management comprehend the operations to ensure that the appropriate recruitment process for nomination of the top essential management are practical managed providing process and action plan under Concrete Human Resource Management.

Remunerations of the Management

1. Remunerations in Cash

Remuneration approved by the Annual General Meeting of Shareholders for the year 2018 on April 28, 2018 is as follows:

1.1 Monthly remuneration and meeting allowance

Board	Monthly Remuneration (Baht per person)	Meeting Allowance (Baht per time) (Only directors who attended the meeting)
Board of Directors		
- Chairman of the Board	25,000	30,000
- Committee	10,000	15,000
Audit Committee		
- Chairman of the Audit Committee	10,000	30,000
- Audit Committee	5,000	15,000

1.2 Bonus

According to the resolutions of the Annual General Meeting of Shareholders for the year 2018, the approval of Bonus, including monthly remuneration and meeting allowance for the year 2018 are not exceeding 5.5 million baht

2. Other compensation or benefits

-None-

Remunerations of the Board of Directors and Audit Committee

Name	2017			2018		
	Remuneration	Meeting Allowance	Bonus	Remuneration	Meeting Allowance	Bonus
1. Dr. Pisit Leeahtam	420,000**	300,000	296,000	420,000**	270,000	340,000
2. Mr. Sumpun Vongphan	540,000**	90,000	148,000	540,000**	75,000	170,000
3. Mr. Upakrom Thaweephoke	180,000**	90,000	148,000	180,000**	75,000	170,000
4. Mr. Ampornrat Poolcharoen	180,000**	90,000	148,000	180,000**	75,000	170,000
5. Mr. Charuvit Suanmalee	180,000**	90,000	148,000	180,000**	75,000	170,000
6. Mr. Ouichai Siriwanjana	180,000**	90,000	148,000	180,000**	75,000	170,000
7. Ms. Sunan Santichotinan	120,000	90,000	148,000	120,000	75,000	170,000
8. Mr. Tai Chong Yih	120,000	90,000	148,000	120,000	75,000	170,000
9. Mr. Teeravut Supaviriyakul	180,000*	150,000	148,000	-	-	-
10. Mr. Singha Nikornpun	180,000*	150,000	148,000	171,500*	120,000	170,000
11. Mr. Annop Tegajarin	120,000*	-	-	180,000*	-	-
12. Mr. Somchai Rojrungrasinkul	-	-	-	103,000	30,000	170,000
Total	2,400,000	1,230,000	1,628,000	2,374,500	945,000	1,870,000

*Inclusive of Total remuneration as Audit Committee

**Inclusive Total remuneration as Executive Director Approved at the Board of Directors Meeting No. 1/2018

*** The Annual General Meeting of Shareholders for the year 2018 resolved to approve the directors' remuneration, bonus and meeting allowance for the year 2018 not exceeding 5.5 million baht.

Remunerations of the Management

1. Monetary remuneration

Remunerations	2017		2018	
	No. of person	Remunerations (baht)	No. of person	Remunerations (baht)
Total Remunerations*	7	19,892,015.00	7	19,943,232.00
Total Bonus	7	-	7	-
Total	7	19,892,015.00	7	19,943,232.00

2. Other compensation or benefits

1. Car to facilitate the execution of duty
2. Fuel Allowance for actual duty but not exceeding 10,000 baht / person / month
3. Annual Health Checkup
4. Life insurance, Health insurance, Accident insurance



Corporate Governance

The Company recognizes the significance of good corporate governance and has thus prescribed the code of conduct relating to the business ethics for transparency of operation of work of staff at all levels. The Company's management has pushed the establishment of corporate governance culture as a basis of sustainable growth and generation of benefit to all stakeholders (please see further information in Form 56-1).

Corporate Governance Policy

To achieve the Company's objectives of business operation; to create responsibilities for performance of work according to the duties; to generate honesty-based transparency; to increase sustainable business competitiveness; and to increase the confidence of stakeholders, the Board of Directors has determined its corporate governance policy, as follows:

1. Operate the business with transparency and accountability; and disclose adequate information for all stakeholders;
2. Manage the Company's affairs at its full capabilities for the maximum benefits of shareholders;
3. Provide the risk management and control system; operate the Company's businesses with reasonable care; evaluate the risks; and determine strategies for correction and monitoring of risk management on a regular basis;
4. Provide equal and fair treatment to shareholders and all stakeholders;
5. Clearly organize the structure of roles, duties, and responsibilities of each group of directors;
6. Encourage the management and all employees to perform their duties with business ethics and righteousness;

The Company has been registered with MAI on May 10th, 2006; whereas, the Board of Directors and the management of the Company has its policy to operate businesses with transparency, to adhere to the principle of merit and to comply with the law and the corporate governance policy of the Company; therefore, the Company has implemented its corporate governance policy for the purposes of transparency and accountability; and has disclosed adequate information to all related parties. The Company has reported the result of implementation of its good corporate governance policy in 2018 according to the principle of good corporate governance of registered companies, as follows:

Section 1 Right of Shareholders

The Board of Directors has given the priority to the right of shareholders; and the Company has implemented its corporate governance policy by taking account of shareholders' rights, as follows:

Structure of Shareholders

The Company has organized clear and transparent structure of shareholding between the Company and its subsidiaries; and has disclosed the names, no. of shares and proportion of shareholding of major shareholders of the Company and its subsidiaries in Form 56-1 and the Annual Report.

Encouragement on the Exercise of Shareholders' Rights

The Company has its practical procedures to maintain and to protect its shareholders' rights. The procedure began with determining the good corporate governance policy with concerns for shareholders' rights and encouraging of shareholders to exercise the rights and their fundamental rights after the trading of securities, rights to receive dividend, supervising the coordination between shareholders and the Registrar of Thailand Securities Depository Co., Ltd. (TSD), as well as establishing a work unit to handle inquiries and to facilitate shareholders regarding the registration work; moreover, the Company has promoted the active roles of shareholders in the shareholders' meetings, including the right of meeting attendance, the voting right, and the expression of opinions so that shareholders will have active participation in considering the crucial matters. Moreover, the company has policy to facilitate and encourage the shareholders and fund managers to join the shareholders' meeting.

Facilitation on the exercise of right of meeting attendance and the voting right of shareholders

The Company has facilitated its shareholders regarding the attendance and the exercise of the voting right in meetings and has refrained from any action which may impair their opportunities to attend meetings; and has managed to promote the exercise of right of shareholders before, during, and after the date of shareholders' meetings, in compliance with principles and guidelines specified in "AGM Checklist", prescribed by the Thai Investors Association, the Limited Companies Association, and the Securities and Exchange Commission. The Company has been evaluated by the Thai Investors Association, the Limited Companies Association, and the Securities and Exchange Commission in the AGM 2018 at the level of 91%.



Section 2 Fair Treatment to Shareholders

The Company has taken account of equality among all groups of shareholders so that shareholders shall have opportunities to participate in its administration of work; and has promoted the mechanism for balance of power and audit of the company's operations; whereas, the principle of fair treatment to shareholders shall be as follows:

Shareholders' Meeting

The Company has realized that shareholders' meeting is a channel that shareholders shall be able to exercise their right of audit and control of the company's operations; therefore, the Company has created the supportive environment of shareholders' meeting so that shareholders shall have an opportunity to exercise their rights and to receive equal treatment. In 2018, the Company has convened shareholders' meeting (AGM) on April 30, 2018, whereas, the Board of Directors has supervised the arrangement of shareholders' meeting and has invited all shareholders, and has notified them of the date, time, venue, as well as agenda of the meeting. The Board of Directors has duly convened the shareholders' meeting within adequate time and has promoted the equal opportunities for inquiries, expression of opinions, and recommendations to all shareholders; moreover, the Company has safely kept the approved minutes of shareholders' meeting systematically for easy and convenient accesses.

Provision of the Protection System and Audit of Internal Data Use

The Board of Directors has given the priority to the provision of protection system and audit of internal data use to prevent from exploiting the internal data for the purpose of trading of securities; and has prescribed guidelines for keeping and prevention of internal data use, which shall be strictly observed throughout the organization.

Moreover, directors and the management have recognized the obligations and responsibility to prepare and disclose the report on the holding of the Company's securities to the Office of Securities and Exchange Commission, as per Clause 59 of the Securities and Exchange Act 1992.

Section 3 Awareness of the Stakeholders' Roles

The Board of Directors is aware of rights and roles of inside and outside stakeholders and has prescribed the Company's mission to become a reliable organization that provides maximum returns to stakeholders; and has also prescribed the written policy and ethical standards on fair treatment to stakeholders to be complied with by the Board of Directors and employees at all levels.

The Board of Directors has given the priority to the rights of all groups of stakeholders through its "core value" project, which consists of TQIC (Team work, Quality, Integrity and Customer Focus), established by means of brainstorming between the management and employees at all levels and being created from the insiders' selfness for practical implementation. This core value was communicated to staff at all levels and was applied to the recruitment of new staff for clear understanding of guidelines of the Company's business operations.

The Board of Directors and the top management are confident that the organizational values and culture, which are determined by the demand and directions of personnel within the organization, shall lead to practical implementation and implantation of good consciousness in accordance with the ethical principle of business operation of the Company, which emphasizes the transparency and fair treatment to all groups of stakeholders in order to achieve the goal of the organization and is simultaneously used as a mechanism to protect rights and benefits of all groups of stakeholders; therefore, it can be trusted that the Company has equally given the priority to all groups of stakeholders including shareholders, employees, business partners and creditors, customers, competitors, communities, society, and the environment; moreover, it has prescribed the procedures covering the rights and benefits that the stakeholders should be given, as follows:

Shareholders

The Company has its policy to take care of the shareholders' right regarding the obtainment of information, voting rights, right to receive fair treatment; moreover, the Company has continuously produced its satisfactory operating result and has given the benefit and satisfactory returns to its shareholders without complicate and cross structure of shareholder. Moreover, the Company also has policy to give an opportunity for the all of shareholders to communicate freely among themselves and will not ignore to disclose any significant conditions in the Shareholders Agreement, which have the big impact to the Company, or any other shareholders (if any). Regarding related transactions, it will be considered carefully by Audit Committee before submission to Board of Directors for consideration and approval; meanwhile, directors who are stakeholders shall refrain from voting for approval of the said transactions; moreover, the Board of Directors shall strictly supervise the related transactions and acquisition and disposal of assets in accordance with the regulations of the Stock Exchange of Thailand (SET).

Employees

The Company has considered that employees are one of the crucial factors to the organization's successes, and has thus determined to develop various factors, for being organizations of learning, to strengthen the organizational structure, to promote team working, to give reasonable returns, which is in line with short and long term of the company operation.



The Company has also provided the company's welfare including group insurance, personal accident insurance, and provident fund and saving and credit cooperation, etc. The company is also accredited with TIS/OHSAS 18001 Standard for occupational health and safety management and also to give priority to its employees' potential development, to pass on the knowledge, and to welcome all opinions and suggestions from employees by way of establishing its core value, which includes its adherence to the integrity.

Business Partners and Creditors

The Company has its policy of fair treatment to business partners; especially in terms of vendor selection process, vendor evaluation process, price comparing process which are written in the company procedure, and creditors strictly in compliance with the law and commercial conditions under the agreements mutually executed, including business ethics and guidelines of good and fair practices relating to borrowing of money from creditors and repayments of debts, negotiating with the bank to get the best and fair guarantee condition and also monitoring Debt and Equity structure to be in a proper proportion in order to cope up with the company's growth ; whereas, in the previous year, the Company had no disputes with its business partners or creditors.

Customers

The Company has taken good cares and responsibilities for its customers by manufacturing standard quality products that meet the customers' demands and emphasizing the quality of products and services as well as reasonable prices, and punctual delivery of products. In case, there are obstacles preventing the delivery of products according to the scheduled time, the Company shall notify its customers in advance to discuss and find collective solutions to the problems.

Competitors

The Company has complied with the rules of fair competitions to maintain the code of conduct for competitions; whereas, in the previous year, the Company had no disputes with its commercial competitors.

Communities, Society, and Environment

The Company has taken its great cares for environmental protection and has prevented any potential environmental impacts to communities and the society. According to implementation of the said policy, the Company has been accredited with ISO 14001 Standard in 2006 and was accredited with TIS/OHSAS 18001 Standard for occupational health and safety management on 11 September 2009.

Whistleblower Policy

The Company has set a function to acknowledge incidence, grievance or suggestion from stakeholders affected from the Company's operation. This can be done via electronic mail and post mail. Shareholders and stakeholders may provide a lead in the case where there is an offense committed against the law or the regulation of the Company or an incident, which may be damaging to the Company. This can be brought to the attention of the Board of Directors through the specified channels. The Company will keep such information confidential in order that the informants may not suffer any trouble from such an outcome. The company has a guideline for the protection of rights of stakeholders who are affected by the violation of rights by the conduct of business of the Company. Compensation of an amount not lower than that required by the law will be considered.

The incidence, grievance or suggestion can be sent to the following channels:

1. Email: secretaryoffice@tirathai.co.th
2. Post mail: Office of Company Secretary
Tirathai Public Company Limited
516/1 Moo 4 Bangpoo Industrial Estate Soi 8 D
Sukhumvit Road, T. Praksa, A. Muang
Samutprakran 10280
Tel: 02 – 769-7699

Section 4 Disclosure of Information and Transparency

The Company is aware of complete, reliable, transparent, adequate and immediate disclosure of information, including financial and non-financial data of the Company so that all stakeholders shall have equal and convenient accesses to the information. For transparent disclosure of information within the organization, the Company has organized meetings between the management and department heads to acknowledge the directions of the Company's business operations and to exchange the information and to pass on the policy implementation to their direct subordinates and to provide channels for employees' knowledge sharing; for disclosure of information outside the organization, the Company has complied with the Requirements of the Stock Exchange of Thailand (SET) and has disclosed the information both in Thai and English languages through SET channels and the Company's website.

The Board of Directors has given the priority to the quality of financial statements and accuracy of information given therein in accordance with the standard of accounting. The Company has supervised and managed the financial statements to be audited by an independent auditor and by the Audit Committee. The Board of Directors has given a report on its responsibilities to prepare financial statements in the Annual Report.

Moreover, in 2018, the Company has given the priority to regular publication of its operating results in overview and



its progress through Opportunity Day activities and the media to provide another channel for distribution of the Company's information to the public.

Relationship with Investors

The Company has established the Investor Relations Section as a direct channel to communicate with shareholders, small investors and institutional investors, analysts, and other related parties such as the Stock Exchange of Thailand and Office of the Securities and Exchange Commission. For duly compliance with the law and regulations, the Company has prepared the investor relations work plans throughout the year; meanwhile, the top management of the Company and the Investor Relations Section have opportunities to give information on business activities; provided that shareholders, investors, analysts, and interest persons may directly contact the Investor Relations Section: Mrs. Chadapa Tantithanatai or Mrs. Chotika Meewongvanich at Tel.02-769-7699 Ext.1220 or email: ir@tirathai.co.th

Section 5 Responsibilities of the Board of Directors

Structure of the Board of Directors

The Board of Directors, which is regarded as the key element of good corporate governance, must consist of personnel with knowledge, expertise, and experiences in favor of the Company's operations. Over a half of the Board of Directors of the Company have the required knowledge and direct experience in transformer business management; meanwhile, the rest of them have the abilities and knowledge in other business fields such as finance, economics, etc.; and all directors have already taken the training course from the IOD; moreover, the term in office of directors, and qualifications of the Company's directors, including appointment and removal of directors must be approved by shareholders at AGM.

The Company has balanced the power of non-executive directors by not giving any person or group of persons the sole decision-making power, in order to establish the mechanism of balance of power and effective management. The Board of Directors consists of 11 members, including 5 executive directors, 3 non-executive directors (including 1 independent director), and 3 independent/audit directors. The Company has totally 4 independent directors or equal to 36% of the total directors; and the Board of Directors has considered that the said proportions are suitable. Executive directors are able to give in-depth comments; meanwhile, non-executive directors are industrial experts; therefore, creative opinions are expressed in the Board of Directors' meetings; and the Board of Directors' decisions are based on the overall benefits of the Company.

Components of the Board of Directors

The Board of Directors shall have their full qualifications as prescribed by law and shall be the qualified persons from different business fields so as to integrate their necessary knowledge and abilities and to devote their efforts and time to perform the duties of directors of the Company; whereas, the procedures of appointment of directors are clear and transparent; and personal records of all directors are disclosed; and at each time of director replacement, the newly appointed directors shall promptly receive the information, which is necessary and beneficial to perform the duties of directors of the Company or not later than 3 months after the date of appointment.

Chairman of the Board of Directors shall not be the same person as the Managing Director and the duties of determination of corporate governance policy and administration of regular work must be clearly separated; the Chairman shall have independence to express opinions and shall have a casting vote, in case of equal votes in the Board of Directors' meeting, according to the Company's Regulations.

Vice Chairman of the Board of Directors shall have duties, according to the Company's Regulations, in any affair assigned by the Chairman of the Board of Directors; and shall perform the duties in lieu of the Chairman of the Board of Directors in the event that the Chairman of the Board of Directors is unable to perform the duties on a temporary basis or when the position of Chairman of the Board of Directors is vacant.

Independent Directors the Company has determined the qualifications of independent directors according to the Regulations of the Office of Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET) so that the independent directors of the Company shall have their genuine independence, which is suitable for characteristics of the Company. (Please see details of qualifications of independent directors in "Criteria for Selection of Audit Director/Independent Director" Page 25).

Managing Director shall be appointed and determined with the scope of power according to the period of time and amounts for entering into juristic acts by the Board of Directors' meetings; and shall have the power to take actions according to the resolutions of the Board of Directors; whereas, power, duties, and responsibilities for normal business operations of the Company shall be in accordance with the policy of the Board of Directors and with the principle of good corporate governance.

Company Secretary shall be obliged to handle the Board of Directors' meeting and shareholders' meeting effectively by taking account of rights and equality of shareholders, to give recommendations and supports to the Board of Directors' affairs governing the law, rules, regulations, requirements, and related procedures, and to give information that the Board of Directors and the newly appointed directors should be informed, and to supervise the compliance with the principle of



corporate governance and to communicate/to take care of shareholders properly.

Subcommittees In compliance with the principle of good corporate governance, the Board of Directors has set up 2 subcommittees to consider and review specific crucial operations carefully and effectively; whereas, the components and rules/duties of the subcommittees are clearly determined. 2 Subcommittees consist of:

Audit Committee

In 2018, the Audit Committee has convened 4 meetings. Each member of the Audit Committee shall assume the office for a term of three years and shall always report to the Board of Directors. The Audit Committee has performed its duties in accordance with the Audit Committee's charters approved by the Board of Directors; moreover, the Audit Committee has prepared the report of the Audit Committee in the Annual Report. (Please see details of components, roles, and duties of the Audit Committee on Page 23).

Records of attendance of each director of the Audit Committee are as follows:

Names of the Audit Committee/ Independent Director	Attendance/Total Meetings 2017 (Time)	Attendance/Total Meetings 2018 (Time)
1. Dr. Pisit Leeahtam	4/4	4/4
2. Mr. Teeravut Supaviriyakul	4/4	-
3. Mr. Singha Nikornpun	4/4	4/4
4. Mr. Annop Tagajarin	-	4/4

Note: Mr. Annop Tagajarin was appointed to be a member of the Audit Committee to replace Mr. Teeravut Supaviriyakul on February 20, 2018

Nominating Committee

The Nominating Committee consists of 3 Board of directors' members and 2 out of 3 are the independent directors, each of them shall assume the office for a term of 1 year. In 2018, the Nominating Committee has convened a meeting to nominate persons to assume the post in place of the retiring directors and to propose their names to the Board for consideration as per the criteria for nomination of directors, with fairness and transparency; and has prepared a report of the Nominating Committee in the Annual Report. (Please see details of roles and duties of the Nominating Committee on Page 24).

Records of attendance of each director of the Nominating Committee are as follows:

Names of the Nominating Committee	Attendance/Total Meetings 2018 (Time)	Term in office will expire in (Year)
1. Mr. Singha Nikornpun	1/1	2019
2. Mr. Charuvit Suanmalee	1/1	2019
3. Mr. Tai Chong Yih	1/1	2019

Roles, Duties, and Responsibilities of the Board of Directors

The Board of Directors is aware of its obligations to supervise the business for the maximum benefits of the Company and has its roles, duties, and responsibilities to consider the principle of law, the Company's regulations, resolutions of the shareholders' meetings, and the principle of good corporate governance in an honest and responsible manner, to disclose the information transparently, and to supervise the administration of work of the Management according to the goals and for the maximum benefits of shareholders, as well as benefits of all stakeholders.

All members of the Board of Directors possess the leadership, visions, and independence in their decision making for the maximum benefits of the shareholders. To strengthen the good corporate governance principle effectively, the Board of Directors has approved and determined the policy and principle of good corporate governance in writing; by having to review and approve the vision, mission and strategy of the company in the past fiscal year including periodic monitoring.

Board of Directors' Meetings

The Company has its policy to convene the Board of Directors' meetings at least in every 3 months; and to convene the Executive Committee's meetings every month; whereby, the date/time of the Board of Directors' meeting shall be fixed in advance throughout the year and shall be notified to all directors so that the directors shall be able to manage their time to attend the meetings; and special and extraordinary meetings may be convened as may be necessary; provided that half of the total directors shall attend the meeting to constitute a quorum. Regarding the determination of agendas, the Chairman shall approve the agendas after discussion with the Managing Director; whereby, each director shall have independence to propose matters to be included in agendas; provided that the Company shall submit invitations to the meeting,

agendas and meeting documents for 7 days prior to the date of meeting so that the Board of Directors shall have enough time to study the information thoroughly before the meeting; and after the meeting, the company secretary shall prepare the minutes of the meeting with complete details thereof; and minutes certified and signed by the Chairman of the Meeting shall be systematically kept as reference for inspection by directors and related parties. In 2018, the Board of Directors has convened 5 ordinary meetings; whereas, the records of attendance of each director can be summarized, as follows:

Names of the Board of Directors		Attendance/Total Meetings 2017 (Time)	Term in office will expire in (Year)
1. Dr. Pisit	Leeahtam	6/6	5/5
2. Mr. Sampan	Vongphan	6/6	5/5
3. Mr. Upakrom	Thaweephoke	6/6	5/5
4. Mr. Charuvit	Suanmalee	6/6	5/5
5. Mr. Ouichai	Siriwajana	6/6	5/5
6. Mr. Ampornrat	Poolcharoen	6/6	5/5
7. Mrs. Sunan	Santichotinan	6/6	5/5
8. Mr. Tai Chong	Yih	6/6	5/5
9. Mr. Somchai	Rojrunvasinkul	-/-	3/5
10. Mr. Singha	Nikornpun	6/6	5/5
11. Mr. Annop	Tegajarin	6/6	5/5

Self-Evaluation of the Board of Directors

The Board of Directors has realized the significance of self-evaluation of work performance to be used as guidelines for the audit of the Board of Directors' performance of duties, thus, in accordance with the principle of good corporate governance. In 2017, the Board of Directors has approved the self-evaluation of its work performance by using the Self-Evaluation Form prescribed by the Corporate Governance Development Center for the Registered Companies.

The result of overall evaluation of 2018, including recommendation and additional comments obtained from the result of performance evaluation of the Board of Directors, shall be considered to find guidelines for improvement of operations in order to support the Board of Directors' operations more effectively.

Business Ethics

The Company has prepared the code of conduct relating to the business ethics of the Board of Directors, the Management, and employees, to be adhered by all related parties as the guidelines for performance of duties in accordance with the Company's missions with honesty and fair treatment to the Company, all groups of stakeholders, and the society as a whole.

Policy on Remunerations for Directors and the Management

The Company has clearly and transparently determined the policy on remunerations for its directors at reasonable levels and in accordance with the situations of the industry in order to attract and maintain the directors with required qualifications. Remunerations must be approved by the shareholders' meeting.

The Company has fixed the remunerations for the Management in accordance with the principle and policy prescribed by the Board of Directors, which is in connection with the operating result of the Company and the performance of work of each of the management. At present, the Company still does not have the Remuneration Committee but has proper remuneration consideration procedures based on the data of remunerations of companies of similar sizes within the industry, as well as the operating result of the Company. (Please see details in Remunerations of Directors and Management)

Development of Directors and the Management

The Company has promoted and facilitated the training sessions and knowledge dissemination to personnel involved in the corporate governance system at all levels including Chairman, directors, independent directors, audit directors, the management, and the company secretary for continuous self-development and self-improvement. At present, personnel involved in the aforementioned corporate governance system has passed several training programs organized by IOD, the Stock Exchange of Thailand, and the Office of Securities and Exchange Commission. Anyhow in 2018, there was no Director attended the training session due to the undertaking duty.

Succession Plan

Regarding the succession plan and nomination of the top management, the Board of Directors and the management are aware of actions to ensure that the Company shall be able to select personnel to assume responsibilities in the managerial posts properly; if concrete processes and action plans shall be provided in accordance with the principle of human resources management.



Control System and Internal Audit

The Company has given the priority to the internal control system both at the managerial level and the operational level, and has determined the obligations and powers of operators, committees, and the management team clearly in writing, and has supervised the utilization of the Company's assets, and has separated the duties of operators, controllers, and evaluators for balance of powers and cross-examinations, and has also determined the internal control relating to the financial system and has provided the financial reporting system to be proposed to the responsible line management.

The Audit Committee, in cooperation with the Management, has reviewed the internal control system of the Company and agreed that the internal control system of the Company is adequate and suitable.

Since, November 30th, 2004, the Company has entered into an agreement with ANS Business Consultant Co., Ltd., who is not an audit firm, which shall be renewed in every 2 years, to perform an internal audit for the Company with the Company Secretary Office as coordinator, thus, to ensure that the operation of main work and significant financial activities of the Company shall be in accordance with the prescribed guidelines and to audit the compliance with the law and provisions in connection with the Company and to ensure that the said outside auditor shall have its full independence to perform the audit and to balance the power; the Board of Directors has thus determined that the said audit company shall directly report the audit result to the Audit Committee and shall determine the scope of such aid in cooperation with the Audit Committee. (Please see details of the internal audit system in Internal Control)

Conflict of Interests

The Board of Directors shall have to deal with transactions, which may have conflict of interests and shall carefully consider the suitability of the said transactions based mainly on the Company's benefits. In case, the Company has any transactions which may have conflict of interests, the Company shall submit the said transactions to the Audit Committee for comments and shall then propose the said transactions for the Board of Directors' consideration.

The Company shall strictly comply with criteria prescribed by the Stock Exchange of Thailand. The Board of Directors has prescribed that Directors or Executives shall not be allowed to take part in the decision-making process to consider the transactions between the Company and the said stakeholder.

The Company requires that directors and executives to have duty to report their conflict of interests or related persons to the Company every time there is a change.

In 2018, the Board of Directors has not received any report on conflict of interests; therefore, it has not submitted this matter to the Audit Committee for any special consideration and comments.

Use of Internal Data

The Board of Directors has determined guidelines for data storage and protection, which shall be strictly complied with throughout the organization, as follows:

1. The Company has prescribed the protection of internal data use and prohibited the organizations involved from disclosing the internal data to non-related persons or organizations;
2. The management of the Company who has received any significant data, which may have potential impacts on stock price changes, shall not make use of the data before disclosing such data to the general public; moreover, the management shall not be allowed to trade the Company's stocks for 1 months and within 24 hours before and after the period when the financial statements or the significant data have been disclosed to the general public; and shall not be allowed to disclose such significant data to the third persons;
3. Directors and the management of the Company shall be obliged to report their stockholding as per Clause 59, thus, to be in accordance with the Announcement of the Office of Securities and Exchange Commission No.Sor.Jor.12/2552 on the preparation and disclosure of stockholding reports;
4. Punishments shall be prescribed and imposed on any person who violates the measures of internal data protection; and circular letters thereof shall be given to employees and the management;

In the previous year, the Company has not received any report or complaint on commission of offences or any punishment of violators of internal data protection measures issued by directors, the management, and the related persons;

Personnel

In the year 2018, from 1 January to 31 December 2018, the company has a total of 507 employees, divided into 164 office employees and 343 production line employees.

In 2018, the Company had no labor disputes.

Remunerations for Employees

Ended by December 31, 2018, the Company paid total remuneration in the form of salary, wage, provident fund, bonus and other benefits amounting to 205,295,738.75 baht.

Remunerations of Auditor Fee

1. Auditor Fee

The Company and its subsidiaries paid audit fees to AMT Associate Co., Ltd. which is the audit firm of the company's auditor for the year 2018, with the total amount of 2,810,000 baht, of which 1,980,000 baht belonging to the company, and 830,000 baht belonging to the subsidiaries company.

2. Other Fee

None

Personnel Development Policy

The Company's policy on employee development has aimed to provide employee with knowledge and competency and retain the skill and qualified employees to be with the company in a long-term period with a career path. The company has provided the training that is suitable for their positions according to each line of activities.

The company always strives for the best by focusing on promoting our top-tier personnel and collectively developing prowess and expertise among our invaluable human resources while simultaneously observing the value of teamwork, quality, customer satisfaction as well as integrity and honesty. We aim at growth and proliferation, as well as sustainable development in terms of business and commerce. Thus, we ensure that a wide variety of training and skill-set developments be provided for our staff member based on years of their professional association, the position being held, their duties and responsibilities such as being particularly witnessed in the executive officers ,middle management team and supervisory personnel as well as operational staff members.

Skill Enhancement Training

The company focuses on promoting and developing personnel at all levels to have expertise and knowledge as well as create a sense of teamwork aligned with quality, maintaining morality and taking into account of customers which will lead to sustainable growth and economic stability. The Company therefore provides a variety of training programs suitable for the job position, age, job and responsibilities, such as management and division manager, Department chiefs and Engineers, Supervisors and Operational Employees etc.

By the year 2018, there were a total of 504 employees (as of December 31, 2018), 408 people were trained, accounting for 80.95%. The total budget for training was 937,183 baht. Details are as follows:

Executive, Division & Department Manager	67 people were trained out of 92 people,	72.83 %
Engineering and Specialists	49 people were trained out of 54 people,	90.74 %
Support Functions	76 people were trained out of 122 people,	62.30 %
Operating Functions	216 people were trained out of 236 people,	91.53 %

By Training Category

Knowledge	745 hours
Skills	346 hours
Attitude	0 hours

Number of training hours in 2018

Employee Level	Average training hours per person	The goal of the curriculum
Executive, Division & Department Manager	27.22	Focus on the development of organizational management Capabilities in order to increase business competitiveness and build sustainability.
Engineering and Specialists	23.11	Focus on developing knowledge and expertise to support future needs. Create knowledge management system to maintain knowledge and experience and organization development.
Support Functions	10.16	Aims to promote the development of knowledge and skills to support or support the operation to achieve the goal.
Operating Functions	16.48	Focus on developing technical, manufacturing and operational skills so that employees can perform their assigned duties by the training format On the Job Training and Coaching.



The capability development of Tirathai personnel under supervision by the Human Resources Development has developed and trained personnel as well as improving the curriculum to meet the needs and changes of business operations in the present era in order for participants to gain knowledge that can be used to benefit the organization. This classifies into 3 types as: 1. In-House Training 2. Training outside the organization (Public Training) 3. On-the-Job training. In 2018, details are as follows:

Type of training	Number of courses	* Number of participants (people)
1. In-House Training	36	914
2. Public Training	46	107
3. On the Job Training	166	1567
Total	248	2588

Note * Number of participants is repeated

Intellectual Property and the use of Information Technology and Communication Policy

Intellectual Property, information technology and communication are key factors contributing to the conduct of business and to operational efficiency. Therefore, it is the shared responsibility of all employees to respect the rights of the owners of intellectual property and to carefully use information technology and communication within the requirements of the law, the announcements and the standard of the Company. In case, any employees have done anything illegally on intellectual property or the use of information technology and communication. After investigation if it is true, the punishment will be depending on the company rule and regulation/or law where it is appropriate. In 2017, there is no any claim on this matter.

Shareholding of Directors and Management of TRT as of 31.12.2018 compared to 31.12.2017

No.	Name	As of 31.12.2017	As of 31.12.2018	Change in shareholding Increase (Decrease) in 2017	% of shareholding in 2017
1	Dr. Pisit Leeahtam Spouse and minor child	50,000 -	50,000 -	40,000 -	0.016% -
2	Mr. Sumpun Vongphan Spouse and minor child	40,109,927 -	40,109,927 -	- -	13.02% -
3	Mr. Upakrom Thaweephoke Spouse and minor child	5,488,558 -	5,488,558 -	- -	1.78% -
4	Mr. Charuvit Suanmalee Spouse and minor child	8,521,014 250,000	8,521,014 250,000	- -	2.77% 0.08%
5	Mr. Ouichai Siriwanjana Spouse and minor child	1,150,000 -	1,519,500 -	369,500 -	0.49% -
6	Mr. Ampornrat Poolcharoen Spouse and minor child	2,253,900 -	2,253,900 -	- -	0.73% -
7	Mr. Sunan Santichotinan Spouse and minor child	6,991,809 -	6,991,809 -	- -	2.27% -
8	Mr. Tai Chong Yih Spouse and minor child	33,000 -	33,000 -	- -	0.01% -
9	Mr. Singha Nikornpun Spouse and minor child	- -	- -	- -	- -
10	Mr. Annop Tegajarin Spouse and minor child	239,700 -	239,700 -	- -	0.08% -
11	Mr. Somchai Roadrungrasinkul Spouse and minor child	- -	- -	- -	- -
12	Mr. Yossagorn Burakamkowitz Spouse and minor child	- 77	- 77	- -	- 0.00%
13	Mr. Somsak Kooarmornpatana Spouse and minor child	220,000 60,000	220,000 60,000	- -	0.07% 0.02%



Internal Control/Risk Management

Internal Control and Checking

From the second meeting of the Board of Directors in 2018 which is attended by 3 Audit Committee, the Board of Directors and the Audit Committee all agreed that the Company has adequate and appropriate internal control system as general and regular practices, which is summarized as follows:

Organization and its Environment

The Company has set the organizational structure and determined the authority and responsibility that conform to the efficient business operations. The company has set up policies, target, and action plan by considering the fairness to the partners, customers, society and environment. The Board of Director, which is independent from the management, has managed the corporate governance practices according to the policy by determining a clear and measurable business operations to achieve the objectives and for the long-term benefits of the company and all stakeholders well as the value and morality of the company and its subsidiaries.

Risk Management

The Company has indicated the risks at the organizational level and operational level or work in process, which is managed by the executive and those who perform their duties in the process. There is also checked by the internal audit to assess, control, and coordinate to control the existing risk measure.

Operational Control of the administrative section and Operational level

The Company has made the overall operational plan as well as sectional plan. The report of operation result in comparison with the target plan will be made periodically. The Executive Committee and Board of Director shall also monitor and control on monthly and quarterly basis. The Company has set the authority and the financial limit amount clearly for each level in writing and monitor of its subsidiary regularly by having monthly board meeting.

For the operation in the operational level, the company has assigned a consulting firm working as an internal auditor. They will check the operation in each procedure with the annual checking plan approved by the Audit Committee. The report concluded that there is no sign of cheating or defect that can cause a serious damage and there is no using of the company's assets improperly. If the internal auditor has found any deviation from the regulation or work instructions or having chance to improve the work efficiency, they will provide a recommendation to the manager who is responsible for that operation to make it more circumspect, correct and more effective.

Information System and Communications

The Company has provided the important information to the Board of Directors and the management to make necessary decisions. There are always record and conclusion of the minutes in every meeting. There is the information system for effective communication in every level within the organization. There is the filing of documents of the accounting as prescribed by law and meeting between the Audit Committee and the CPA (Certified Public Accountant) to review the accounting policy according to the GAAP (Generally Accepted Accounting Principles) and to consider all the main points from the CPA's report.

The Company has developed and used internal information and communication systems. The Company has been continuously developing to ensure that the management of the Company is in the right direction, faster and more efficient to exploit the appropriate control in both Preventive Control and Detective Control.

In addition, the Company has expanded its use of Enterprise Resource Planning (IT) systems for its various activities in the company and its subsidiaries, such as financial accounting system and Inventory Management System. Therefore, the control and management of the company is more efficient.

In the development and supply of information technology, the Company has selection process and use appropriately and concisely.

Monitoring System

The Company has regular Board of Director's meeting 4 times a year with extraordinary meeting depending on the necessity and the propriety. There is regular monthly Executive Committee's meeting to consider and follow the results of operation of the administrative section if it whether or not achieved the target. In the Board of Director's meeting and Executive Committee's meeting, if the results of operations do not achieve the target, there will have a resolution to the responsible unit to proceed all necessary corrections.

In addition, the company has provided the monitoring and checking the operation according to the company's regulation, ethical standards and the good internal controlling system. The company has assigned the Internal Checking Consulting Firm to proceed the internal checking according to the checking plan approved by the Audit Committees. If the internal checker find a fault or something that should be improved in the internal control system, they will report to the internal checker find a fault or something that should be improved in the internal control system, they will report to the chief Executive, and the responsible manager will do the improvement immediately and report to the Audit Committee every

trimester.

The Audit Committee convene the regular meeting 4 time per year; will report the checking result to the Board of Directors every trimester.

For 2018, the Internal Checker found that there is no sign of cheating or no defect that can cause a serious damage and there is no using of the company's assets improperly. If the Internal Checker fined these things, the Internal Checker must report to the Audit Committee immediately in order to let the Audit Committee check the report and precede improvement in advance.

The auditor of the company is Mr. Chaiyut Augsuwittaya, the CPA number 3885 which is the auditor of the consolidated of company financial statements for ending year date: 31 December 2018 has checked the internal controlling system of the accounting of the company to make a checking and a limit of operation for the time as over and has found no defect that is subject matter to give recommendation to the company and improve the internal controlling anyhow.



Corporate Social Responsibility (CSR)

Electric transformers manufacturing industry is a downstream industry, which related to electricity because electric transformers are products used in transmitting and distributed electricity. It is a kind of fundamental energy crucial for the well-being of the people and drive the economy as a whole.

Tirathai Company has realized the importance and determined to be part of sustainable electric energy with good member of the society. The company also operate the organization with responsibility to the public, caring to the community, society, and environment. Cooperation with public participants and stakeholders will be company main concerns for continuously and sustainable growth. As a result, the company projects the CSR operation as follows,

1. Good Corporate Governance

The company operates legitimately and strictly follow related regulations with transparency, important information disclosure, and verifiable. The Compliance Policy with Good Corporate Governance, the company is taking into account the benefits of shareholders, employees, community, society, business partners, clients, competitors, creditors, and all stakeholders.

In 2018, the company were evaluated with a very good CG score and was assessed in the Annual General Meeting in 2018 with 91 score.

2. Conducting Business with fairness

The company prioritize the business operation with fairness and abide continuously by treating partners equally and fairly. The company also operate business with integrity, respect Intellectual property, promote political rights, and follows the commitment with stakeholders equally and reasonably.

2.1 Fair Competition

Practice and Guidance

1) Specify all terms and conditions in the agreements and strictly follows the agreement. In case the company cannot follow any conditions, the company will immediately inform customer for further discussions and mutually consider the resolution.

2) Provide necessary information and being good consultants to clients. Offering good, adequate, and updated advices to clients about the products and services.

3) Understand and respond needs and expectations of customer appropriately and timely manner.

4) Deliver good quality products, according to specifications, and reasonable prices.

2.2 Promoting social responsibility with trading partners.

The company do not yet operate the official promotion of social responsibility within the business chain of the stakeholders.

2.3 Respects the property rights

Practice and Guidance

1) Encouraging both executives and employees to use all company's assets and resources efficiently in order to increase the competitive edge and provide good service to customers. Promote copyright products and discourage the Intellectual property infringement.

2) The company aims to protect and preserve the company's Intellectual property from any infringement without permission, also respects other companies' Intellectual properties.

2.4 Involvement with political responsibility

Practice and Guidance

1) The company runs business without bias and have no interests in any political parties or political authorities. Financial supports or resources of the company will not be brought to support any political parties both direct and indirect ways.

2) Motivating and supporting employees to have freedom in political appreciation without domination, threat, force, or participation.

3. Anti-Corruption

According to the resolution of the company executives meeting, 1/2015 on 18th February 2015, The resolution was to announce the policy and intention about not to involve in corruption, as well as appointed subcommittees including Mr. Singha Nikornpun, Mr. Upakrom Thaweepoke, and Mrs. Sunan Santichotinan to act as follows,

1. Draft policies concerning prevention in any corruption involvement.

2. Announce policies concerning prevention in any corruption involvement.

3. Declare intention to participate in the anti-corruption campaign (Collection Action Coalition Against Corruption : CAC)



The company is still unable to apply for the certification within 18 months from the date the company has signed a declaration of intention which the company must submit the certification by June 15, 2017. The company will return to announce the intention again in 2019

4. Respect Human Rights

The company stimulates the significance of respects to the human rights and dignity and treats all the participants, employees, community, and neighboring society with respect in values and do not offend any fundamental rights, which is the foundation in managing and developing human resources. These actions associate with business in increasing its values by linking the value added to the products and productivity.

Practice and Guidance

1) The company promotes the practices of human rights mandate including to the operation of its subsidiaries, joint venture, and business partners.

2) Protect personal information of the company's administered and caring employees, to the public without employees' consent.

3) The company promote and open opportunity to the employees, community, and society to participate in expressing any actions that may violate the human rights.

5. Fair Labour Practices

The company comprehends and places importance on fair labor practice with respect and abide by the laws and principles of ethics without discrimination in employment, no force labor, nor child labors. Employees are able to have freedom in associations along with concerning health and safety in workplace of the employees. Therefore, the improvement of the working environment, providing good quality of life, and opportunity to express personal potentials, as well as equal opportunity in practicing and training, which are the Values of the company continuously operate for long-time period.

1) The company emphasizes on employment without discrimination and bring indifferences in nationality, religion, gender, age, disability, social status, education, or educational institutes in considering and judging for the employment.

2) The company will treat all employees fairly in providing returns, promotion, and capability development as well as moral development in order to promote qualified and moral employees such as, proper potential remuneration, taking care of and in consideration of maternity health and safety as priorities.

3) The company cares for health and sanitation of the employees and related employees by promoting and raising awareness on safety, sanitation, and environment in workplace. According to the Occupation Health and Safety Policy with the target to prevent any incidents of loss and sickness, the plan has put in place for Incident Prevention, promoting participation, risk avoidance, and continuously improvement to create the Safety Culture to all employees and the associated.

3.1 The company defines specific unit to control and push for the operation of safety, sanitation, and environment in workplace. According to the Occupation Health and Safety Policy (Safety, health, and environment at work), there shall be a meeting once a month to provide improvement guidance, mistakes, diagnosis of risk and risk assessment as well as follow up the progress of the operation as planned.

3.2 The company performed the Health Risk Assessment (HRA) in order to observe risk level of health in employees in order to assure that the employees will be taking care of and manage the risk to health for instance, the examining of lead in blood level, volatile matters in urine, lungs conditions, and hearing capability. The results of the HRA report in 2018 found no abnormal employees except the abnormal hearing capacity of 8 employees. The company has set up the measures to retest for verification and the results showed the abnormal hearing capacity did not affect the work and daily life. The company proceeds the preventive action with protection gears for employee to wear at all working time and check the environment condition up to the standards on yearly basis. Besides, the company established the "Hearing preservation campaign" to the affected employees.

3.3 The company has campaigning "Safety Campaign Program" to follow up and examine the safety plan and the environment suitable for working standards and regulations. In 2018, the company has rewarded "Zero Accident" to high risks accidents target to 18 units out of 29 units, in line with the set goals.

4) The company focus on promoting and developing personnel at all levels to have expertise and knowledge along with team spirit, quality, virtue, and customer concern, which will lead to sustainable growth and economic stability. The Company therefore provides a variety of training programs suitable for job positions, experiences, and job responsibilities, such as Executives, Division Managers, Section Heads, and Engineers, operating employers, etc.

As of Dec. 31, 2018, total employees are 504 people, 408 people were trained, representing 80.95 percent. The total budget for training was 937,183 baht by separating into:

- : Executives, Division Managers, Section Heads, being trained 67 people out of 92 people, accounted for 72.83%
- : Engineers and expertise, being trained 49 people out of 54 people, accounted for 90.74%
- : Operating employees, being trained 216 people out of 236 people, accounted for 91.53%

The training session were:

Knowledge	745 hours;
Skill	346 hours;



5) The company has provided various benefits such as group insurance, organ loss insurance from accidents, health insurance, Provident Fund (PVD), employees' transportation, free lunches and dinners for over-time working (OT), and health examination according to the risks involved, etc. In 2018, there were 201 health checks of employees according to risk factors, totaling 36,540 baht, a financial support for employees' parent Cremation 10 employees, totaling 65,000 baht. There are also "Tirathai Family Care Project" by giving 12 items for the employees who gave birth and sickness, totaling 12,066 baht.

6) The company promote and support the education of all levels of employees by regulating the leave for further study by the human resources guidance plan in 2008 in order to enhance employees' knowledge and skills and good quality of life, to take leave for further study or short-term and long-term training session.

7) The company has provided Tirathai savings cooperative in order to encourage employees to save and plan for money spending following the Sufficiency economy by His Majesty King Bhumibol Adulyadej. Tirathai Cooperatives established on 29 March 2006. In 2018, there are a total of 243 members and a total share capital of 33,171,250 baht

8) The company provided the petition for those employees who were treated unfair from the working regulations in 2008 in order to build employees-company relationship and among employees themselves. The petition will be inquired, investigated and considered the resolution which those petitioner and associated will be receiving protection.

The total number of employees in the company and its subsidiaries as of 31th December 2018 and 31th December 2017 are as follows:

Company	Population (People)			
	31th December 2018		31th December 2017	
	Male	Female	Male	Female
1. Tirathai Public Co., Ltd.,	358	144	357	144
2. Thai Fin Co., Ltd.,	53	10	55	8
3. Tirathai E&S Co., Ltd.,	27	7	32	6
4. L.D.S Metal Work Co., Ltd.	268	56	307	66
5. L.D.S-N.D.P (JV)	384	46	391	45
Total	1,090	263	1142	269
Number of employees according to employment type				
Full-time employees	772	220	717	218
Contract employees	318	43	425	51

9) The company provides the employees freedom to express opinions without interruption, and allowing employees to be participate in the welfare committee in order to inform the progress and status of the company regularly. The company also supports discussion and collaboration with the welfare committee to enhance working standard of the employees

6. Responsibility to Consumers

The company set up policies to respond to customer satisfaction. Consumers who directly purchase products and services from the company will obtain quality products up to international standards at fair and reasonable price, The company pays close attention to the needs and expectation of consumers' responses appropriately and timely manner. In addition, the information gatherings will be utilized to improve quality of products and services in order to build trusts from customers.

Practices and Guidance

6.1 Assurances of quality and safety of electric transformers

All transformers are tested for electrical properties before distribution because transformers are peripheral devices in a high voltage power electrical transmission system. If there is any defective caused by the transformer will cause damage to the property, business opportunity including the danger to users and people involved. The company is aware

of such impacts and pay close attention to every process from design, production process, and testing processes of which TRT is capable of testing the transformer in every single process from Routine Test, Type Test, or Special Test in accordance with IEC60076, IEEE C57.12.90 and TIS 384-2543. There is only short-circuit with-stand test will be sent to the KEMA testing laboratory in Netherlands. In addition, the testing laboratory of the company were appointed by Office of Industrial Products as a central laboratory for testing and certifying TIS 384-2543 Industrial Standard including ISO 9001, OHSAS/-TIS 18001, ISO 14001 and ISO/IEC 17025 Electrical Testing Laboratory and Calibration Laboratory. In order to guarantee the quality of design, production and ability to examine electric transformers with international standard before distribution to customers.

6.2 Confidentiality and customer rights

The company has measures to keep customer's information confidentiality and secret, such as technical information, testing results or other confidential information. The company has procedures in collecting and sending the information in consideration of customer's confidentiality as a main concern, and maintain customer's rights. For example, customers can attend in the Witness Test for their own transformers in order to insure the results of the test. In 2018, there were 60 customers attend the Witness test.

6.3 Provision of sufficient and correct information to customers

Tirathai's transformers that passed the testing will be labelling with the Name Plate (Labels). Labels will be placed on the body of transformers to show the details and components of the transformers according to IEC60076-1 and TIS 384-2543 standards including transformer type, standard number, manufacturer name, manufacturer serial number, production year, phase number, electric power, frequency limit, highest current, insulator level, weight, etc. These labels inform customers all the details of each transformers. Besides, the user manual and the training about instructions, cautions, and maintenance in using transformers will be provided to customers.

6.4 Knowledge training to customers

In 2018, the company had provided technical expertise engineers to train knowledge about instructions, cautions, and maintenance in using transformers for both domestic and overseas totaling 9 agencies with total number of 141 participants such as Metropolitan Electricity Authority, Provincial Electricity Authority, Hoya Optics (Thailand) Co., Ltd., Rayong Engineering and Maintenance Company Limited, PTT Global Chemical Public Company Limited, Fuji Furukawa E&C (Thailand) Co., Ltd. and Power Quality Team Co., Ltd. etc.

6.5 Dissemination of knowledge in transformer engineering

The company published an academic journal under the name "Tirathai Journal" with the objective of disseminating knowledge about transformer engineering to those who interested. There is no commercial purpose for this journal and the copyright is not reserved to publish the content. The Editor and staff are all employees of the company. Presently, the publication is in the seventh year and Issue 21, which contains knowledge about electrical engineering, valuable thesis to engineering students' universities, including techniques of usage and maintenance of transformers, as well as At present, it is published in the seventh year, issue 21, with content about the knowledge of electrical engineering. Thesis that has engineering value of students from various universities including the techniques of use and maintenance of transformers as well as transferring the concept of the management philosophy outside the university, which is another corner that the university has never taught. In addition, the company aims that this book is environmentally friendly and health-conscious to the readers. The cover and content in the book are therefore printed on paper produced from agricultural waste materials with a non-toxic process and use ink produced from soybean oil etc. Besides, the company hope the journal will be environmental and care for the reader's health. The cover and the papers made out of agricultural non-toxic leftover; also, the printing ink was made from soybean oil. In 2018, journals were distributed to employees, customers, universities' libraries, Electricity Generating Authority of Thailand Metropolitan Electricity Authority Provincial Electricity Authority University libraries and general public totaling 3,580 copies. There was also the information posted in the website www.tirathai.co.th

6.6 Hearing Comments

In order for customer to be confident in the quality of our transformers, the company had opened for customer visits over the Production Process, Testing Process, as well as to listen the hearing comments and exchanging knowledge between the company and customer as well as bringing suggestions. The suggestions will be analyzed and diagnose for improvement for better customer satisfaction. In 2018, there were government agencies, customers from domestic and overseas paid a courtesy visit the Tirathai transformer production process totaling 51 people, such as the Metropolitan Electricity Authority, Provincial Electricity Authority, Thai Standards and Quality Association, National Science and Technology Development Agency (NSTDA), Metropolitan Waterworks Authority, International Copper Association, etc.

6.7 Satisfaction survey the company had conducted the satisfaction survey from customers who attended the Witness test in the topic of satisfaction in services of sales, testing personnel, production and testing processes, products, and the environment, In 2018, the satisfaction survey showed satisfactorily results in accordance with the target 80%.



6.8 Complaints the company has the process to receive complaints about quality of products and services through many channels as such; 30 lines of call center, e-mail, and faxes. The company operate 24 hours call center is 24 hours in order to respond customer complaint and solve problems spontaneously.

7. Participation of Community and Society Development

The company commit to be good member to the society and operates its business by recognizing social responsibilities, profit sharing, and return to creative community at large in order to drive the business, community, and society to grow up sustainably through the following activities and programs:

Practices and Guidance

Learning resources outside the classroom

The Company has a policy to provide the organization as a learning resource outside of the classroom in the transformer manufacturing engineering of the country. The students are exposed to the production process of transformers for both Distribution Transformer and Power Transformer. In 2018, there were students from various educational institutions visited the transformer manufacturing process including quality management systems, environment and safety from junior high school to master degrees a total of 447 people, such as the Faculty of Engineering Ubon Ratchathani University, Samutprakarn School, Rajamangala University of Technology Thanyaburi, South-East Asia University, Pathumwan Institute of Technology, King Mongkut's Institute of Technology Ladkrabang, Don Bosco Technology College, Faculty of Engineering Chulalongkorn University etc.

In addition, company has collaboration program on internships and cooperative education from various universities with an aim of providing students with practical work experience. In 2018, there were 53 students enrolled in the internship, paying a total allowance of 771,758 baht.

Public Benefit Activities

On April 30, 2018, the company supported the study by giving test transformers of 5 kVA 1Ph 50Hz 2x380 - 4x173 V to King Mongkut's University of Technology Thonburi to use for practical teaching to students. The company allowed students of the institute and faculty to participate in learning from the design process, production process, including the testing process

8. Environmental Management

Environmental management must be operating along with business operation. The Company has conducted policy to administer the environment in consideration of impact from the production process or any activities by abiding the environmental friendly practices, laws, and regulations strictly which leads to true sustainable growth of community and business.

Practices and Guidance

1. The company obtained the certificate of ISO14001 standard for all the area in the company by an assessment of independent outside evaluator. According to the latest assessment in 2018, Major Non-compliance are not detected, only Minor Non-compliance.

2. The company complies with environmental laws and also investigates environmental effects found that any pollution levels are normal based on environmental standard as follows,

Air pollution

The company has installed a Bag House Filter to vacuum dust caused by the process of producing insulation paper. The quality of air released from the insulating paper production process and other areas of the process are monitoring in order not to affect the environment and neighboring communities.

Water pollution

The company completely controlled the wastewater system. When water were consumed and used, it will be transferred to wastewater system. The wastewater will be examined monthly, such as pH, BOD, COD, Oil & Grease, SS, TDS, and TKN are used as examining methods. Terms and conditions as designated by laws.

Noise pollution

The company regularly checks noise volume. The source of noise is from the working machine. Therefore, in consideration of effects, which will affect employees, and nearby community, noise volume will be checked at least yearly by taking the average of 8 working hours. Terms and conditions as designated by laws

Industrial waste

The company adopted the process to dispose of industrial waste from the production process be segregating waste into 3 types;

1. Common waste;
2. Recycling waste; and
3. Hazardous waste.

The company has hired the agency who has the license to collect hazardous waste, transport, treatment, and dispose of and or unused materials as according to the waste type. Besides, the company is making sure of the waste management process out of the factory, the company has sent the safety representative to double check the landfills and segregate the contaminated materials. On March 14, 2018, the company was inspected by West 2 Energy Company Limit-

ed and AK Mechanics and Recycling Company Limited.

3. The company received the Green Industry certification in 4th. Level (Green Culture) from Green Industry Promotion and Development Office Ministry of industry. The goal is to create a green culture under the project "Garbage Smuggled" to encourage all employees to be conscious of waste separation and environmental protection.

4. In 2018, the company had no complaints about environmental issues or misconduct from any inside and outside the company.

9. Innovation and dissemination of innovation for Corporate Social Responsibility (CSR)

The company has adopted the knowledge, creativity, and experience in business administration combined with socio-economic Sufficiency Economy that beneficial to the economic and society to develop, deploy and innovate to create business innovations that can create benefits, increase competitiveness as well as create added value for business and society at the same time

Practices and Guidance

Transformer Testing is the crucial process that determine the quality of Transformers in order to build confidence and acceptance from customers. Tirathai has brought knowledge, creativity, and long-term business experiences integrated with the sufficiency economy philosophy to implement and innovate by developing an up-to-date transformer testing and calibration laboratory according to international standards, such as IEC, IEEE, ANSI, etc. At present, Tirathai's Testing Laboratory is capable of maximum testing up to 900 MVA 3 Ph. 50 Hz 550 kV. and certified the following scope of testing;

- Lightning Impulse Tests
- Line Terminal AC withstand test
- Switching Impulse Test

According to IEC 60076 standard, added from the original test list it is considered that the company's electrical testing laboratory has been certified for the ability to test the transformer to meet the required standards. In addition, the Electrical Testing and Calibration Laboratory of Tirathai has also been certified with the laboratory standard according to ISO / IEC 17025: 2005 from the Thai Industrial Standards Institute (TIS). This will create opportunities for business competition both domestically and internationally.

The Development of transformer testing capability of Tirathai is the investment in human resources development of the company up to the potential of high voltage knowledge. It can be applied for testing other devices such as power cables, overvoltage traps, etc., to support research and development in other industries. Tirathai's testing and Calibration Laboratory has also been appointed by the Thai Industrial Standard Institute (TIS) to be the Third Party testing center for transformer testing.

10. Publication of Corporate Social Responsibility Report (CSR report)

The company emphasizes on the exposure of information, which reflects the practice of Corporate Social Responsibility (CSR) as stated earlier. From the publication of information, not only it will be advantageous for stakeholders, every respondents will have feedback to the company about the CSR quality that it reaches the goal or not.

Practices and Guidance

1. The company has published CSR report in the annual report and through the website www.tirathai.co.th, stating the information as follows,

1.1 Business administrations. The Company operates in accordance with the laws and regulations. Transparent Disclosure of important information is subject to good corporate governance policy taking into account of the benefits to shareholders, employees, community and society, partners, customers, competitors, creditors and all stakeholders as well as being a good member of the society and doing business by recognizing the collective responsibility.

1.2 Environmental and safety operations. The company focus on working Environment and safety by concerning Environment and safety by concerning safety in works, health, and suitable environment for employees. These are main concerns in business administration which lead to the organization of the environment (ISO 14001), occupational health safety and environment master plan (OHSAS /TIS 18001), and waste disposal process which designated as laws and another regulations.

1.3 Social operations. The company treats employees equally in unbiased employment (without violating human rights), reasonable profits, workplace welfare suitable for employees' needs, and employee's enhancement in sufficient to company's values. Furthermore, the company makes itself as an external learning source about the electric transformer production engineering of the country by allowing students from many education institutes to participate in the transformer production process. Also the collaboration with the financial supports and tools for building high-voltage laboratory, combining with the permission of internship and co-operative education. These shows that Tirathai is more than Thai electric transformers manufacturer, with dedication of stimulating the education of Thai citizens.

2. The company offered numerous ways of information distribution in order to easily access. The company published the CSR report in both Thai and English through the following media: annual report, and the information distribution on website www.tirathai.co.th, 56-1.



Nature of Business Operation



Tirathai Public Co., Ltd. is a manufacturer of made-to-order transformers for domestic and overseas distribution and service provider of transformer installation, maintenance, and testing. During 2011-2015, the Company and its subsidiaries have generated over 70% of the total incomes from domestic markets. The Company has 2 manufacturing plants: one for manufacturing power transformer and the second one for distribution transformer. At present, the Company is the sole local manufacturer of transformers in Thailand, which has manufactured both power transformers and distribution transformers and has received the transfer of manufacturing technology from Siemens Transformers Austria GmbH & Co KG (VA TECH EBG Transformatoren GmbH & Co) of Austria; and Fuji Electric Systems Co., Ltd. of Japan, the world's leading manufacturers of transformers. Currently, the Company is holding shares in 3 subsidiary companies that supply the transformer's components to the Company as follows:

Thai Fin Co., Ltd., located in Bangpu Industrial Estate, is operating a business of manufacturing, distribution, repairs, and maintenance of transformer tank body and accessories including cover, fins, clamps, etc., and has manufactured and distributed the products solely to the Company. The Company has increased its investments in Thai Fin Co., Ltd., totally 5 million Baht in September 2006

for purchase and improvements of tools, machineries, and factory buildings in order to meet the expansion of production capacity. As a result, Thai Fin Co., Ltd. has its paid-up registered capital of totally 15 million Baht, which TRT holds 99.99% of Thai Fin's common shares.

Tirathai E&S Co., Ltd. is providing distribution, installation and maintenance services of electrical power equipment and establishing under the business plan as a separated business unit in order to increase the flexibility of management and competitions in the markets. Tirathai E&S Co., Ltd. had now started its operation since 3rd quarter 2010. TRT E&S currently has its paid-up registered capital of 5 million baht, which TRT holds 99.99% of TRT E&S common shares. Currently, the company assemble and distribute Aerial Crane Device and Digger Derrick Unit and Electrical maintenance for Metropolitan Electricity Authority and Provincial Electricity Authority.

L.D.S Metal Work Co., Ltd. Located in Bangpu Industrial Estate. Its nature of business provides general custom metalwork service, specialized in large casing transformer. The largest casing transformer LDS currently produced is 300 MVA. TRT had approved to enter into the transaction to purchase 85% of common share in L.D.S Metal Works Co., Ltd by EGM No.1/2012 held on 5 October 2012 in order to secure the procurement of main raw material and to cope up with the business expansion as



specified in 5-year business plan. LDS has increased its capital from 20 million baht to 120 million baht as per the TRT Board's resolution No.3/2015 dated 9 August 2015, as a consequent the shareholding of the company has increased from 85% to 92.50%.

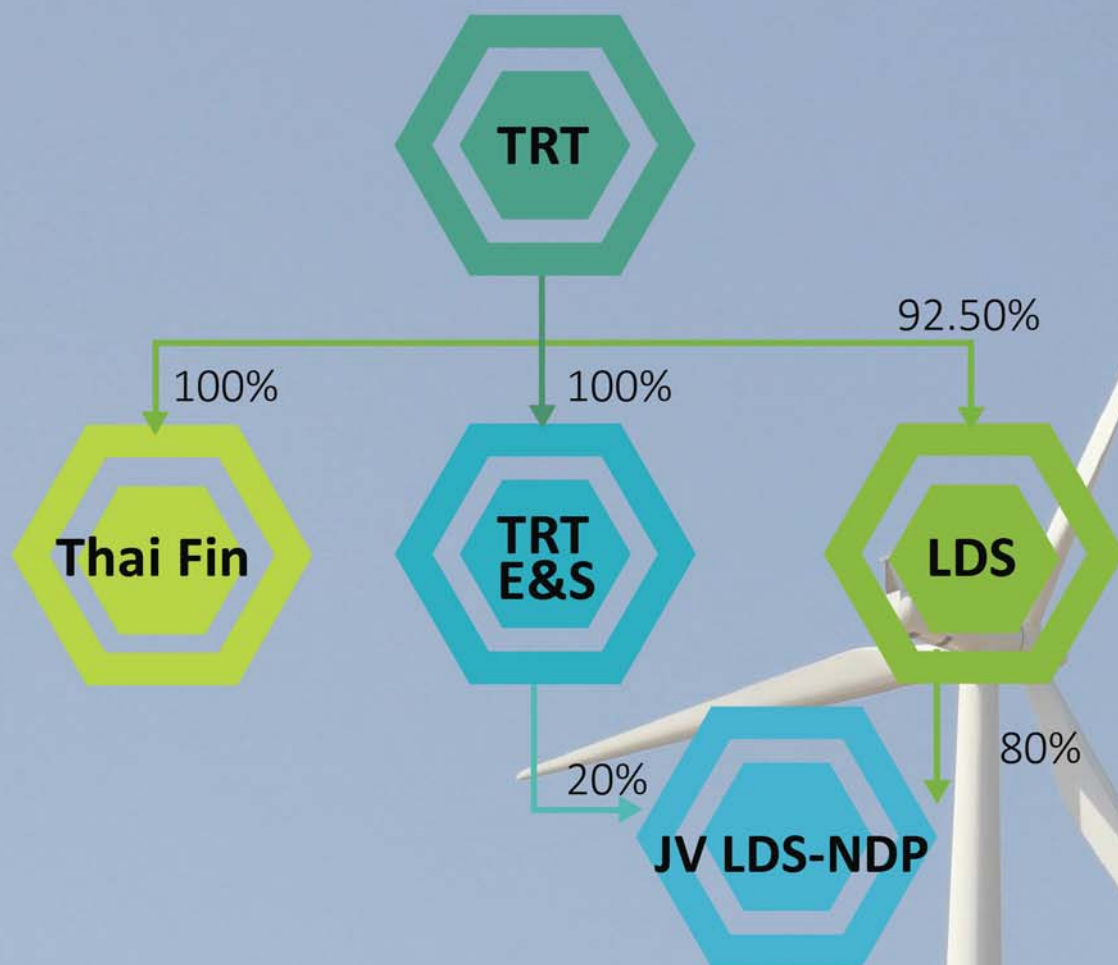
During the fourth quarter of 2013, LDS had won the auction and signed contract for Engineering Procurement and Commissioning (EPC) over The Conveyor Belt System to transport Ashes and Gypsum for Hongsa Power plant at The Laos People's Democratic Republic worth 448 million baht. The project had completed in the third quarter of 2015. In compensation for on-going quality of the delivered work, on December 2014 LDS had rewarded and signed the second contract, called the contract for Operation and Maintenance of the Conveyor Belt System to unloading soil (Waste Line 2) under the name of JV – N.D.P. (JV). This was worth 1,315 million baht over the 4.5 years contract. These projects have enlarged the capability of the Company in business expansion into EPC of The Conveyor Belt System including services over the Operating and Maintenance for Power Plants, Mine, and, every industry who uses Conveyor Belt System to support the growth potential to achieve the target of the Company.

JV L.D.S.-N.D.P. (JV) (LDS hold shares 80% and TRT E&S 20%) established in 2014 according to new business expansion policy of the Company and its subsidiaries

regarding the Operation and Maintenance Service, located at the same address as LDS. The core business is Operation and Maintenance of Conveyor Belt System that JV had entered in to an agreement with Hongsa Power Co., Ltd in 2016. This is for the Operation and Maintenance of Waste Line 2 with total project value of 1,315 million baht, or 300 million baht per year, and Operation and Maintenance of Ash and Gypsum Conveyor Belt System with value of 29 million per year. The project term is 4.5 years under the condition to renew the contract every 5 years throughout the project life. In September 2016, The JV had signed contract for Coal Conveyor System Service Agreement in relation to Hongsa Mine-Mount Power Project worth 24 million baht per year under the condition to renew the contract on a yearly basis throughout the project life.



Structure of Shareholding of Tirathai Group of Companies



Products and Services of TRT Group

Products, businesses, and services of Tirathai Group of Companies consist of two groups:

1. Transformer Group, manufacture and distribute by the Company
 - Distribution Transformer
 - Power Transformer
 - Service
2. Non-Transformer Group, operate by companies in Tirathai Group
 - Aerial / Digger Derrick Crane for maintenance of Electrical System
 - Steel fabrication, Engineering Procurement and Construction (EPC) and Construction Project.
 - Operation and Maintenance of Conveyor System, Hongsa Power Co Ltd at The Laos People's Democratic Republic

Nature of Business Operation

Transformer Group

The Company's products and services categorize into 2 types of Transformers and services as follows:

Transformers

The Company's transformer products classifies into 3 types, according to the electrical power and voltage, as follows:

Power Transformers

Transformers that have the electrical power of over 10 MVA or having the voltage of over 36 kV (maximum electrical power is 300 MVA; and maximum voltage is 230 kV) or massive MVA shall be able to supply more electricity. This type of transformer uses oils as an insulator to prevent short circuits in transformers. The Company has manufactured the power transformers under the technology of Siemens Transformers Austria GmbH & Co KG (VA TECH EBG Transformatoren GmbH & Co) of Austria and Fuji Electric Systems Co., Ltd. of Japan.

Since power transformers are of large sizes; therefore, before delivering the products to customers, the Company shall disassemble components of transformers as may be necessary, thus, to facilitate the transportation. Regarding the assembling and installation of power transformers, the Company shall calculate the service fees separately from the prices of transformers; and experts must provide such services. The majority of users of power transformers are manufacturers and suppliers of electrical energy such as the Electricity Generating Authority of Thailand (EGAT), the Provincial Electricity Authority (PEA), the Metropolitan Electricity Authority (MEA), industrial estates and large-size industrial factories, which use the electricity from the transmission line, etc. At present, the Company is regarding as one of the three manufacturers in Thailand who can manufacture power transformers of 200 MVA 230 kV, and one of the three manufacturers in Thailand that can manufacture power transformers of 300 MVA 230 kV.

Distribution Transformers

Distribution transformers are the transformers that receive the electricity from the distribution line of the Electricity Generating Authority. Normally, power transformers will have the electric power of not more than 10 MVA, and the voltage of not more than 36 kV.

Special Transformers

The Company has its own strengths in manufacturing special transformers, which are special designed and manufactured according to the objectives of use and specifications prescribed by the customers. Parts of the design and the manufacturing technology are different from the production process of normal transformers, which require a lot of expertise of the manufacturers. Special transformers include rectifier transformers, which use in chemical industrial factories, induction furnace transformers, which use in metals smelting industry; or transformers using other insulators such as silicone oil, etc. The Company has manufactured this type of transformers under the technology of Fuji Electric Systems Co., Ltd. from Japan.

Nature of Business Operation

Services

The Company's services diversify and provide in connection with transformers, 24 hours a day in order to meet the customers' demands and to provide convenience to customers. The Company has emphasized its service provision to customers by using specialized personnel and modern tools and equipment. Our service includes erection and installation of transformers, oil filling services, maintenance services, modification and repairs services, testing services, and transformer rental services.



Non-Transformer Group

Products and business of Non-Transformer group consist of:

Aerial / Digger Derrick for maintenance of Electrical System for the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA) for instance, which assembled and distributed by Tirathai E&S Company Limited. The market share is about 30%. As TRT E&S's business is a project base, so the revenue will be depending on the state enterprise budget. The Company has studied the possibilities to distribute new product, which fulfill the demand of the others government units including private sector, in order to recognize the revenue constantly.

Nature of Business Operation

Steel fabrication work for Engineering Procurement and Construction (EPC) project and Construction project operate by L.D.S. Metal Work Co., Ltd.

Steel fabrication for general structural steel for instance; transformer casing, vacuum oven for transformer production, power plant's structures such as stacker, steel duct and etc., E-house structure, material handling conveyor structure and other general structure or part.



Construction Project of building or material handling system which contains more than 50% of steel comparing to the whole project for instance; turbine building for biomass or RDF power plant, warehouse, office, material handling equipment (mechanical only) or other building structures for both local and overseas market.



Engineering Procurement and Construction (EPC) Project of design, procurement, installation, and testing material's conveyor system for Power Plant, Coal Mining, for both local and overseas Belt Conveyor System.

Nature of Business Operation

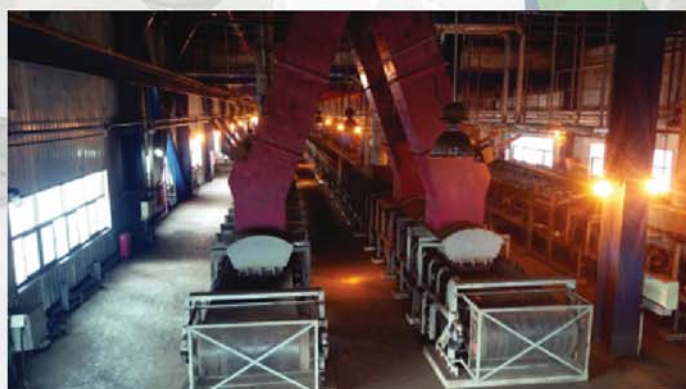
Operation and Maintenance (O&M) work of conveyor system at Hongsa Mine Mouth Power Plant, Hongsa; Lao PDR that is responsible by JV L.D.S.-N.D.P. consists of:

Operation and Maintenance Agreement relating to the Waste Line 2 at Hongsa Mine Mouth Power Project dated 28 April 2015 at total contract price of 1,315 million baht which incomes from excavated overburden volume each year (or approximated income of 300 million baht per year). The contract period is 4.5 years, which will be renewal every 5 years until the end of power plant project (25 years).



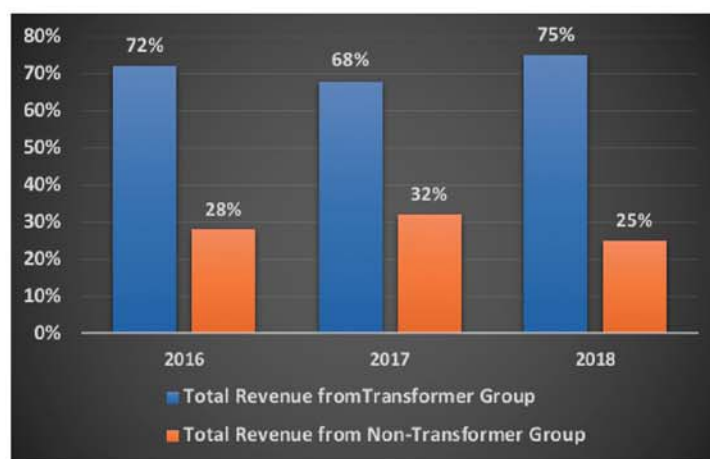
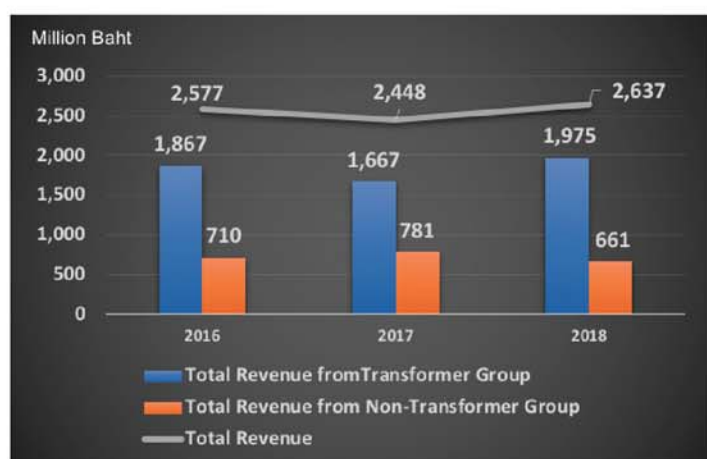
Coal Conveyor System Service Agreement in relation to Hongsa Mine Mouth Power Project, dated 19 September 2016, worth 24 million baht per year, contract period of 1 year with conditions to review the renewal every year throughout the project life (25 years). However in June 2018, HPC changed the responsible party to oversee the contracting and maintenance work of the charcoal conveyor system. For the operation and maintenance project of the Lignite Hongsa Thermal Power Plant, Lao PDR from HPC to the Electricity Generating Authority of Thailand (EGAT). The JV has signed a contract for the operation and maintenance of charcoal conveyor system equipment as well as for the operation and maintenance project of the lignite Hongsa Thermal Power Plant, Lao PDR in conjunction with EGAT on 15 June 2018, value of 23.39 million baht per year, contract period of 2 years.

Operation and Maintenance of Ash and Gypsum Conveyor System Agreement for Mine Mouth Power Project dated 18 May 2015 at amount of 29 million baht per year and contract period of 4.5 years, which will be renewal every 5 years until the end of power plant project (25 years).



Structure of Income

Structure of Income (Million Baht)	2016	%	2017	%	2018	%
Transformer Group						
1. Revenue of Transformer - Domestic						
Power Transformer	1,006	39%	652	27%	940	36%
Distribution Transformer	287	11%	530	22%	399	15%
Transformer Components	14	1%	13	1%	11	0%
Total	1,306	51%	1,195	49%	1,350	51%
2. Revenue of Transformer - Export						
Power Transformer	372	14%	286	12%	366	14%
Distribution Transformer	105	4%	109	4%	213	8%
Transformer Components	2	0%	6	0%	2	0%
Total	479	19%	401	16%	581	22%
3. Revenue of Transformer Services	82	3%	71	3%	44	2%
Total Revenue of Transformer Group	1,867	72%	1,667	68%	1,975	75%
Non-Transformer Group						
4. Revenue of Steel Fabrication/EPC	161	6%	357	15%	221	8%
5. Revenue of Airal Derrick Truck and EPC	209	8%	70	3%	61	2%
6. Revenue of Opeation and Maintenance (O&M)	299	12%	336	14%	358	14%
7. Revenue - Others	41	2%	18	1%	21	1%
Total Fevenue from Non-Transformer Group	710	28%	781	32%	661	25%
Total Revenue	2,577	100%	2,448	100%	2,637	100%



Received Orders and Backlog for the Year 2016-2018

Table of Received Orders and Backlog	2016		2017		2018	
	Amount (Million Baht)	%	Amount (Million Baht)	%	Amount (Million Baht)	%
Total Revenue	2,577.33	100%	2,448.03	100%	2,636.62	100%
Received Orders – Local						
Transformer Group						
Distribution Transformers	282.00	15.11%	709.92	32.26%	259.43	12.65%
Power Transformers	643.29	34.48%	915.46	41.60%	671.07	32.71%
Total Received Orders – Transformer Group	925.29	49.59%	1,625.38	73.86%	930.50	45.35%
Received Orders –Non-Transformer Group	268.09	14.37%	303.93	13.81%	300.64	14.65%
Total	1,193.38	63.96%	1,929.31	87.67%	1,231.14	60.01%
Received Orders – Export						
Transformer Group						
Distribution Transformers	120.38	6.45%	52.97	2.41%	310.64	15.14%
Power Transformers	261.80	14.03%	120.87	5.49%	479.04	23.35%
Total Received Orders – Transformer Group	382.18	20.48%	173.84	7.90%	789.68	38.49%
Received Orders –Non-Transformer Group	290.29	15.56%	97.60	4.43%	30.78	1.50%
Total	672.47	36.04%	271.44	12.33%	820.46	39.99%
Total Received Orders both Local & Export						
Transformer Product						
Distribution Transformers	402.38	21.57%	762.89	34.67%	570.07	27.79%
Power Transformers	905.09	48.51%	1,036.63	47.09%	1,150.11	56.06%
Total Received Orders – Transformer Group	1,307.47	70.07%	1,799.22	81.76%	1,720.18	83.85%
Received Orders –Non-Transformer Group	558.38	29.93%	401.53	18.24%	331.42	16.15%
Total	1,865.85	100.00%	2,200.75	100.00%	2,051.60	100.00%
Backlog Orders – Local (as of December 31st)						
Transformer Product						
Distribution Transformers	166.85	7.54%	286.33	14.43%	145.43	10.00%
Power Transformers	486.48	21.97%	870.76	43.88%	607.05	41.74%
Total backlog – Transformer Group	653.33	29.51%	1,157.09	58.30%	752.48	51.75%
Backlog – Non transformer Group	60.02	2.71%	92.67	4.67%	82.96	5.70%
Total	713.35	32.22%	1,249.76	62.97%	835.44	57.45%
Backlog Orders – Export (as of December 31st)						
Transformer Product						
Distribution Transformers	71.03	3.21%	35.13	1.77%	114.19	7.85%
Power Transformers	288.09	13.01%	35.88	1.81%	172.03	11.83%
Total backlog – Transformer Group	359.12	16.22%	71.01	3.58%	286.22	19.68%
Backlog – Non transformer Group	1,141.66	51.56%	663.80	33.45%	332.53	22.87%
Total	1,500.79	67.78%	734.81	37.03%	618.75	42.55%
Total Backlog Orders of both Local & Export						
Transformer Product						
Distribution Transformers	237.88	10.74%	321.46	16.20%	259.62	17.85%
Power Transformers	774.57	34.98%	906.64	45.68%	779.08	53.57%
Total backlog – Transformer Group	1,012.45	45.73%	1,228.10	61.88%	1,038.70	71.43%
Backlog – Non transformer Group	1,201.68	54.27%	756.47	38.12%	415.49	28.57%
Total	2,214.13	100.00%	1,984.57	100.00%	1,454.19	100.00%



Situation of the Industry and Competitions

Situation of the Industry

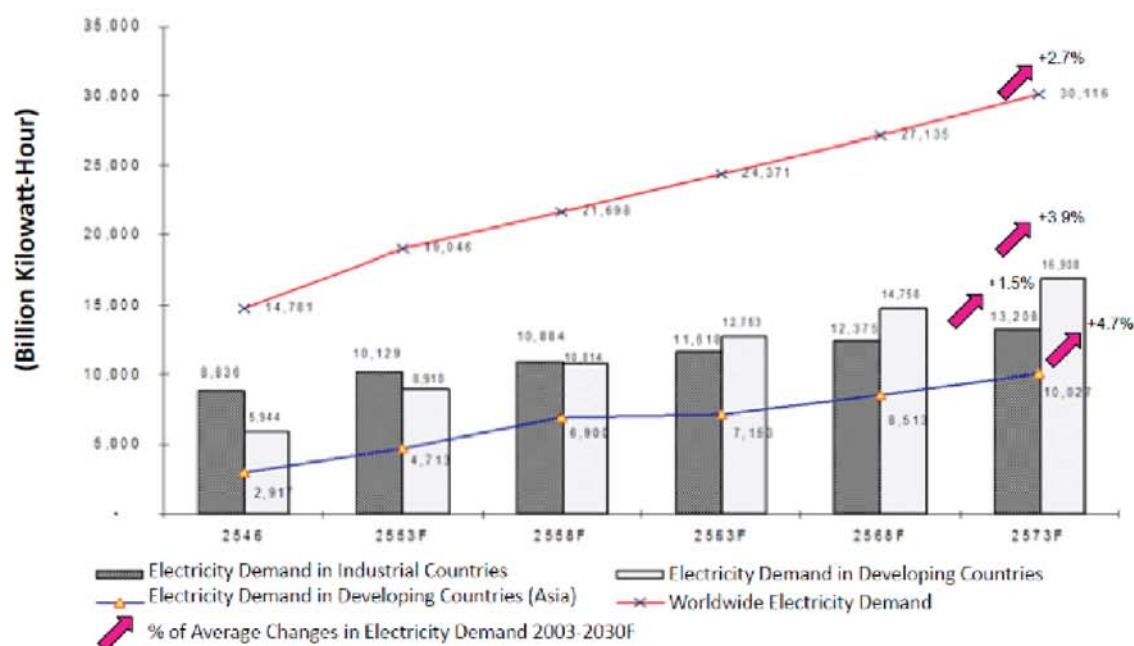
Transformer manufacturing industry is a linkage industry in connection with the electrical energy, which regards as a fundamental energy of all countries and of great importance to the living condition of people and business operations of industries as transformers utilize in the power supply and distribution system.

The transformer industry shall expand according to the increasing demand of electricity, increasing of population, economic expansion, and expansion of the industrial sectors. Whereas, the management of the Company has evaluated that every 1 megawatt of increasing demand of electricity, the demand for power transformer shall be approximately 2 MVA, and the demand for distribution transformer shall be approximately 4 MVA for use in the power supply and distribution system. Providing that the expansion of the transformer industry shall include the market of replacement transformers.

Trends of Transformer Industry Worldwide

According to the expansion of the transformer industry, which is in accordance with the increasing demand of electricity, the trends of demand for electrical energy shall imply the trends of transformer industry. According to the estimation of the Energy Information Administration (EIA) of the United States of America, the trends of demand of electrical energy worldwide during 2010-2030 shall be as follows:

Trends of Worldwide Demand of Electrical Energy



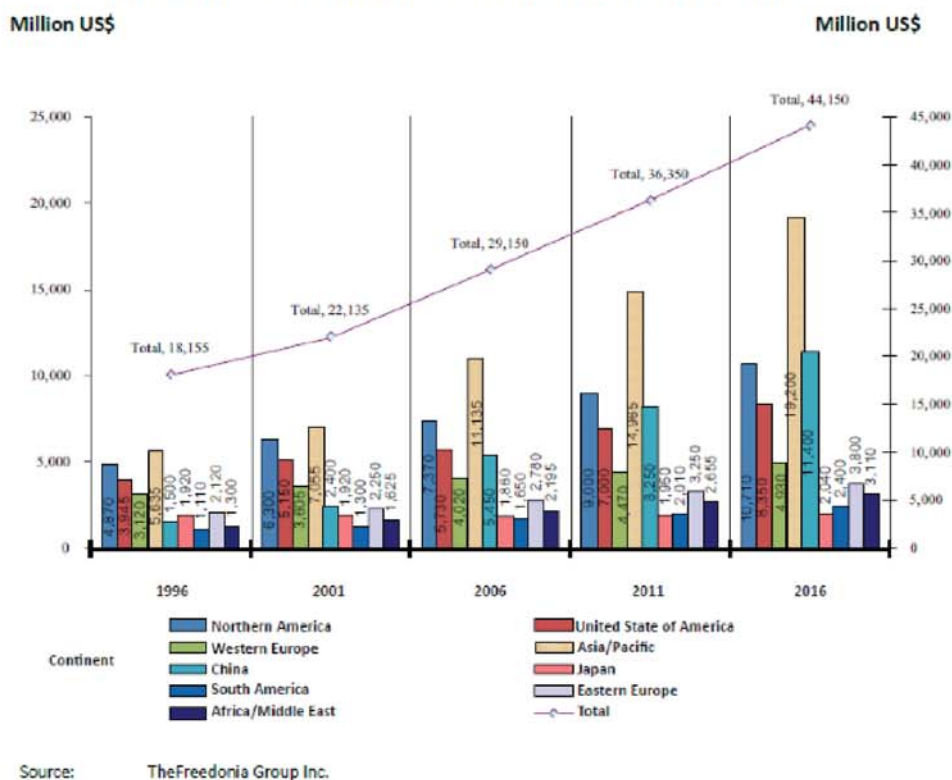
Source : Energy Information Administration (EIA) of the United States of America

Remarks : "Worldwide Electricity Demand" consists of the electricity demands in industrial countries, developing countries, Soviet Union, and Eastern Europe; whereas, developing countries consist of developing countries in Asia, the Middle East, Africa, Central America and South America. Meanwhile, industrial countries consist of United States of America, Canada, Mexico, Western Europe, Japan, Australia, and New Zealand; and developing countries in Asia consist of China, India, and other developing countries.



According to the data of worldwide electricity demand, the worldwide electricity demand tend to increase from 14,781 billion Kilowatt-Hour in 2003 to 30,116 billion Kilowatt-Hour in 2030, or increased by 2.7 % p.a. Whereby the electricity demand in developing countries tends to be higher than those in the industrial countries as from 2015, and the majority of highest electricity demand is from countries in Asia such as China, India, and other developing countries in Asia of which the annual increase rates of electricity use are 4.8%, 4.6%, and 4.4% respectively. Meanwhile, the annual increase rates of electricity use of developing countries in Asia and in the industrial countries are 4.7% and 1.5% respectively. Therefore, the Company has given the priority to the transformer markets of developing countries in Asia, particularly India, Malaysia, Vietnam, Brunei, etc., which have good economic growth rates, and other Asian countries which cannot produce transformers or demanding quality power transformers at reasonable prices. This factor is considering in determining the directions of overseas customer base expansion in both the short-term and the long-term.

Worldwide Demand of Transformers in Value



According to the trends of worldwide demand of electrical energy and the quantity of worldwide demand of transformers, it obviously seen that the trends of growth are relevant, i.e., when the worldwide demand of electrical energy increases, the demand of transformers shall also increase; therefore, in the future, the transformer industry worldwide tends to be growing continuously.

Domestic Demand of Electrical Energy

Since 2003, the demand of electrical energy in Thailand has continuously increased. When compared to the worldwide demand of energy, the demand of electrical energy in Thailand has increased in accordance with the increases of population, economic expansion, and expansion of the industrial sector. The structure of power generation businesses and the demand of electricity in Thailand are as follows:

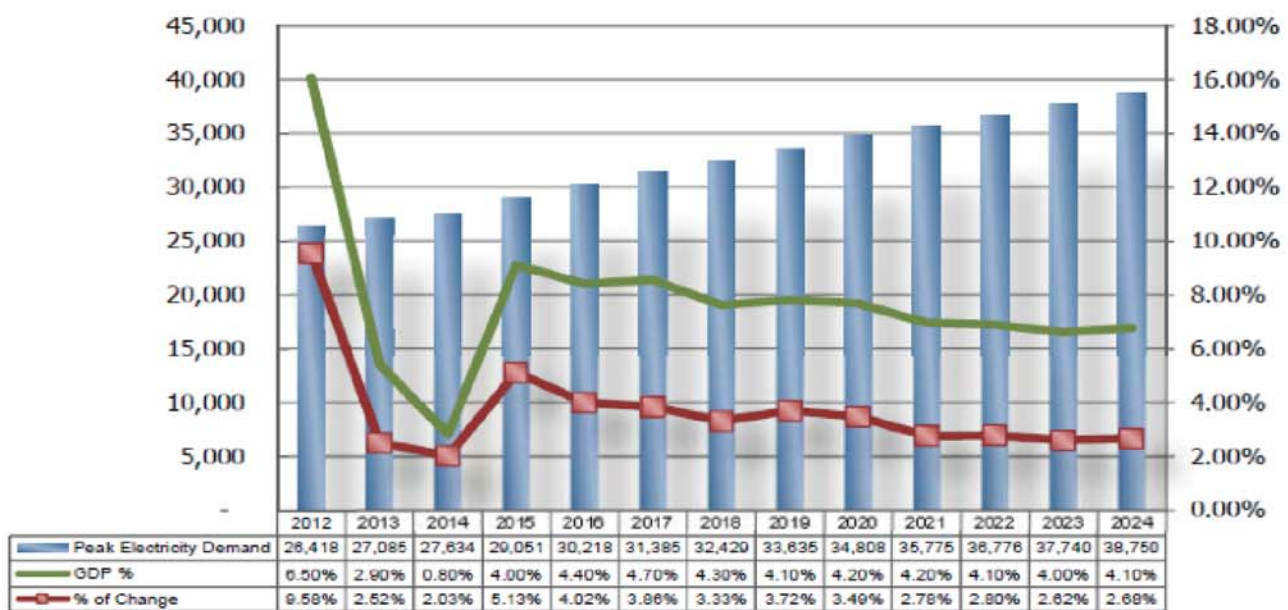
Structure of Domestic Electricity Businesses

At present, the structure of electricity businesses in Thailand starts from power plants located far away from sources of electricity generation, then, the voltage will be hence increasing by transformers; and the electric current will send through the high-voltage transmission system along the transmission lines. When having reached the areas, which have demand of electricity or communities, the voltage, will be adjusted by transformers as deems appropriate, then, the electric current will be through the distribution system along the transmission lines; and the voltage will be suitably decreased once again before distributing electricity to users. Structure of electricity businesses in Thailand classify into 3 systems, including:

1. Generation System;
2. Transmission System;
3. Distribution System;

The Electricity Generating Authority of Thailand (EGAT) operates the majority of the generation system and the whole transmission system in Thailand, while the distribution system operates by the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA); MEA shall supply electricity to users in Bangkok, Nonthaburi, and Samut Prakarn; while, PEA shall supply electricity to users in other provinces.

Electricity Demand Forecast



Source: Statistics and forecasting of electricity demand according to the PDP 2015 Plan

From the highest amount of electricity production and purchase in Thailand or in other words, the highest demand for electricity in Thailand according to the Thailand Power Development Plan 2015-2036 (PDP 2015), which in 2036, the maximum electricity demand forecast is 49,655 megawatts, according to the plan and the highest electricity demand during 2014-2036, the average of 1,001 megawatts per year, average annual rate of 2.67%, compared to the average GDP growth rate in the same period is at 2.68. The maximum demand for electricity will change in the same direction as the GDP growth, which will cause the demand for transformers to grow in the same direction. With an average growth of 2.67% per year, which the government sector has prepared a budget for the supply of electricity transformers approximately 3,000-4,000 million baht each year to support the expansion of electricity demand according to the PDP 2015 plan.

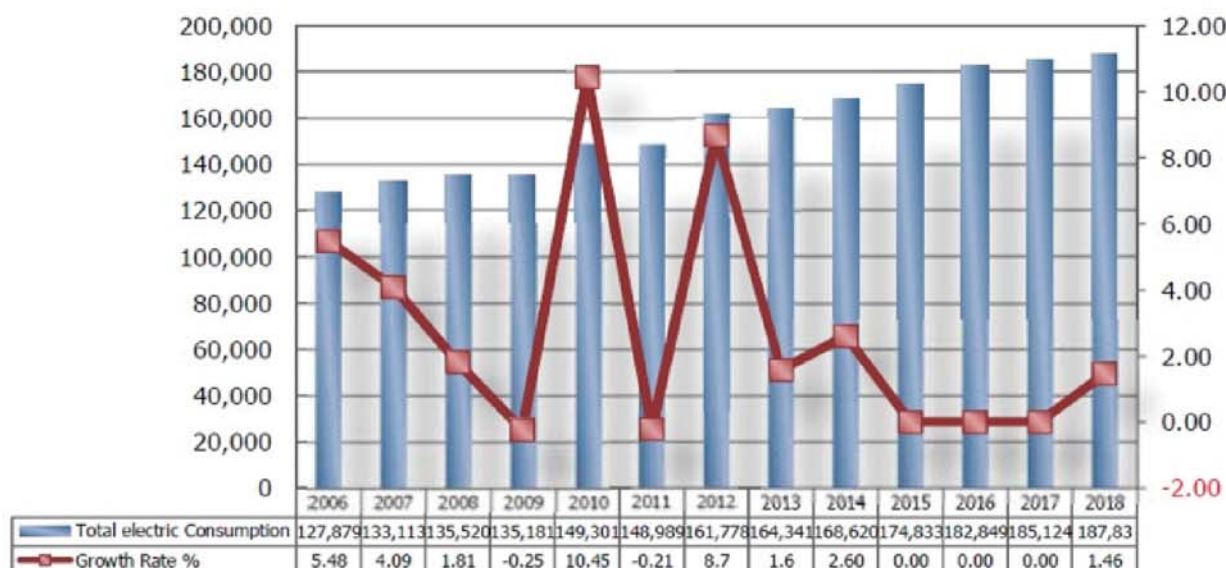


Trends in the Transformer Industry in Thailand

Regarding the trends of transformer industry in Thailand, the structure has changed from importation to import-substitution industry. Ratios of domestic use/exportation have changed from 80:20 in 2006 to 70:30 from 2007 and the exportation growth rate seems to be increased continuously because the local manufacturer of transformer could increase their production capacity and could produce a variety of products that meet the demand of foreign customers more effectively. The quality of products is more acceptable to the international market.

Electric Consumption for Whole Country 2006-2018

GWH



Source: EPPO

In 2018, the country's electricity consumption has increased from 185,124 GWH in 2017 to 187,831 GWH in 2018, or increased by 1.46%. The increase is mainly the industrial sector, both in the metropolitan and provincial areas, representing 47% of the total electricity consumption, which indicates the demand for electricity is still ongoing.

In 2018, the transformer industry outlook of government, private, and export sectors deteriorated because government policy of bidding process was changed from the traditional process to e-bidding process on August 23rd '2017 resulted that government officers must make understanding of new bidding process which made slowing budget utilization in year 2017 and 2018. Consequently, the transformer orders by the government and private sectors were decreased from 1,625 million baht in 2017 to 931 million baht in 2018. For export sector, the export order improved from 174 million baht in 2017 to 789 million baht in 2018 due to large project in Singapore counting at 51% of total export orders. The Company's transformer backlog as of December 31st 2018 was 1,039 million baht which 788 million baht and 251 million was delivered in 2019 and 2020 respectively. Since the Company delivered high gross profit margin transformers especially export sector resulted in gross profit margin of transformer business increased from 16.77% in 2017 to 18.76% in 2018.

However, the Company forecasted that transformer demand in 2019 has still improved because the government budget utilization is back normally. The demand of private sector will increase because infrastructure investment by the government and the Company launches new product, Unit Substation, to serve the Underground Cable Project by MEA to develop Bangkok as Asian City and by MEA to improve travelling province, increase life and property securities, concern landscape, and protect environment.

For export sector, the Company has policy to expand export market to growing market area especially construction, plastic and petrochemical industries and renewable energy power plants and solar power plants that are supported by government and foreign investments such as CLMV, the Philippines, and Malaysia which generally acknowledges the Company's transformer quality.

For existing government and private sectors, the Company has still focused on engineering to order product with low competition. Moreover, the announcement of PDP2015 to be effective on June 30th 2015 will enhance higher transformer demand substantially because high voltage transmission towers to support ASIAN GRID requires power transformers rated 500/230/115 KV. Based on the government's investment budget of high voltage transmission towers projects of Electricity Generating Authority of Thailand over the year 2016-2020 for 10,000 million baht or average 2,500 million baht, the Company shall have market shares about 25%-30%.

In addition, the Company has operated to increase productivity by building new plant starting production since December 2016 to serve existing production line which resulted that the Company's productivity increases from 5,000 MVA to 9,000 MVA and serves growing production for additional 5 to 7 year onward. Accordingly, the increase in transformer demand by the government due to PDP2015 will relieve business competition.

Especially, on March 4th, 2019, the Company and EGAT signed the contract of 268 million baht for 6 units of 333.33 MVA 500kV power transformer for Transmission System Development Project for the Northeast Region, Lower North Region, Central Region, and Bangkok Metropolitan for System Security Enhancement (TIEC) in accordance with PDP2015. Its contract value is about 268 million baht. The power transformers will be delivered in 2020. These power plants are largest voltage which the Company is one of two manufactures in Thailand.

However, in 2019 the Company forecasts that price competition should range from neutral to high. In order to reduce its risk, the Company will focus on engineering to order product with low competition in domestic and foreign markets to increase opportunity to take profit and deploy all procedures to manage more cost effective to maintain at least average 20% net profit margin.

To sum up, as of December 31st 2018, the Company and its subsidiaries' operating performances were improved because total revenue of 2,637 million baht increased by 8% from the one of 2017 and its gross profit margin of 2018 was 21.90% to sale and service revenue compared to 20.10% of 2017. However, LDS, a subsidiary, had its revenue that could not increase as high as its expense and had higher financial cost which resulted that in December 31st 2018, the Company and its subsidiaries had net loss attributed to shareholders of (30.76) million baht compared to (68.70) million baht as of December 31st 2017. As of December 31st 2018, the Company and subsidiaries had total backlog of 1,748 million baht of which 1,257 million baht and 491 million baht will be delivered in 2019 and 2020 respectively. Total bid and quotation as of December 31st 2018 was approximately 13,031 million baht which expected to be ordered about 20%-25%. In 2019, the Company and its subsidiaries will operate due to registered policies and manage cost effective to maintain average gross profit margin of the group at least 20% as well as other procedures to manage controllable risks and to make confident that the Company and its subsidiaries operates and controls suitably.

Competition

Competition in the transformer industry, the company has divided the market into the transformer distribution system and power transformer market. The distribution transformer market has 25 manufacturers, which are Thai companies. There are 8 competitors who are capable of manufacturing and testing in accordance with the ISO 9000 industry standard and the Short Circuit Test. Other than this is medium and small manufacturers with the main selling point of pricing. The customer groups of each size of the manufacturer are different.

Meanwhile, the market of transformers is an industry that requires knowledge, ability, expertise, experience of manufacturers and advanced technology in production including intensive research and development to produce high quality and meet standards criteria including the stability in customer's electrical systems. The new comers of the competitors are more difficult. Currently, the company is the manufacturer and distributor of the only transformer that can produce power transformers and transformers distribution system. The company is one of the three transformer manufacturers in the country for size not exceeding 100 MVA 230 kV and is one of the three manufacturers of power transformers ranging in size from 100-300 MVA 230 kV.

For the international market, since the company has the ability to produce 230 KV power transformers for domestic market, this enables the expansion of the same transformers to Vietnam, India, Sri Lanka and Pakistan markets, with a market value of several hundred million US dollars. Meanwhile, the current target market of the company for both transformer distribution system and power transformers up to 132 KV can still maintain market coverage to Vietnam, Malaysia, Singapore, Philippines, India, Nepal, Sri Lanka and Australia. The Company has been recognized by multinational companies to participate in large-scale projects such as many countries' Petrochemical Projects including Fuji Electric System Co., Ltd and Samsung Co., Ltd., which represent the competitive advantage of the company internationally. This is in line with the Company's policy to target the export market to account for 30-35% of total sales.



Risk Factors

Risks from Business Operation

Risks of Incomes from Bids

The Company and its subsidiaries have the main incomes from bids invited by State Enterprise power producers in Thailand, including Metropolitan Electricity Authority (MEA), Electricity Generating Authority of Thailand (EGAT) and the Provincial Electricity Authority (PEA). In 2018, the Company and its subsidiaries received orders from MEA, EGAT and PEA equivalents to 10%, 5% and 9% of total revenue respectively; therefore, such income depends on the ability to win the project bid which is uncertain and also depends upon the economic condition, and budgets of the afore-mentioned Agencies. As of 31 December 2018, the Company and its subsidiaries had its outstanding projects on hand to be delivered to these Agencies a total of 177.35 million Baht.

In addition, the Company and its subsidiaries have increased competitiveness by producing power transformers with a size of 300 MVA, the voltage of 230 kV. As a result, the Company has become one of the three manufacturers in Thailand that can manufacture power transformers of 300 MVA with a voltage of 230 kV; therefore, the Company expects to generate steady income.

Risks from Fluctuations of Prices of Main Raw Materials

The main raw materials for the manufacturing of transformers are insulated copper wire, insulated silicon steel, transformer tank, and transformer oil. In the year 2018, the cost of raw materials were 21%, 12%, 15%, and 7% of the cost of sales and services, respectively. The prices of such raw materials shall be vary according to global demand and supply especially copper prices, which have significant price fluctuations in the world market since 2006 and in 2018, copper prices in the world market still fluctuate. The Company and its subsidiaries have closely monitored the copper price situation and have adjusting the strategy of standing the selling price in accordance with the cost and have managed the procurement of raw materials efficiently. The Company and its subsidiaries have continued to apply the existing measures in 2018 including closely monitoring the situation of raw material prices and adjusting strategies, as appropriate. The Company expected that the risks of raw materials prices would be at the controllable level.

Risks from Dependence on Key Account Customers

In 2018, the proportion of sales of the transformer of the company is divided into 46 percent private, 30 percent export and 24 percent state enterprise, which the company and its subsidiaries do not have a proportion of sales to any customer over than 30 percent of total sales. In 2018, the Company and its subsidiaries have maintained the same marketing policies along with adjusting strategies according to the situation and suitability. Moreover, the Company has increased its production capacity of the 300 MVA power transformer, 230kV voltage, giving the Company the potential to compete and capable of expanding its market base both domestic and international. The Company, therefore, is confident to be able to effectively manage the risk from dependence on only key account customer.

Risks from relying on any business

The core business of Tirathai Group is transformer business. In 2018, the main business is accounted for 75% of total revenue of Tirathai Group. The demand for transformer has direct correlation with the state enterprise demand in accordance with the PDP plan of both domestic and international while the private sector depends on the economic situation and investments in both the private and public sectors. In order to reduce the risks, the company has taken up new lines of businesses as stated in the "Nature of Business Operation". Since 2015, such businesses have had few competitors but existing demand from both domestic and international markets especially AEC Group, these will be distributed proportionately into the revenue structure of the high-growth business groups. As a result, The Company is enable to conduct the businesses stably and sustainably. As of December 2018, the proportion of revenue from transformer group and non-transformer group were 75% and 25% respectively.

Risks from Price Competition

The Price competition during the economic slowdown and in the event that the Government Auction System is not in the normal stage can cause supply over Demand, which considers as an inevitable risk factors. Therefore, Tirathai Group has measures to reduce the risk as follows:

1. Cost Plus Pricing Method. The Cost Plus pricing provides management with the flexibility in the bidding and gross margin administration at an average rate of 20%.
2. Focus on the market with high margin products that require design engineering and advanced standards.
3. Improve the management system in the organization to be more efficient and reduce unnecessary waste of supply chain from both internal and external in order to generate competitive advantage.

Financial Risks

Risks from Exchange Rates

The Company and its subsidiaries have had incomes from sales and costs in foreign currencies (costs include cost of sales and services, selling and administrative expenses, and interest), mostly in US dollars, Singapore dollars, and Euro, and other minor currencies. Therefore, the Company and its subsidiaries have the risks from the aforementioned exchange rates.

However, the Company has set up a hedging policy for foreign currency denominated in foreign currencies. The Company has opened a US Dollar deposit account to make a natural hedge. The Company was able to settle the payments of raw materials in US dollars and using it for the estimation of transformer prices. The Company has provided an allowance for fluctuation of exchange rates at a certain level.

Nevertheless, the current currency fluctuates around the world economy. The Company recognizes the significance of such risks. The Company has entered into forward contracts with financial institutions in accordance with the economic situation in each period to prevent the risk as well



Related Transactions

Related Transactions with Parties in Conflict

As at 31 December 2018, the Company has no related transactions with parties in conflict as defined in Clause no.15 “Parties in Conflict” in the Notification of SEC and SET No. Kor Chor: 17/2551 dated 15 December 2008

In the event of a related transaction with a person who may have a conflict of interest in the future.

The Company has the procedure and policy in dealing with the related transactions as follows:

1. Procedures of Related Transaction Approval

Concerning the related transactions of the Company that may occur to have conflict of interest, the Company has the policy not to involve or enter into any related transactions with parties who may have conflict of interest, except for inevitable cases, thus, to ensure the transparency and confidence to investors; whereby, the Company shall consider only normal business transactions for the maximum benefits of the Company under the same conditions as other business partners. The Company shall assign the Audit Committee to give comments on the necessity and suitability of such transactions. In case, the Audit Committee has no expertise in considering the related transactions which may occur, the Company shall assign independent expert or auditor of the Company to give comments on the said transactions for decision making of the Audit Committee or shareholders, as the case may be.

2. Policy and Trends on Related Transactions

The Company, in cooperation with the Audit Committee, shall consider the reasonable and fair rate of returns of such related transactions that may occur; and shall give its approval according to the related procedures and regulations. The company shall disclose the types and value of related transactions of the Company with parties in conflict under the announcements and regulations of the Securities and Exchange Commission.

Regarding the related transactions that may occur to parties in conflict of interest or stakeholders, the Company has its policy to assign the Audit Committee to give comments on the rate of returns, including necessity and suitability of such transactions by casting votes in such meetings; provided that any directors who are stakeholders shall have no voting rights.

3. Investor Protection Measures

For the purpose of investor protection, in case, there are related transactions of the Company occurring to parties in conflict of interests or stakeholders or may have conflict of interests in the future, the Company shall propose such related transactions to the Board of Directors’ Meeting attended by the Audit Committee. The consideration of such related transactions shall be with fair treatment; and shall have its policy to determine reasonable prices. In case, the Audit Committee has no expertise in considering the related transactions which may occur, the Company shall assign independent expert or auditor of the Company to give comments on the said transactions for decision making of the Board of Directors or shareholders, as the case may be. The Board of Directors shall comply with the law governing securities and stock market, and regulations, announcements, orders, or requirements of the Stock Exchange of Thailand (SET). The company shall comply with the regulations on the disclosure of information on such related transactions, and acquisitions or disposal of major assets of the Company, except for related transactions which are within the normal course of business; and shall have its policy to determine prices and conditions which are the market prices or indifferent to the third parties.

The Company shall disclose the related transactions in the Notes to Financial Statements which have been audited by the Company’s auditor, whereas, the Company shall have its policy to enter into related transactions only in connection with the main businesses of the Company. At present, the Company has assigned the Audit Committee to audit the related transactions and the internal control system of the Company. Thus, to ensure the transparency and confidence to investors; moreover, the Company has adhered to the principle of reduction of all risks to the businesses; and has assigned the Audit Committee to supervise the said risk factors in detail.

Management Discussion and Analysis: MD&A

The main business of the company and its affiliated consists of:

1. Transformer Group

• Transformer Business

In 2018, the transformer industry outlook of government, private, and export sectors deteriorated because government policy of bidding process was changed from the traditional process to e-bidding process on August 23rd '2017 resulted that government officers must make understanding of new bidding process which made slowing budget utilization in year 2017 and 2018. Consequently, the transformer orders by the government and private sectors were decreased from 1,625 million baht in 2017 to 931 million baht in 2018. For export sector, the export order improved from 174 million baht in 2017 to 789 million baht in 2018 due to large project in Singapore counting at 51% of total export orders. The Company's transformer backlog as of December 31st 2018 was 1,039 million baht which 788 million baht and 251 million was delivered in 2019 and 2020 respectively. In 2018, the Company delivered high gross profit margin transformers especially export sector resulted in gross profit margin of transformer business increased from 16.77% in 2017 to 18.76% in 2018.

However, the Company forecasted that transformer demand in 2019 has still improved because the government budget utilization is back normally. The demand of private sector will increase because infrastructure investment by the government and the Company launches new product, Unit Substation, to serve the Underground Cable Project by MEA to develop Bangkok as Asian City and by MEA to improve travelling province, increase life and property securities, concern landscape, and protect environment.

For export sector, the Company has policy to expand export market to growing market area especially construction, plastic and petrochemical industries and renewable energy power plants and solar power plants that are supported by government and foreign investments such as CLMV, the Philippines, and Malaysia which generally acknowledges the Company's transformer quality.

For existing government and private sectors, the Company has still focused on engineering to order product with low competition. Moreover, the announcement of PDP2015 to be effective on June 30th 2015 will enhance higher transformer demand substantially because high voltage transmission towers to support ASIAN GRID requires power transformers rated 525/230/115 KV. Based on the government's investment budget of high voltage transmission towers projects of Electricity Generating Authority of Thailand over the year 2016-2020 for 10,000 million baht or average 2,500 million baht, the Company shall have market shares about 25%-30%.

In addition, the Company has operated to increase productivity by building new plant starting production since December 2016 to serve existing production line which resulted that the Company's productivity increases from 5,000 MVA to 9,000 MVA and serves growing production for additional 5 to 7 year onward. Accordingly, the increase in transformer demand by the government due to PDP2015 will relieve business competition.

Especially, on March 4th, 2019, the Company and EGAT signed the contract of 268 million baht for 6 units of 333.33 MVA 525kV power transformer for Transmission System Development Project for the Northeast Region, Lower North Region, Central Region, and Bangkok Metropolitan for System Security Enhancement (TIEC) in accordance with PDP2015. Its contract value is about 268 million baht. The power transformers will be delivered in 2020. These power plants are largest voltage which the Company is one of two manufactures in Thailand.

However, in 2019 the Company forecasts that price competition should range from neutral to high. In order to reduce its risk, the Company will focus on engineering to order product with low competition in domestic and foreign markets to increase opportunity to take profit and deploy all procedures to manage more cost effective to maintain at least average 20% net profit margin.

• Repair and services of Transformer

Transformers are durable product with usage life around 25 years and require slightly maintenance. Therefore, the workloads and gross profit margin of repairing and services each year depend on the requirement of user and product damage. In 2018, the repairs and services revenue decreased from 71 million baht in 2017 to 44 million baht in 2018 and the gross profit margin was 51% in 2017 compared to 65% in 2017.

2. Non-Transformer Business consists of:

• Assembly and distribution of Aerial Crane Device and Digger Derrick Unit for Electrical system maintenance of Electricity Authority managed by TRT E&S

In 2018, the Electricity Authorities slowed down large project bidding which resulted that TRT E&S received less aerial crane device project order. TRT E&S's revenue composed of Aerial Crane Device and Digger Derrick of 23 million baht and service revenue of 38 million baht. The Company forecasts that government bidding will recover in 2019 which waiting list of bidding amount in 2018 was about 1,857 million baht which TRT E&S's market share is about 15 - 20% to deliver in 2019 to 2020.



• **Steel Fabrication, Engineering Procurement and Construction (EPC) Project and Construction Project managed by LDS**

In 2015, LDS initially reorganized to prepare for EPC business expansion for the Construction Project with steel structure more than 50% including labor skill development certified by ASME in 2016 and anticipated for certification in Q2'17 to prepare for high quality steel fabrication, such as pressure vessel besides Steel Fabrication that LDS already has had skills in manufacturing quality products. As a consequent, the expense was high. In 2016, for the EPC's Ash and Gypsum Conveyor Belt System and the Conveyor Belt System to unloading soil (Waste Line 2), in November 2016, LDS signed 2 contracts of 201 million baht with Hongsa Power Co., Ltd, Lao PDR which these projects were delivered in 2017. Subsequently, the revenue recognition of LDS did not catch up with the expansion expenses since 2015, so LDS had net loss 34 million baht and 47 million baht in 2016 and 2017 respectively. In 2018, because revenue did not increase as high as expense, LDS had net loss 74 million baht consisting of the unused deferred income tax of previous year 21 million baht and net loss 54 million baht. However, LDS's backlog as of December 31st 2018 was about 81 million baht that all backlog will be delivered in 2019 while the pending bidding amount as of December 31st'2017 was 1,424 million baht expected to be 20% to 25% of orders.

LDS believed that in 2018, the readiness in increasing capabilities over the past years as well as the monthly review and follow up process to ensure proper management will return sale growth reaching the target and meet break even in 2019 which bases for profit making in the following year.

• **Conveyor Belt Operation and Maintenance at Hongsa Power Plant managed by JV L.D.S-N.D.P. (JV)**

In 2018, JV renewed the contract for Coal Conveyor System Services Agreement dated 1st January 2018 for the maintenance of Coal Conveyor Belt System at Hongsa Power plant worth 24 million baht per year (Average 1.98 million baht per month). The project lasts 2 years ending on June 30th 2020 which in 2018 to 2019, JV should earn income and relocation/shift by 300 to 330 million baht a year.

In 2018, JV reconsidered the extension of the contract for Operation and Maintenance of Waste Line 2 (O&M WL2). In Jan 2019, Hongsa Power Co., Ltd, Lao PDR opened bidding for Operation and Maintenance of Waste Line 2 (O&M W L2) which the result of bidding was announced on March 6th 2019 and JV did not win the bid.

Conclusion

To sum up, as of December 31st 2018, the Company and its subsidiaries' operating performances were improved because total revenue of 2,637 million baht increased by 8% from the one of 2017 and its gross profit margin of 2018 was 21.90% to sale and service revenue compared to 20.10% of 2017. However, LDS, a subsidiary, had its revenue that could not increase as high as its expense and had higher financial cost which resulted that in December 31st 2018, the Company and its subsidiaries had net loss attributed to shareholders of (30.76) million baht compared to (68.70) million baht as of December 31st 2017. As of December 31st 2018, the Company and subsidiaries had total backlog of 1,748 million baht of which 1,257 million baht and 491 million baht will be delivered in 2019 and 2020 respectively. Total bid and quotation as of December 31st 2018 was approximately 13,031 million baht which expected to be ordered about 20%-25%. In 2019, the Company and its subsidiaries will operate due to registered policies and manage cost effective to maintain average gross profit margin of the group at least 20% as well as other procedures to manage controllable risks and to make confident that the Company and its subsidiaries operates and controls suitably.

Performance Analysis

1. Overview of Operating Result of year 2018

(Million Baht)	2017		2018		% Change
Total Revenue	2,448.03		2,636.62		8%
Sale & Service Revenue	2,429.77	100.00%	2,615.91	100.00%	8%
Net Profit Margin	488.45	20.10%	572.85	21.90%	17%
EBITDA	50.95	2.10%	146.88	5.61%	188%
EBIT	(32.33)	-1.33%	58.81	2.25%	282%
Net Profit / (Net Loss) attributable to equity	(68.70)	-2.83%	(30.76)	-1.18%	-55%

In 2018, the Company and its subsidiaries had net loss attributable to equity shareholders of (30.76) million baht compared to net loss attributable to equity shareholders of (68.70) million baht as followings.

1. The gross profit margin of revenue from sales and service in 2018 was at 21.90% compared to the one in 2017 at 20.10%. The increase in gross profit margin was resulted by the increase in gross profit margin of Transformer business which was increased from 16.77% in 2017 to 18.76% in 2018. In addition, gross profit margin of Non-Transformer business increased from 27.39% in 2017 to 31.58% in 2018 due to the increase in higher margin product delivery.

2. Selling Expenses in 2018 in line with the budget was equal to 157.13 million baht or 5.96% of total revenue compared to 152.45 million baht or 6.23% of total revenue in 2016 which is prorated due to the increase in Sale.

3. The administrative expenses in 2018 was in line with the budget was equal to 377.62 million baht or 14.32% of total revenue, compared to 378.08 million baht or 15.44% of total revenue in 2017.

4. Financial cost as percentage of total revenue in 2018 was at 2.45% compared to 2.43% in 2017 due to the increase in interest rate of long-term bond that was issued in 2018.

2. Structure of Revenue

Structure of Income (Million Baht) Transformer Group	2016	%	2017	%	2018	%
1. Revenue of Transformer - Domestic						
Power Transformer	1,006	39%	652	27%	940	36%
Distribution Transformer	287	11%	530	22%	399	15%
Transformer Components	14	1%	13	1%	11	0%
Total	1,306	51%	1,195	49%	1,350	51%
2. Revenue of Transformer - Export						
Power Transformer	372	14%	286	12%	366	14%
Distribution Transformer	105	4%	109	4%	213	8%
Transformer Components	2	0%	6	0%	2	0%
Total	479	19%	401	16%	581	22%
3. Revenue of Transformer Services	82	3%	71	3%	44	2%
Total Revenue of Transformer Group	1,867	72%	1,667	68%	1,975	75%
Non-Transformer Group						
4. Revenue of Steel Fabrication/EPC	161	6%	357	15%	221	8%
5. Revenue of Aerial Derrick Truck and EPC	209	8%	70	3%	61	2%
6. Revenue of Operation and Maintenance (O&M)	299	12%	336	14%	358	14%
7. Revenue - Others	41	2%	18	1%	21	1%
Total Revenue from Non-Transformer Group	710	28%	781	32%	661	25%
Total Revenue	2,577	100%	2,448	100%	2,637	100%

***Revenue – Others are interest income, gain from FX, Tax coupon, and other income.**

In 2018, the company and its subsidiaries reported total revenue of 2,637 million baht which consisted of 1) Transformer business revenue of 1,975 million baht or 75% and 2) Non-Transformer business revenue of 661 million baht or 25% as details.

1) Transformer business revenue consisted of 2 sources as follows.

1.1) Sale of Power Transformer and of Distribution Transformer in 2018 was equal to 1,931 million baht derived from the government sector at 24%, domestic private sector at 46%, and export sector at 30% compared to those of 1,596 million baht in 2017 derived from the government sector, domestic private sector, and export sector at 34%, 41%, and 25% respectively.

1.2) Service Business: Revenue of Service Business in 2018 composed of the revenue from installation, repair, testing, maintenance, and other transformer related services was 44 million baht which was recognized by TRT.

2) Non-Transformer business revenue of 661 million baht in 2018 consisted of followings.

2.1) Revenue from Fabricate Steel / EPC of 221 million baht.

2.2) Revenue from assembly and distribution of Aerial Crane Device and Digger Derrick Unit of 61 million baht

2.3) Revenue from JV O&M WL2 and O&M Ash projects of 358 million baht.

2.4) Revenue from others of 21 million baht.

3. Financial Statement

Statements of Financial Position (million baht)	As of Dec 31'17	As of Dec 31'18	Change	% Change
Current Assets	1,839.95 58%	1,909.58 61%	69.64	3.78%
Non-Current Assets	1,307.35 42%	1,242.30 39%	(65.05)	-4.98%
Total Assets	3,147.29 100%	3,151.88 100%	4.59	0.15%
Current Liabilities	1,414.67 45%	1,851.50 59%	436.82	30.88%
Long-term Liabilities	697.84 22%	285.45 9%	(412.38)	-59.09%
Total Debt	2,112.51 67%	2,136.95 68%	24.44	1.16%
Total Equity of Parent Company's shareholders	1,044.78 33%	1,029.06 33%	(15.72)	-1.50%



Total Asset: As of December 31st 2018, the Company and its subsidiaries' total assets of 3,151.88 million baht increase by 459 million baht from those of 3,147.29 million baht or 0.15% in 2017 as followings.

1) Current Asset: As of December 31st, 2018, Current Asset increased by 69.64 million baht or 3.78% from those in 2017 as the following details:

- Trade Account Receivable was increased by 121.28 million baht because delivery amount in Q4'2018 increased higher than the one of Q4'2017. Most of trade account receivable is un-due AR that is 93% of total net AR.
- Average account receivable collection period in 2018 was 100 days compared to 119 days in 2016 since the receivable collection period depends on collective AR condition in contract especially power transformer.
- The Company has a policy to set an allowance for doubtful account for the debt that is expected to not collect under management investigation on a quarterly basis. As of December 31st 2018, the Company and subsidiaries did not increasingly set allowance for doubtful account but they asked for AR collection by 1.1 million baht. Hence, the allowance for doubtful account by the end of 2018 was 17.09 million baht compared to 18.19 million baht in 2018.
- Other Account Receivable increased by 8.23 million baht due to the increase in deferred tax of 13.60 million baht.
- Inventory increased by 20.18 million baht in accordance with management of raw materials and finished goods in order to reserve production for delivery in 2019. Moreover, the management agreed to set the allowance for devaluation of inventories that its cost was higher than net value receivable and of inventories that deteriorated in quality and high aging abided by Accounting Standard-TAS 2 : Inventory Accordingly, the allowance for devaluation of inventories in 2018 decreased by 3.12 million baht because the amortized inventories were sold. Consequently, the allowance for devaluation of inventories as of the end of December 2018 decreased to 20.42 million baht compared to 23.54 million baht as of the end of December 2017.
- Other current asset decreased by 15.37 million baht.

2) Non-Current Asset: As of December 31st 2018, Non-Current Asset decreased by 65.05 million baht or 4.98% mainly resulted from the depreciation and amortization of net Property, Plant, and Equipment by 52.36 million baht and the decrease in deferred income tax and withholding tax receivable by 13.57 million baht.

Total Liability: As of December 31st 2018, Total Liability of the company and its subsidiaries was equal to 2,136.95 million baht, increased by 24.44 million baht or 1.16%. Major increasing is the increase in Current Liability by 436.82 million baht or 30.88% due to the increase in short term loan from financial institution, accrued expense and current portion in 1 year of long-term bond.

Shareholders' Equity: As of December 31st 2018, Shareholders' Equity of the company and its subsidiaries was to 1,029.06 million baht, decreased by 15.72 million baht or 1.50% from last year because of net loss attributable to equity shareholders in 2018 of 30.76 million baht.

Capital Structure

- As of December 31st 2018, the Company and its subsidiaries had Total Debt to Equity for shareholders ratio at 2.08 times higher than 2.02 times in 2017 which resulted from decreased in Equity due to net loss in 2018. However, interest bearing debt to equity for shareholders as of December 31st 2018 was 1.39 times, which represented the well managed the interest-bearing debt to be in appropriate proportion which was lower than 1.5 times as specified in the condition of existing bond.

- The Liquidity ratio of the company and its subsidiaries was 1.03 times in 2018 compared to 1.30 times in 2017 which mainly resulted from the increase by 239 million baht in bond due within one year and the increase by 132 million baht in short term loan from financial institutes.

- Interest coverage ratio in 2018 was 2.27 times higher than 0.86 times in 2017 and DSCR was 0.26 times in 2018 higher than 0.16 times in 2016 because earnings before interest, tax, depreciation, and amortization (EBITDA) increased from 50.95 million baht in year 2017 to 146.88 million baht in 2018.

In conclusions, the Company and its subsidiaries' policy is to control that debt to equity ratio is not over 1.5 times and to manage EBITDA portion suitable with amount of principal and interest expense. Furthermore, the Company and its subsidiaries has policy to reserve short term credit line of financial institute with the condition that the Company can withdraw short term loan within 3 to 5 days and repay prior to due date without any charge which its credit lines are review annually. As of December 31st, 2018, the company and its subsidiaries have this kind of credit line of 350 million baht to maintain liquidity of the company and its subsidiaries under serious management to stabilize capital structure.

4. The Liquidity

Liquidity (million baht)	2018
Net cash inflow (outflow) from operating activities	63.03
Net cash inflow (outflow) from investing activities	(34.34)
Net cash inflow (outflow) from financing activities	(93.15)
Net increase (decrease) in cash and cash equivalent	(64.46)
Beginning balance Cash and Cash Equivalent	313.42
Foreign Exchange Gain (Loss)	(0.54)
Ending balance Cash and Cash Equivalent	248.42

Ending Balance Cash and Cash Equivalent of the Company and its subsidiaries as of December 31st 2018 was equal to 248.42 million baht lower than the one of 313.42 million baht as of December 31st 2017 because of having net cash inflow from operating activities of 63.03 million baht and net cash outflow from investing and financing activities of 127.49 million baht. It shows that the Company and its subsidiaries have well managed its liquidity which still has cash ending of year 2018 of 248.42 million baht.



Report of the Board of Directors' Responsibilities for Financial Statements

To Shareholders

The Board of Directors is responsible for the consolidated financial statement of the Company and its Subsidiaries, including financial information in the Annual Report and the Company's financial statements. The Board of Directors is of the opinion that the Company's financial statements for the year ended 31 December 2018 have been prepared in accordance with generally accepted accounting principles, with appropriate accounting practices applied on a conservative and consistent basis. Where judgment and estimates were required, these were made with careful and reasonable consideration, and adequate disclosures have been made in the notes to the financial statements. These financial statements have been audited by independent certified auditors who have given their unqualified opinions.

The Board of Directors supports the practice of good corporate governance in the Company and endeavors to improve the structure of the Board of Directors accordingly so that the Company's operation is efficient, transparent and reliable. The Board of Directors has appointed an Audit Committee which comprises three independent directors who are responsible for reviewing the financial reports and the internal control and audit system of the Company. The Audit Committee has expressed its opinion with regard to the stated matters in the Report of the Audit Committee which is presented in this Annual Report.

The Board of Directors is of the opinion that the Company's internal control system is adequate and appropriate and can reasonably assure the creditability of the Company's financial statements for the year ended 31 December 2018.



Dr. Pisit Leeahtam
Chairman of the Board of Director



Mr. Sumpan Vongphan
Managing Director

Financial Statements

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
THAILAND

FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2018
AND
INDEPENDENT AUDITOR'S REPORT

EXPRESSED IN
THAI BAHT



Independent Certified Public Accountant's Report



A. M. T. & Associates

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INDEPENDENT AUDITOR'S REPORT

To The Shareholders and Board of Directors of Tirathai Public Company Limited

Opinion

I have audited the consolidated financial statements of Tirathai Public Company Limited and its subsidiaries (the “Group”) and the separate financial statements of Tirathai Public Company Limited (the “Company”) which comprise the consolidated and separate statements of financial position as of December 31, 2018, and the related consolidated and separate statements of changes in equity, income, comprehensive income, and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of Tirathai Public Company Limited and its subsidiaries and of Tirathai Public Company Limited as of December 31, 2018, and 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 in accordance with the Federation of Accounting Professions’s Code of Ethics for Professional Accountants together with the ethical requirements 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.

Independent Certified Public Accountant's Report



A. M. T. & Associates

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Key Audit Matters

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

Key Audit Matters included Audit Procedures are as follows:

Presentation of inventory valuation (the consolidated and separate financial statements)

As describe in Note 2.6 and 7 to the financial statement, inventories which stated at the lower of cost and net realizable value are significant amount. And the management used information from inventory aging analysis report and individual obsolete stock analysis report to consider the allowance for inventories declining value, therefore, I have identified that the valuation of inventories is the significant matter that requires special attention in the audit.

My audit procedure on such matter

I assessed and tested the internal control related to the calculation of inventory cost, observed the inventory count, checked the aging report of inventories, inquired the management, and considered reasonableness of the policy regarding setup allowance for inventories declining value, and tested compliant of the allowance for inventories declining value to the policy. Including test the calculation of the allowance for inventories declining value by comparing cost of inventories and net realizable value. Additionally, I considered the adequacy of the information disclosure related to the measurement of inventories.

Other Information

Management is responsible for the other information. The other information comprise the information included in the annual report of the Group, but does not include the financial statements and my auditor's report thereon, which 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 do 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 financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance and the management of the Group.



Independent Certified Public Accountant's Report



A. M. T. & Associates

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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 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.

Independent Certified Public Accountant's Report



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- 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 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 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 year 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.

(CHAIYUTH ANGSUWITHAYA)
Certified Public Accountant
Registration No. 3885

A.M.T. & ASSOCIATES
Bangkok, Thailand
February 28, 2019



Statements of Financial Position

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2018

	NOTE	BAHT			
		CONSOLIDATED		SEPARATE	
		FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
		AS OF DECEMBER 31,		AS OF DECEMBER 31,	
		2018	2017	2018	2017
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents		248,417,436.80	313,415,181.24	190,743,076.35	274,250,779.13
Current investments - investments units		690,540.00	801,860.00	690,540.00	801,860.00
Trade receivables - net	3 and 25	766,399,910.87	645,120,356.18	642,680,419.02	488,670,169.79
Unbilled contract revenue	4	8,530,299.77	8,111,496.22	-	-
Other receivables	5 and 25	61,876,016.03	53,644,486.85	35,108,582.95	28,913,019.15
Short - term loan to related party	6 and 25	-	-	-	55,000,000.00
Current portion of long - term loans to related parties - net	10 and 25	-	-	5,280,000.00	-
Inventories - net	7	817,772,349.14	797,589,310.99	701,031,203.20	712,398,998.99
Other current assets					
- Advances payment for goods and services	25	4,165,098.22	3,957,360.00	1,627,900.00	2,767,500.00
- Retention	4	1,418,985.50	16,304,020.00	-	-
- Others		310,651.95	1,001,246.04	168,755.91	159,500.00
Total current assets		1,909,581,288.28	1,839,945,317.52	1,577,330,477.43	1,562,961,827.06
NON - CURRENT ASSETS					
Investments in subsidiaries	8	-	-	138,188,700.00	138,188,700.00
Other long - term investments	9 and 13	37,787,625.30	37,429,820.36	37,493,591.06	37,138,248.56
Long - term loans to related parties - net	10 and 25	-	-	282,106,882.57	209,734,684.93
Property, plant and equipment - net	11 and 13	1,056,850,054.98	1,109,210,668.23	916,792,889.59	957,962,048.78
Goodwill		19,772,301.79	19,772,301.79	-	-
Intangible assets - net	12	9,101,407.78	8,150,793.89	5,464,099.92	3,757,994.09
Deferred tax assets	22	51,361,281.98	78,946,204.68	29,464,062.42	33,656,025.41
Other non - current assets					
- Refundable withholding income tax		44,698,541.35	30,685,852.75	18,079,171.02	11,779,285.51
- Advance payment for assets		15,756,000.00	15,756,000.00	15,756,000.00	15,756,000.00
- Others		6,968,628.02	7,393,392.87	3,440,410.02	4,005,784.02
Total non - current assets		1,242,295,841.20	1,307,345,034.57	1,446,785,806.60	1,411,978,771.30
TOTAL ASSETS		3,151,877,129.48	3,147,290,352.09	3,024,116,284.03	2,974,940,598.36

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

Statements of Financial Position

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2018

	NOTE	BAHT			
		CONSOLIDATED		SEPARATE	
		FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
		AS OF DECEMBER 31,		AS OF DECEMBER 31,	
		2018	2017	2018	2017
LIABILITIES AND SHAREHOLDERS' EQUITY					
CURRENT LIABILITIES					
Bank overdrafts and short - term loans					
from financial institutions	13	734,350,367.67	601,930,036.89	631,143,297.16	481,788,582.11
Trade payables					
- Related parties	25	-	-	38,088,983.39	35,358,520.68
- Others		365,106,914.94	361,375,326.19	267,702,522.64	284,490,578.69
Other payables	14	182,092,681.75	122,070,976.30	149,831,580.72	94,212,140.43
Short - term debentures	15	99,286,465.70	-	99,286,465.70	-
Current portion of long - term debentures	15	399,642,962.43	259,858,653.05	399,642,962.43	259,858,653.05
Income tax payable		6,478,246.71	4,920,434.75	-	-
Other current liabilities					
- Advances received for goods and services	4	54,323,836.33	51,996,122.35	50,278,504.65	47,760,960.84
- Accrued dividend payment		211,202.07	226,817.83	211,202.07	226,817.83
- Others		10,003,770.03	12,294,923.25	7,549,017.92	7,834,598.57
Total current liabilities		1,851,496,447.63	1,414,673,290.61	1,643,734,536.68	1,211,530,852.20
NON - CURRENT LIABILITIES					
Long - term debentures - net of current portion	15	199,463,953.21	597,969,042.74	199,463,953.21	597,969,042.74
Provisions for employee benefits	16	85,988,972.86	99,867,319.70	66,127,374.25	74,528,251.00
Total non - current liabilities		285,452,926.07	697,836,362.44	265,591,327.46	672,497,293.74
Total liabilities		2,136,949,373.70	2,112,509,653.05	1,909,325,864.14	1,884,028,145.94
SHAREHOLDERS' EQUITY					
Share capital					
Authorized share capital					
359,202,865 ordinary shares of Baht 1.00 each		359,202,865.00	359,202,865.00	359,202,865.00	359,202,865.00
Issued and fully paid - up share capital					
308,008,272 ordinary shares of Baht 1.00 each		308,008,272.00	308,008,272.00	308,008,272.00	308,008,272.00
Share premium		260,145,145.84	260,145,145.84	260,145,145.84	260,145,145.84
Retained earnings					
Appropriated - legal reserve	18	35,920,286.50	35,920,286.50	35,920,286.50	35,920,286.50
Unappropriated		424,985,850.46	440,708,745.17	510,716,715.55	486,838,748.08
Total equity of parent Company's shareholders		1,029,059,554.80	1,044,782,449.51	1,114,790,419.89	1,090,912,452.42
Non - controlling interests		(14,131,799.02)	(10,001,750.47)	-	-
Total shareholders' equity		1,014,927,755.78	1,034,780,699.04	1,114,790,419.89	1,090,912,452.42
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		3,151,877,129.48	3,147,290,352.09	3,024,116,284.03	2,974,940,598.36

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



Statements of Changes in Equity

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF CHANGES IN EQUITY
CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2018

BAHT

	Equity holders of parent company											
	Note	Issued and fully paid - up share capital	Share premium	Retained earnings		Other components of equity				Total equity of parent Company's shareholders	Non - controlling interests	Total shareholder's equity
				Appropriated - legal reserve	Unappropriated	Other comprehensive income (loss)	Actuarial gains (losses)	on defined employee benefit plans				
Balances as of January 1, 2018	308,008,272.00	260,145,145.84	35,920,286.50	440,708,745.17	-	-	-	1,044,782,449.51	(10,001,750.47)	-	1,034,780,699.04	
Total comprehensive income (loss) for the year	-	-	-	(30,762,284.49)	15,039,389.78	-	-	(15,722,894.71)	(4,130,048.55)	-	(19,852,943.26)	
Transferred to retained earnings	-	-	-	15,039,389.78	(15,039,389.78)	-	-	-	-	-	-	
Ending balances as of December 31, 2018	308,008,272.00	260,145,145.84	35,920,286.50	424,985,850.46	-	-	-	1,029,059,554.80	(14,131,799.02)	-	1,014,927,755.78	
Balances as of January 1, 2017	308,008,272.00	260,145,145.84	35,920,286.50	530,259,682.25	-	-	-	1,134,333,386.59	(7,540,278.90)	-	1,126,793,107.69	
Total comprehensive income (loss) for the year	-	-	-	(68,700,560.41)	19,190,438.69	-	-	(49,510,121.72)	(2,461,471.57)	-	(51,971,593.29)	
Transferred to retained earnings	-	-	-	19,190,438.69	(19,190,438.69)	-	-	-	-	-	-	
Dividend paid	19	-	-	(40,040,815.36)	-	-	-	(40,040,815.36)	-	-	(40,040,815.36)	
Ending balances as of December 31, 2017	308,008,272.00	260,145,145.84	35,920,286.50	440,708,745.17	-	-	-	1,044,782,449.51	(10,001,750.47)	-	1,034,780,699.04	

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

Statements of Changes in Equity

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF CHANGES IN EQUITY
SEPARATE FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2018

	Note	BAHT					
		Issued and fully paid - up share capital	Share premium	Retained earnings		Other components of equity	
				Appropriated - legal reserve	Unappropriated	Other comprehensive income (loss) Actuarial gains (losses) on defined employee benefit plans	Total shareholder's equity
Balances as of January 1, 2018		308,008,272.00	260,145,145.84	35,920,286.50	486,838,748.08	-	1,090,912,452.42
Total comprehensive income (loss) for the year		-	-	-	15,914,474.87	7,963,492.60	23,877,967.47
Transferred to retained earnings		-	-	-	7,963,492.60	(7,963,492.60)	-
Ending balances as of December 31, 2018		308,008,272.00	260,145,145.84	35,920,286.50	510,716,715.55	-	1,114,790,419.89
Balances as of January 1, 2017		308,008,272.00	260,145,145.84	35,920,286.50	561,994,159.20	-	1,166,067,863.54
Total comprehensive income (loss) for the year		-	-	-	(53,947,247.76)	18,832,652.00	(35,114,595.76)
Transferred to retained earnings		-	-	-	18,832,652.00	(18,832,652.00)	-
Dividend paid	19	-	-	-	(40,040,815.36)	-	(40,040,815.36)
Ending balances as of December 31, 2017		308,008,272.00	260,145,145.84	35,920,286.50	486,838,748.08	-	1,090,912,452.42

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



Statements of Income

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF INCOME
FOR THE YEAR ENDED DECEMBER 31, 2018

	NOTE	BAHT			
		CONSOLIDATED		SEPARATE	
		FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
		FOR THE YEARS ENDED DECEMBER 31,		FOR THE YEARS ENDED DECEMBER 31,	
		2018	2017	2018	2017
REVENUES					
Revenues from sales		2,094,435,461.20	1,730,271,833.50	1,931,545,671.98	1,595,452,074.83
Revenues from services		440,696,047.76	445,175,641.11	43,842,160.78	71,061,407.65
Revenues from construction contracts		80,779,926.63	254,318,516.22	-	-
Others income					
- Gain on exchange rate		6,004,042.92	-	5,495,942.10	-
- Reversal of allowance for doubtful accounts	3	1,100,000.00	-	1,100,000.00	-
- Others		13,604,241.52	18,267,358.01	22,075,205.02	28,474,183.27
Total revenues	25	2,636,619,720.03	2,448,033,348.84	2,004,058,979.88	1,694,987,665.75
EXPENSES					
Cost of sales	7	1,700,909,330.04	1,430,878,032.20	1,589,620,475.65	1,351,658,091.22
Cost of services		267,185,637.80	266,686,988.36	15,167,789.94	35,442,097.32
Cost of construction contracts		74,964,557.69	243,747,190.13	-	-
Selling expenses		157,126,460.76	152,458,445.46	144,195,962.10	138,127,183.27
Administrative expenses		377,620,360.51	378,080,388.60	178,168,593.37	177,414,714.90
Other expense					
- Loss on exchange rate		-	4,308,421.38	-	5,133,747.30
- Doubtful accounts	3	-	4,199,580.00	-	4,199,580.00
Finance cost		64,636,131.27	59,506,958.11	58,790,594.11	52,005,280.60
Total expenses	21 and 25	2,642,442,478.07	2,539,866,004.24	1,985,943,415.17	1,763,980,694.61
PROFIT (LOSS) BEFORE INCOME TAX EXPENSES		(5,822,758.04)	(91,832,655.40)	18,115,564.71	(68,993,028.86)
TAX EXPENSES (INCOME)	22	29,369,690.69	(20,643,740.31)	2,201,089.84	(15,045,781.10)
PROFIT (LOSS) FOR THE YEARS		(35,192,448.73)	(71,188,915.09)	15,914,474.87	(53,947,247.76)
PROFIT (LOSS) FOR THE YEARS ATTRIBUTABLE TO:					
EQUITY HOLDERS OF THE PARENT		(30,762,284.49)	(68,700,560.41)	15,914,474.87	(53,947,247.76)
NON - CONTROLLING INTERESTS		(4,430,164.24)	(2,488,354.68)	-	-
		(35,192,448.73)	(71,188,915.09)	15,914,474.87	(53,947,247.76)
PROFIT (LOSS) PER SHARE					
BASIC EARNINGS (LOSS) PER SHARE	23				
PROFIT (LOSS) EQUITY HOLDERS OF THE PARENT		(0.10)	(0.22)	0.05	(0.18)

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



Statements of Comprehensive Income

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2018

	NOTE	BAHT			
		CONSOLIDATED		SEPARATE	
		FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
		FOR THE YEARS ENDED DECEMBER 31,		FOR THE YEARS ENDED DECEMBER 31,	
		2018	2017	2018	2017
PROFIT (LOSS) FOR THE YEARS		(35,192,448.73)	(71,188,915.09)	15,914,474.87	(53,947,247.76)
OTHER COMPREHENSIVE INCOME (LOSS):					
Items that will not be reclassified subsequently to profit or losses:					
Actuarial gains (losses) on defined employee benefit plans	16	19,174,381.84	24,021,652.25	9,954,365.75	23,540,815.00
Deferred tax relating to other component of equity	22	(3,834,876.37)	(4,804,330.45)	(1,990,873.15)	(4,708,163.00)
Total items that will not be reclassified subsequently to profit or losses		15,339,505.47	19,217,321.80	7,963,492.60	18,832,652.00
OTHER COMPREHENSIVE INCOME (LOSS) FOR THE YEARS		15,339,505.47	19,217,321.80	7,963,492.60	18,832,652.00
TOTAL COMPREHENSIVE INCOME (LOSS) FOR THE YEARS		(19,852,943.26)	(51,971,593.29)	23,877,967.47	(35,114,595.76)
TOTAL COMPREHENSIVE INCOME (LOSS) FOR THE YEARS					
ATTRIBUTABLE TO:					
EQUITY HOLDERS OF THE PARENT		(15,722,894.71)	(49,510,121.72)	23,877,967.47	(35,114,595.76)
NON - CONTROLLING INTERESTS		(4,130,048.55)	(2,461,471.57)	-	-
		(19,852,943.26)	(51,971,593.29)	23,877,967.47	(35,114,595.76)

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



Statements of Cash Flows

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2018

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	FOR THE YEARS ENDED DECEMBER 31,		FOR THE YEARS ENDED DECEMBER 31,	
	2018	2017	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES				
Profit (loss) for the years	(35,192,448.73)	(71,188,915.09)	15,914,474.87	(53,947,247.76)
Adjustments to reconciles net profit (loss) for the year to net cash provided by (use in) operating activities:				
Depreciation and amortization expenses	88,070,008.51	83,272,881.01	56,844,428.52	54,387,619.64
Unrealized loss (gain) on exchange rate	441,971.26	2,548,300.67	(1,071,317.77)	2,626,128.75
Loss on devaluation of inventories (reversal)	(3,115,316.28)	7,183,559.85	(2,915,191.18)	7,325,802.88
Loss (gain) from decline in value of marketable securities	111,320.00	(101,050.00)	111,320.00	(101,050.00)
Loss (gain) on sale of property, plant and equipment	2,115.80	(353,370.80)	(285,370.83)	(72,049.02)
Provision for loss on sale order for undelivered goods (reversal)	(2,399,791.15)	2,399,791.15	(1,884,652.76)	1,884,652.76
Bad debt and doubtful accounts (reversal)	(1,100,000.00)	4,199,580.00	(1,100,000.00)	4,199,580.00
Provisions for employee benefits	11,751,671.00	16,035,420.25	7,826,719.00	11,718,445.00
Interest income	(2,079,016.01)	(1,428,706.87)	(15,185,218.94)	(12,562,077.29)
Finance costs	64,636,131.27	59,506,958.11	43,516,410.13	52,005,280.60
Tax expenses (income)	29,369,690.69	(20,643,740.31)	2,201,089.84	(15,045,781.10)
Profit (loss) from operating activities before changes in operating assets and liabilities	150,496,336.36	81,430,707.97	103,972,690.88	52,419,304.46
Operating assets decrease (increase)				
Trade receivables	(121,355,229.93)	134,343,465.98	(155,433,992.68)	179,944,537.64
Unbilled contract revenue	(418,803.55)	5,362,192.58	-	-
Other receivables	(8,409,356.61)	27,313,023.65	(4,848,705.37)	39,866,642.43
Inventories	(17,067,721.87)	25,778,543.41	14,282,986.97	24,478,445.54
Other current assets	15,367,890.37	(12,886,064.73)	1,130,344.09	(1,456,846.96)
Operating liabilities increase (decrease)				
Trade payables - related parties	-	-	2,730,462.71	779,552.14
Trade payables - others	5,507,841.32	131,567,578.37	(14,958,708.23)	118,481,804.66
Other payables	58,053,241.25	(12,092,645.46)	52,781,303.50	(12,230,280.18)
Other current liabilities	1,146,560.84	19,542,257.00	2,894,946.20	28,720,731.08
Employee benefit obligation paid	(2,220,796.00)	(1,299,666.00)	(2,038,390.00)	(906,313.00)
Cash from operating activities	81,099,962.18	399,059,392.77	512,938.07	430,097,577.81
Cash received (paid) for income tax expenses	(18,074,521.00)	(20,690,772.37)	(6,299,885.51)	(7,946,276.82)
Net cash inflow (outflow) from operating activities	63,025,441.18	378,368,620.40	(5,786,947.44)	422,151,300.99

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



Statements of Cash Flows

- 2 -

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES

STATEMENTS OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2018

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	FOR THE YEARS ENDED DECEMBER 31,		FOR THE YEARS ENDED DECEMBER 31,	
	2018	2017	2018	2017
CASH FLOWS FROM INVESTING ACTIVITIES:				
Interest received	2,256,843.44	1,878,941.05	4,186,162.87	7,830,790.07
Proceeds from sale of property, plant and equipment	324,241.70	519,525.49	323,373.83	72,163.02
Acquisition in property, plant and equipment	(29,501,992.34)	(94,462,135.80)	(11,189,847.16)	(75,621,634.33)
Cash paid for payable on purchase of assets	-	(5,361,903.30)	-	(4,602,364.34)
Decrease (increase) in loan to related party	-	-	(13,000,000.00)	(24,500,000.00)
Decrease (increase) in other long - term investments	(357,804.94)	3,015,067.49	(355,342.50)	3,017,509.30
Decrease (increase) in intangible assets	(7,484,374.31)	(1,820,783.79)	(6,229,531.00)	(327,217.62)
Decrease (increase) in other non - current assets	424,764.85	(20,220.40)	565,374.00	471,421.67
Net cash inflow (outflow) from investing activities	(34,338,321.60)	(96,251,509.26)	(25,699,809.96)	(93,659,332.23)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Finance costs paid	(64,681,949.71)	(60,285,954.56)	(42,465,988.26)	(53,839,902.55)
Increase (decrease) in bank overdrafts and short - term loans from financial institutions	133,066,547.23	(183,891,943.53)	152,274,439.94	(217,258,096.26)
Cash received from debenture issuance - net	98,468,000.00	397,820,000.00	98,468,000.00	397,820,000.00
Redemption	(260,000,000.00)	(400,000,000.00)	(260,000,000.00)	(400,000,000.00)
Dividend paid	-	(40,030,255.23)	-	(40,030,255.23)
Net cash inflow (outflow) from financing activities	(93,147,402.48)	(286,388,153.32)	(51,723,548.32)	(313,308,254.04)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(64,460,282.90)	(4,271,042.18)	(83,210,305.72)	15,183,714.72
CASH AND CASH EQUIVALENTS, BEGINNING OF YEARS	313,415,181.24	317,948,782.25	274,250,779.13	259,329,623.24
EFFECT FROM EXCHANGE RATE CHANGES ON BALANCES				
HOLD IN FOREIGN CURRENCIES	(537,461.54)	(262,558.83)	(297,397.06)	(262,558.83)
CASH AND CASH EQUIVALENTS, ENDING OF YEARS	248,417,436.80	313,415,181.24	190,743,076.35	274,250,779.13

SUPPLEMENTAL DISCLOSURES OF CASH FLOWS INFORMATION

Activities not affecting cash :

For the year ended December 31, 2017

- Decrease in advance payment amounted of Baht 0.93 million from purchases property, plant and equipment in consolidated financial statement and separate financial statement.

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



Notes to Financial Statements

TIRATHAI PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES NOTES TO FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018

1. GENERAL INFORMATION

1.1 General matter

The Company was incorporated as a limited company under the Thai Civil Commercial Code on August 20, 1987, and changed its status to a public limited company under the Public Limited Company Act on July 13, 2005 and the Company's share had been approved to be listed in the Market for Alternative Investment (MAI) on May 10, 2006. The address of its registered office is 516/1 Moo 4 Bangpoo Industrial Estate, Sukhumvit Road Samutprakarn. The Company operates in Thailand, with the principal activity in manufacturing, repairing and maintenance service of transformer and sales transformer equipment.

1.2 Basis for preparation of financial statements

1.2.1 These financial statements have been prepared in accordance with financial reporting standards and guidelines promulgated by the Federation of Accounting professions.

These financial statements are presented in Thai Baht, which is the functional currency of the Company and its subsidiaries.

These financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

theAn English language version of the financial statements has been prepared from the statutory financial statements that were issued in Thai language. In case of conflict or difference in understanding, the financial statements in Thai language shall prevail.

1.2.2 Basis of consolidation

1) These consolidated financial statements include the financial statements of Tirathai Public Company Limited and its subsidiaries ("the Group" and "the Company and its subsidiaries") and have been prepared on the same basis as that applied for the consolidated financial statements for the year ended December 31, 2017 as follow:

Company	Type of Business	Relationship	Holding of investment (%)	
			2018	2017
<u>Direct Subsidiaries:</u>				
Tirathai E&S Co., Ltd.	Distribution, installation and maintenance service of electrical power equipment	Direct shareholding and joint directors	99.99	99.99
Thaifin Co., Ltd.	Manufacturing, repairing and maintenance service of transformer equipment	Direct shareholding and joint directors	99.99	99.99
L.D.S. Metal Work Co., Ltd.	General custom metal work service	Direct shareholding	92.50	92.50
<u>Indirect Subsidiary:</u>				
Joint Venture L.D.S. - N.D.P. (L.D.S. Metal Work Co., Ltd’s holding is 80% and Tirathai E&S Co., Ltd’s holding is 20%)	Submit tenders or offer to work for a foreign country (Obtained the tax ID number with the Revenue Department on January 27, 2015)	Indirect shareholding	-	-

Notes to Financial Statements

As of December 31, 2018 and 2017, Joint Venture L.D.S - N.D.P's capital amount Baht 100 million.

- 2) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.
- 3) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
- 4) Significant intercompany transactions are eliminated from the consolidated financial statements.

1.3 Related parties

Through shareholding and/or director are as follow:

- Tirathai E&S Company Limited
- Thaifin Company Limited
- L.D.S. Metal Work Company Limited
- Joint Venture L.D.S. - N.D.P.
- Fuji Tusco Corrugate Company Limited

1.4 Adoption of new financial reporting standards

1.4.1 Financial reporting standards which are effective for the current year

During the year, the Group adopted a number of revised and new accounting standards and financial reporting standards including their interpretations, issued by the Federation of Accounting Professions, which are effective for financial statements year beginning on or after January 1, 2018. Adoption of the above financial reporting standards in the current year do not have material effect on the financial statements.

1.4.2 Financial reporting standards which are not effective for the current year

During the year, the Federation of Accounting Professions has issued the revised and new accounting standard, financial reporting standards, accounting standard interpretations and financial reporting standard interpretations, which are effective for financial statements period beginning on or after January 1 in the year indicated as follows:

Accounting Standard	<u>Year effective</u>
TAS 1 Presentation of Financial Statements (revised 2018)	2019
TAS 2 Inventories (revised 2018)	2019
TAS 7 Statement of Cash Flows (revised 2018)	2019
TAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (revised 2018)	2019
TAS 10 Events after the Reporting Period (revised 2018)	2019
TAS 12 Income Taxes (revised 2018)	2019
TAS 16 Property, Plant and Equipment (revised 2018)	2019
TAS 17 Leases (revised 2018)	2019
TAS 19 Employee Benefits (revised 2018)	2019
TAS 20 Accounting for Government Grants and Disclosure of Government Assistance (revised 2018)	2019



Notes to Financial Statements

	<u>Year effective</u>
Accounting Standard	
TAS 21 The Effects of Changes in Foreign Exchange Rates (revised 2018)	2019
TAS 23 Borrowing Costs (revised 2018)	2019
TAS 24 Related Party Disclosures (revised 2018)	2019
TAS 26 Accounting and Reporting by Retirement Benefit Plans (revised 2018)	2019
TAS 27 Separate Financial Statements (revised 2018)	2019
TAS 28 Investments in Associates and Joint Ventures (revised 2018)	2019
TAS 29 Financial Reporting in Hyperinflationary Economies (revised 2018)	2019
TAS 32 Financial Instruments: Presentation	2020
TAS 33 Earnings per Share (revised 2018)	2019
TAS 34 Interim Financial Reporting (revised 2018)	2019
TAS 36 Impairment of Assets (revised 2018)	2019
TAS 37 Provisions, Contingent Liabilities and Contingent Assets (revised 2018)	2019
TAS 38 Intangible Assets (revised 2018)	2019
TAS 40 Investment Property (revised 2018)	2019
TAS 41 Agriculture (revised 2018)	2019
Financial Reporting Standard	
TFRS 1 First - time Adoption of Thai Financial Reporting Standards	2019
TFRS 2 Share - based Payment (revised 2018)	2019
TFRS 3 Business Combinations (revised 2018)	2019
TFRS 5 Non - current Assets Held for Sale and Discontinued Operations (revised 2018)	2019
TFRS 6 Exploration for and Evaluation of Mineral Resources (revised 2018)	2019
TFRS 7 Financial Instruments : Disclosures	2020
TFRS 8 Operating Segments (revised 2018)	2019
TFRS 9 Financial Instruments	2020
TFRS 10 Consolidated Financial Statements (revised 2018)	2019
TFRS 11 Joint Arrangements (revised 2018)	2019
TFRS 12 Disclosure of Interests in Other Entities (revised 2018)	2019
TFRS 13 Fair Value Measurement (revised 2018)	2019
TFRS 15 Revenue from Contracts with Customers	2019
Accounting Standard Interpretations	
TSIC 10 Government Assistance - No Specific Relation to Operating Activities (revised 2018)	2019
TSIC 15 Operating Leases - Incentives (revised 2018)	2019
TSIC 25 Income Taxes - Changes in the Tax Status of an Entity or its Shareholders (revised 2018)	2019



Notes to Financial Statements

Year effective

Accounting Standard Interpretations

TSIC 27	Evaluating the Substance of Transactions Involving the Legal Form of a Lease (revised 2018)	2019
TSIC 29	Service Concession Arrangements: Disclosures (revised 2018)	2019
TSIC 32	Intangible Assets - Web Site Costs (revised 2018)	2019

Financial Reporting Standard Interpretations

TFRIC 1	Changes in Existing Decommissioning, Restoration and Similar Liabilities (revised 2018)	2019
TFRIC 4	Determining whether an Arrangement contains a Lease (revised 2018)	2019
TFRIC 5	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds (revised 2018)	2019
TFRIC 7	Applying the Restatement Approach under TAS 29 Financial Reporting in Hyperinflationary Economies (revised 2018)	2019
TFRIC 10	Interim Financial Reporting and Impairment (revised 2018)	2019
TFRIC 12	Service Concession Arrangements (revised 2018)	2019
TFRIC 14	TAS 19 - The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction (revised 2018)	2019
TFRIC 16	Hedges of a Net Investment in a Foreign Operation	2020
TFRIC 17	Distributions of Non - Cash Assets to Owners (revised 2018)	2019
TFRIC 19	Extinguishing Financial Liabilities with Equity Instruments	2020
TFRIC 20	Stripping Costs in the Production Phase of a Surface Mine (revised 2018)	2019
TFRIC 21	Levies (revised 2018)	2019

The management of the Group has assessed TAS, TFRS, TSIC and TFRIC which are effective for financial statement year beginning on or after January 1, 2019 as follows:

1) TAS 1, TAS 2, TAS 7, TAS 8, TAS 10, TAS 12, TAS 16, TAS 17, TAS 19, TAS 21, TAS 23, TAS 24, TAS 27, TAS 28, TAS 33, TAS 34, TAS 36, TAS 37, TAS 38 and TFRS 8, TFRS 10, TFRS 11, TFRS 12 and TFRS 13 will not have material impact on the financial statements when they are applied.

2) For TFRS 15, the management assessed the impact of adoption of this accounting standard effecting to sales transactions of subsidiaries related to “Contract for special product”, the management assessed that the transactions are transferred control of a good to a customer according to performance completed to date. Thus these transactions shall be recognized as revenue by reference to the stage of completion. Previously, these transactions are recognized as revenue when goods are delivered and the risk and reward of goods ownership are transferred to customers.

3) The other TAS, TFRS, TSIC and TFRIC which have not been stated in No.1) and No.2) are not relevant to the Group business, therefore they do not have impact on the financial statement when they are applied.

And the management of the Group is currently evaluating the impact of TAS, TFRS and TFRIC which are effective for financial statements year beginning on or after January 1, 2020 to the financial statements when they are adopted.



Notes to Financial Statements

2. SIGNIFICANT ACCOUNTING POLICIES

2.1 Revenue recognition

Revenues from sale are recognized as revenue when goods are delivered and the risk and reward of goods ownership are transferred to customers.

Revenues from services are recognized by reference to the stage of completion.

Revenues from construction contracts are recognized using the percentage - of - completion method by refer to the completion of a physical proportion of the contract work performed as assessed by the project engineers and customers or by refer to the proportion that actual construction costs incurred for work performed up to the end of the period to the estimated total construction costs to be incurred to completion depending on the nature of the contract. When the outcome of a construction contract cannot be estimated reliably, the revenue shall be recognized only to the extent of construction costs incurred that it is probable will be recoverable and the construction costs shall be recognized as an expense in the period in which they are incurred. When it is probable that total construction costs will exceed total contract revenue, the expected loss shall be recognized immediately as an expense in the statements of income.

2.2 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand, cash at bank, and all highly liquid investments and not subject to withdrawal restrictions.

2.3 Unbilled contract revenue

Unbilled contract revenue comprises the aggregate amount of costs incurred that relate to the specific contract in progress and recognized profit to date; less the sum of recognized loss and the progress billings. The value of progress billings exceed the value of the work in progress is presented as “Advance received” under current liabilities.

2.4 Current investments - investment units

Investment units are stated at fair value.

2.5 Allowance for doubtful accounts

The Company provides allowance for doubtful accounts by reviewing the current status of existing receivables and losses were estimated on the amounts anticipated uncollectable.

2.6 Inventories

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

Finished goods and work in process are stated at standard cost (which approximates actual cost by weighted average method). Standard cost includes all production costs and appropriate share of production overheads base on normal operating capacity.

Raw materials, spare parts and factory supplies are stated at cost (FIFO) and charged to production costs whenever consumed.

The Group provides allowance for inventories declining value for inventories which cost exceeded net realizable value, for deteriorated, damaged, obsolete and slow - moving inventories.

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

Notes to Financial Statements

2.7 Investments in subsidiaries

Investments in subsidiaries in the separate financial statements are recorded under the cost method.

Allowances for impairment of investment have been provided by considering the operating result and the future business plan of the subsidiaries.

2.8 Other long - term investments

Investments in ordinary shares of a related company are presented as the general investment at book value. The investment had been transferred from investment in a subsidiary. As at the transferred date, the book value of investments is zero. And the investments which additionally invested from the increased share capital are stated at cost.

Allowance for impairment of investments shall be provided by taking the net book value.

2.9 Borrowing Costs

Borrowing costs comprise interest and other costs associated with the borrowings. Borrowing costs incurred on qualifying assets are capitalized as a cost of the qualifying property until all the activities necessary to prepare the property for their intended uses are substantially completed. When funds are specifically borrowed for the construction or the production of asset, the amount of borrowing costs capitalized is determined from the actual borrowing costs during the year less any income on the temporary investment of those borrowings. When funds are borrowed for general purpose, the Group multiplies the capitalization rate by the capital expenditure in allocating borrowing costs to costs of assets.

All other borrowing costs are expensed in the period they incurred.

2.10 Property, plant and equipment

Land is stated at cost and other fixed assets are stated at cost net of accumulated depreciation.

Depreciation is calculated on straight - line method based on the estimated useful lives of the assets as follows:

	YEARS
Building and construction	3 - 20
Machineries, tools and equipment	5 - 20
Furniture and office equipment	3 - 10
Vehicles	5 - 10

2.11 Intangible assets

Intangible asset is stated at cost less accumulated amortization. Amortization of intangible asset is calculated by reference to its cost on the straight - line basis over 5 years.

2.12 Deferred cost of issued debentures

Deferred cost of issued debentures is amortized by using the approximate effective rate over the term of the debentures.

The amortization of deferred cost of issued debentures is included in finance cost.



Notes to Financial Statements

2.13 Foreign currency transactions

Foreign currency transactions are translated into Baht at the exchange rate ruling on the transaction date. Assets and liabilities denominated in foreign currencies outstanding the statements of financial position date are translated into Baht at the exchange rates ruling on the statements of financial position date.

Gains and losses on exchange are included in determining earnings.

2.14 Financial instruments

Financial instruments carried in the statements of financial position include deposits with financial institutions, investment, trade receivables and trade payables, lending and borrowings. The particular recognition methods adopted are disclosed in the individual policy associated with each item.

2.15 Finance lease agreement

Leases of property, plant and equipment which transfer substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalized at the lower of the fair value of the leased property or the present value of the minimum lease payments. The outstanding rental obligations, net of finance charges, are included in other long - term payables, while the interest element is charged to the statements of income over the lease period. If there is no reasonable certainty that the lessees will obtain ownership by the end of the lease term, the asset acquired under finance lease shall be fully depreciated over the shorter of the useful life of the asset or the lease term.

2.16 Use of estimates and judgments

The preparation of financial statements in conformity with financial reporting standards requires management to make subjective judgments and estimates regarding matters that are inherently uncertain. These judgments and estimates affect reported amounts and disclosures and actual results could differ. The significant areas of estimation uncertainty and critical judgments related to allowance for doubtful accounts, allowance for inventories declining value, allowance for impairment of investment, depreciation, provisions for employee benefits, and recognition of revenue by using the percentage of completion method.

2.17 Employee benefits

Salaries, wages, bonuses, contributions to the social security fund, provident fund and other benefits are recognized as expenses when incurred.

Severance Payment as specified in Labour Law are recognized as expenses in the income statement along the service period of employees. The Company and its subsidiaries's post - employment benefit obligations are estimated by a qualified actuary under the actuarial assumption using the Projected Unit Credit Method. However, the actual benefit obligation may be different from the estimate.

The Company and its subsidiaries recognized the actuarial gains or losses arising from defined benefit plan in the period incurred in other comprehensive income.

The Company and its subsidiaries recognized termination benefits when it is demonstrably committed, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy.

Past service costs are recognized in the statement of income when the Company and its subsidiaries' plan amendment or curtailment occurs, or recognition in related restructuring costs or termination benefits.

Notes to Financial Statements

2.18 Income tax

Income tax for the year comprises current and deferred tax. Current and deferred tax are recognized in the statement of income except to the extent that they relate to business combination or items recognized directly in equity or other comprehensive income.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted at the reporting date.

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

A deferred tax asset is recognized to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. 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 realized.

2.19 Basic earnings per share

Basic earnings per share are determined by dividing profit (loss) for the year attributable to equity holders of the parent by the weighted average number of ordinary shares outstanding.



Notes to Financial Statements

3. TRADE RECEIVABLES - NET

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Trade receivables				
- Related party	-	-	1,081,581.57	543,262.54
- Others	783,492,898.33	663,313,343.64	657,721,924.68	505,349,994.48
Total	783,492,898.33	663,313,343.64	658,803,506.25	505,893,257.02
<u>Less</u> Allowance for doubtful accounts	<u>(17,092,987.46)</u>	<u>(18,192,987.46)</u>	<u>(16,123,087.23)</u>	<u>(17,223,087.23)</u>
Trade receivables - net	<u>766,399,910.87</u>	<u>645,120,356.18</u>	<u>642,680,419.02</u>	<u>488,670,169.79</u>

As of December 31, 2018 and 2017, the trade receivables are classified by aging as follows:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Current	713,773,317.60	573,594,189.07	603,908,206.43	435,025,504.68
Overdue				
Less than 3 months	25,740,150.19	42,238,928.91	13,470,460.07	24,660,080.85
Over 3 months to 6 months	3,673,667.91	677,153.94	2,453,644.80	374,500.00
Over 6 months to 12 months	6,107,099.41	529,175.12	5,809,465.53	529,175.12
Over than 12 months	34,198,663.22	46,273,896.60	33,161,729.42	45,303,996.37
Total	783,492,898.33	663,313,343.64	658,803,506.25	505,893,257.02
<u>Less</u> Allowance for doubtful accounts	<u>(17,092,987.46)</u>	<u>(18,192,987.46)</u>	<u>(16,123,087.23)</u>	<u>(17,223,087.23)</u>
Trade receivables - net	<u>766,399,910.87</u>	<u>645,120,356.18</u>	<u>642,680,419.02</u>	<u>488,670,169.79</u>

The change in the allowance for doubtful accounts for the year ended December 31, 2018 is as follow:

	BAHT	
	CONSOLIDATED	SEPARATE
	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
Beginning balance	(18,192,987.46)	(17,223,087.23)
Increased during the year	-	-
Received during the year	1,100,000.00	1,100,000.00
Decreased due to write - off	-	-
Ending balance	<u>(17,092,987.46)</u>	<u>(16,123,087.23)</u>

Notes to Financial Statements

4. UNBILLED CONTRACT REVENUE / ADVANCE RECEIVED

As of December 31, 2018 and 2017, unbilled contract revenue and advance received are as follows:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
<u>Unbilled contract revenue</u>				
Project value as per contract	<u>23,400,000.00</u>	<u>172,029,880.00</u>	<u>-</u>	<u>-</u>
Accumulated amount recognized as revenue on percentage of completion basis	10,352,243.77	135,735,346.22	-	-
<u>Less</u> Value of progress billings	<u>(1,821,944.00)</u>	<u>(127,623,850.00)</u>	<u>-</u>	<u>-</u>
Unbilled contract revenue	<u>8,530,299.77</u>	<u>8,111,496.22</u>	<u>-</u>	<u>-</u>
<u>Advance received</u>				
Project value as per contract	<u>1,450,000.00</u>	<u>-</u>	<u>-</u>	<u>-</u>
Value of progress billings	1,305,000.00	-	-	-
<u>Less</u> Accumulated amount recognized as revenue on percentage of completion basis	<u>(1,246,264.11)</u>	<u>-</u>	<u>-</u>	<u>-</u>
Advance received	<u>58,735.89</u>	<u>-</u>	<u>-</u>	<u>-</u>

As of December 31, 2018, the contract in progress costs incurred and recognized gain (loss) to date amounted Baht 9.25 million and Baht 2.35 million, respectively (As of December 31, 2017 amounted Baht 142.83 million and Baht (7.09) million, respectively) and the retentions amount Baht - million (As of December 31, 2017 amounted Baht 12.29 million).



Notes to Financial Statements

5. OTHER RECEIVABLES

Other receivables, as follows:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Accrued incomes	244,797.01	785,169.02	11,422,068.12	10,078,062.58
Advances payment	2,573,514.14	2,473,952.01	697,931.54	393,123.89
Prepaid expenses	13,893,264.19	18,815,702.64	6,984,241.66	11,850,603.73
Revenue Department receivable	45,164,440.69	31,569,663.18	16,004,341.63	6,591,228.95
Total	<u>61,876,016.03</u>	<u>53,644,486.85</u>	<u>35,108,582.95</u>	<u>28,913,019.15</u>

6. SHORT - TERM LOAN TO RELATED PARTY

	BAHT			
	SEPARATE FINANCIAL STATEMENTS			
	Balance as of December 31, 2017	Increase	Decrease	Balance as of December 31, 2018
Loan to subsidiary	<u>55,000,000.00</u>	13,000,000.00	68,000,000.00	<u>-</u>

Loan to a subsidiary is promissory note for 1 year with interest at the rate of 5.50% p.a., which is unsecured.

In the 4th quarter of year 2018, the Company had entered into a long - term loan agreement with the said subsidiary. The subsidiary drawdown the loan by transfer from short - term loan to long - term loan as mentioned in the Note 10 to the financial statements.

Notes to Financial Statements

7. INVENTORIES - NET

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Finished goods	194,442,820.85	202,552,600.51	191,671,288.20	204,690,094.82
Work in process	210,432,596.81	185,903,505.23	189,266,920.94	167,952,763.70
Raw materials	371,224,489.56	339,111,131.40	318,536,661.53	300,653,174.98
Spare parts and factory supplies	34,624,271.31	31,119,233.46	-	-
Raw materials in transit	27,471,187.61	62,441,173.67	21,979,349.53	62,441,173.67
Total	838,195,366.14	821,127,644.27	721,454,220.20	735,737,207.17
<u>Less</u> Allowance for inventories declining value	(20,423,017.00)	(23,538,333.28)	(20,423,017.00)	(23,338,208.18)
Inventories - net	<u>817,772,349.14</u>	<u>797,589,310.99</u>	<u>701,031,203.20</u>	<u>712,398,998.99</u>

Inventories recognized as an expense in cost of sales.

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Cost of goods sold	1,704,024,646.32	1,423,694,472.35	1,592,535,666.83	1,344,332,288.34
Increase (decrease) allowance for inventories declining value	(3,115,316.28)	7,183,559.85	(2,915,191.18)	7,325,802.88
	<u>1,700,909,330.04</u>	<u>1,430,878,032.20</u>	<u>1,589,620,475.65</u>	<u>1,351,658,091.22</u>

Movement of allowance for inventories declining value for the year ended December 31, 2018 is as follows:

	BAHT	
	CONSOLIDATED	SEPARATE
	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
Beginning balance	(23,538,333.28)	(23,338,208.18)
Decreased (increased) during the year	3,115,316.28	2,915,191.18
Ending balance	<u>(20,423,017.00)</u>	<u>(20,423,017.00)</u>



Notes to Financial Statements

8. INVESTMENTS IN SUBSIDIARIES

	Type of Business	Relationship	Million Baht		Holding of investment		SEPARATE FINANCIAL STATEMENTS				
			Paid - up share capital		Investment		Cost method		Book value		
			2018	2017	2018	2017	2018	2017	2018	2017	
Subsidiaries Companies											
Tirathai E&S Co., Ltd.	Distribution, installation and maintenance service of electrical power equipment	Direct shareholding and joint directors	5.0	5.0	99.99%	99.99%	4,999,300.00	4,999,300.00	110,821,154.47	104,044,194.24	
Thaifin Co., Ltd.	Manufacturing, repairing and maintenance service of transformer equipment	Direct shareholding and joint directors	15.0	15.0	99.99%	99.99%	14,999,400.00	14,999,400.00	29,114,195.87	22,819,091.36	
L.D.S. Metal Work Co., Ltd.	General custom metal work service	Direct shareholding	120.0	120.0	92.50%	92.50%	118,190,000.00	118,190,000.00	11,480,147.49	62,063,353.61	
Total											

Notes to Financial Statements

9. OTHER LONG - TERM INVESTMENTS

	Share holding	BAHT			
		CONSOLIDATED		SEPARATE	
		FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
		2018	2017	2018	2017
Investments in ordinary shares					
- General investment					
- Related company:					
Fuji Tusco Corrugate Co., Ltd. 10%		6,000,000.00	6,000,000.00	6,000,000.00	6,000,000.00
Fixed deposits		31,787,625.30	31,429,820.36	31,493,591.06	31,138,248.56
Total other long - term investments		<u>37,787,625.30</u>	<u>37,429,820.36</u>	<u>37,493,591.06</u>	<u>37,138,248.56</u>

As of December 31, 2018 and 2017 fixed deposits are pledged to secure bank overdrafts and loans from banks, letter of credits and letter of guarantees for business the Company and its subsidiaries.

10. LONG - TERM LOANS TO RELATED PARTIES

	BAHT			
	SEPARATE FINANCIAL STATEMENTS			
	Balance as of December 31, 2017	Increase	Decrease	Balance as of December 31, 2018
Loans to related party	209,734,684.93	77,652,197.64	-	287,386,882.57
<u>Less</u> Current portion	<u>-</u>			<u>(5,280,000.00)</u>
Long - term loans to related party - net	<u>209,734,684.93</u>			<u>282,106,882.57</u>



Notes to Financial Statements

Subsidiaries

Loan no.1 :

In September 2014, the Company had entered into a three - years term loan of Baht 49.73 million with a subsidiary with interest at the rate of 5.30% p.a. which is unsecured. The total principal is repayable within September 25, 2017 and interest is repayable in every 3 months starting December 2014.

On September 25, 2017, the Company and the subsidiary had entered into the memorandum of loan agreement dated September 25, 2014 by extend total principal which will be repayable within September 25, 2019.

On December 28, 2018, the Company and the subsidiary had entered into the memorandum of loan agreement dated September 25, 2014 by extend total principal which will be repayable within September 25, 2024.

Loan no.2 :

On February 2, 2015, the Company had entered into a long - term loan agreement with the said subsidiary in amount of Baht 160 million. The subsidiary is able to drawdown the loan in installment when necessary and shall drawdown under this agreement within December 25, 2015 with interest at the rate of 4.50% p.a. which is unsecured. The interest is repayable in every six - months commencing the first repayment shall be paid within 6 months commencing from the 1st drawdown date. The principal are repayable equally in 4 installments in every December 25 of each year starting December 25, 2016. During the year 2015, the subsidiary drawdown 3 installments total Baht 101 million. Later, on December 25, 2015, the subsidiary drawdown the loan in amount of Baht 59 million by transfer from short - term loan to the loan under this agreement.

On December 25, 2016, the Company and the subsidiary had entered into the memorandum of loan agreement dated February 2, 2015 by extend 1 year of each installment which the 1st installment will be December 25, 2017.

On December 25, 2017, the Company and the subsidiary had entered into the memorandum of loan agreement dated February 2, 2015 by extend of each installment are as follows:

The 1st installment will be repayable within June 25, 2019

The 2nd installment will be repayable within December 25, 2019

The 3rd installment will be repayable within December 25, 2020

The 4th installment will be repayable within December 25, 2021

On December 28, 2018, the Company and the subsidiary had entered into the memorandum of loan agreement dated February 2, 2015 by extend of each installment are as follows:

The 1st installment will be repayable within December 25, 2025

The 2nd installment will be repayable within December 25, 2026

The 3rd installment will be repayable within December 25, 2027

The 4th installment will be repayable within December 25, 2028

Loan no.3 :

On December 28, 2018, the Company had entered into a long - term loan agreement with the said subsidiary in amount of Baht 77.65 million. The subsidiary drawdown the loan by transfer from short - term loan and accrued interest payable to the loan under this agreement with interest at the rate of 5.50% p.a. which is unsecured. The principal and interest are repayable in every month starting January 2019 and repayment within 120 installments are as follow:

The 1st - 60th installment : Each installment will be repayable at Baht 0.44 million and interest

The 61st - 119th installment : Each installment will be repayable at Baht 0.86 million and interest

The 120th installment : The remaining amount will be repayable with interest

Notes to Financial Statements

11. PROPERTY, PLANT AND EQUIPMENT - NET

	BAHT					
	CONSOLIDATED FINANCIAL STATEMENTS					
	Land	Building and construction	Machineries, tools and equipment	Furniture and office equipment	Vehicles	Assets in progress
Cost						Total
As of December 31, 2017	272,881,245.00	506,448,149.39	1,063,620,609.19	59,423,770.23	67,413,442.95	3,071,295.31
Increase	-	3,652,409.65	17,018,159.56	2,172,631.05	1,960,541.12	4,698,250.96
Decrease	-	-	(622,135.40)	(100,700.00)	(858,878.50)	-
Transfer in (out)	-	-	3,525,645.55	544,533.37	-	(4,070,178.92)
As of December 31, 2018	272,881,245.00	510,100,559.04	1,083,542,278.90	62,040,234.65	68,515,105.57	3,699,367.35
Accumulated depreciation						
As of December 31, 2017	-	(226,409,213.17)	(556,977,220.09)	(41,349,943.02)	(38,911,467.56)	-
Increase	-	(16,559,952.56)	(52,637,155.37)	(4,581,057.46)	(7,758,082.70)	-
Decrease	-	-	339,554.77	56,924.13	858,877.50	-
As of December 31, 2018	-	(242,969,165.73)	(609,274,820.69)	(45,874,076.35)	(45,810,672.76)	-
Net book value						
As of December 31, 2017	272,881,245.00	280,038,936.22	506,643,389.10	18,073,827.21	28,501,975.39	3,071,295.31
As of December 31, 2018	272,881,245.00	267,131,393.31	474,267,458.21	16,166,158.30	22,704,432.81	3,699,367.35

Depreciation charges for the years 2018 and 2017 amounted to Baht 81,536,248.09 and Baht 78,831,357.27 respectively, are included in the statement of income.



Notes to Financial Statements

BAHT						
SEPARATE FINANCIAL STATEMENTS						
	Land	Building and construction	Machineries, tools and equipment	Furniture and office equipment	Vehicles	Assets in progress
Cost						Total
As of December 31, 2017	264,421,245.00	428,331,357.85	904,446,060.63	40,954,874.32	27,564,308.21	1,439,788.81
Increase	-	3,060,717.00	6,382,063.29	1,186,319.21	560,747.66	-
Decrease	-	-	-	(86,000.00)	(858,878.50)	-
Transfer in (out)	-	-	1,439,788.81	-	-	(1,439,788.81)
As of December 31, 2018	264,421,245.00	431,392,074.85	912,267,912.73	42,055,193.53	27,266,177.37	-
Accumulated depreciation						
As of December 31, 2017	-	(197,849,144.78)	(459,525,555.93)	(30,129,089.49)	(21,691,795.84)	-
Increase	-	(13,444,505.46)	(35,665,471.56)	(1,982,476.65)	(1,228,549.68)	-
Decrease	-	-	-	47,998.00	858,877.50	-
As of December 31, 2018	-	(211,293,650.24)	(495,191,027.49)	(32,063,568.14)	(22,061,468.02)	-
Net book value						
As of December 31, 2017	264,421,245.00	230,482,213.07	444,920,504.70	10,825,784.83	5,872,512.37	1,439,788.81
As of December 31, 2018	264,421,245.00	220,098,424.61	417,076,885.24	9,991,625.39	5,204,709.35	-

Depreciation charges for the years 2018 and 2017 amounted to Baht 52,321,003.35 and Baht 50,828,001.44, respectively are included in the statement of income.

As of December 31, 2018 and 2017, certain land, building and construction, and machineries are mortgaged to several local banks and financial institutions as security against bank overdrafts and loans from banks, letter of credit and letter of guarantees.

In year 2017, Capitalized borrowing costs relating to the acquisition of construction of building and machineries in progress amounted to Baht 3.05 million (the Company only : amounted Baht 3.05 million), with a capitalization rate of 3.13% - 4.42% p.a.

As of December 31, 2018 and 2017, fixed assets have been fully depreciated but are still in use in the original cost as follows:

	MILLION BAHT	
	CONSOLIDATED FINANCIAL STATEMENTS	SEPARATE FINANCIAL STATEMENTS
As of December 31, 2018	705.81	617.87
As of December 31, 2017	684.17	602.84

Notes to Financial Statements

12. INTANGIBLE ASSETS - NET

	BAHT			
	CONSOLIDATED FINANCIAL STATEMENTS			
	Deferred product design expenses	Computer software	Expense for quality certification	Total
<u>Cost</u>				
As of December 31, 2017	42,112,408.06	38,194,912.75	19,847,924.27	100,155,245.08
Increase	-	7,179,567.46	304,806.85	7,484,374.31
Decrease	-	-	-	-
Transfer in (out)	-	-	-	-
As of December 31, 2018	42,112,408.06	45,374,480.21	20,152,731.12	107,639,619.39
<u>Accumulated amortization</u>				
As of December 31, 2017	(42,112,408.06)	(32,872,660.84)	(17,019,382.29)	(92,004,451.19)
Increase	-	(4,928,847.33)	(1,604,913.09)	(6,533,760.42)
Decrease	-	-	-	-
As of December 31, 2018	(42,112,408.06)	(37,801,508.17)	(18,624,295.38)	(98,538,211.61)
<u>Net book value</u>				
As of December 31, 2017	-	5,322,251.91	2,828,541.98	8,150,793.89
As of December 31, 2018	-	7,572,972.04	1,528,435.74	9,101,407.78

Amortization for the years 2018 and 2017 amounted to Baht 6,533,760.42 and Baht 4,441,523.74, respectively are included in the statement of income.

	BAHT			
	SEPARATE FINANCIAL STATEMENTS			
	Deferred product design expenses	Computer software	Expense for quality certification	Total
<u>Cost</u>				
As of December 31, 2017	42,112,408.06	33,221,017.17	18,051,856.89	93,385,282.12
Increase	-	6,229,531.00	-	6,229,531.00
Decrease	-	-	-	-
Transfer in (out)	-	-	-	-
As of December 31, 2018	42,112,408.06	39,450,548.17	18,051,856.89	99,614,813.12
<u>Accumulated amortization</u>				
As of December 31, 2017	(42,112,408.06)	(30,495,497.68)	(17,019,382.29)	(89,627,288.03)
Increase	-	(3,775,244.26)	(748,180.91)	(4,523,425.17)
Decrease	-	-	-	-
As of December 31, 2018	(42,112,408.06)	(34,270,741.94)	(17,767,563.20)	(94,150,713.20)
<u>Net book value</u>				
As of December 31, 2017	-	2,725,519.49	1,032,474.60	3,757,994.09
As of December 31, 2018	-	5,179,806.23	284,293.69	5,464,099.92

Amortization for the year 2018 and 2017 amounted to Baht 4,523,425.17 and Baht 3,559,618.20, respectively are included in the statement of income.

As of December 31, 2018 and 2017, intangible assets have been fully amortized but expected to utilize in the original cost amounted Baht 82.70 million and Baht 77.64 million, respectively (the Company only : amounted to Baht 82.66 million and Baht 77.64 million, respectively).



Notes to Financial Statements

13. BANK OVERDRAFTS AND SHORT - TERM LOANS FROM FINANCIAL INSTITUTIONS

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Bank overdrafts	24,357,904.35	19,778,177.86	-	-
Promissory note				
(Interest at the rate of 2.85% - 3.75% p.a. as of				
December 31, 2018 and interest at the rate of				
2.80% - 3.00% p.a., as of December 31, 2017)	320,000,000.00	200,000,000.00	320,000,000.00	200,000,000.00
Trust receipts	389,992,463.32	382,151,859.03	311,143,297.16	281,788,582.11
Total	734,350,367.67	601,930,036.89	631,143,297.16	481,788,582.11

Bank overdrafts and loans from several local banks are secured by the mortgage of land, building and construction, together with guarantee by cash at banks and subsidiary.

In January - February 2019, 4 promissory notes amount of Baht 170 million were due and the total amount was repaid and the Company had entered into short - term loans from several local bank in the amount of Baht 200 million which are 4 promissory notes with interest at the rate of 3.01% - 3.75% p.a., which is unsecured.

14. OTHER PAYABLES

Other payable of the following

	BATH			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Accrued expenses	166,716,940.06	108,672,800.29	137,980,127.85	84,974,055.04
Accrued expenses - retirement benefit	4,234,840.00	-	4,234,840.00	-
Revenue Department payable	11,140,901.69	13,398,176.01	7,616,612.87	9,238,085.39
Total	182,092,681.75	122,070,976.30	149,831,580.72	94,212,140.43

Notes to Financial Statements

15. DEBENTURES

Balance of debentures consisted of the following:

		BAHT	
		CONSOLIDATED AND SEPARATE	
		FINANCIAL STATEMENTS	
		As of	As of
		December 31, 2018	December 31, 2017
Debentures issued no.2		-	200,000,000.00
Debentures issued no.3		-	200,000,000.00
Debentures issued no.4		100,000,000.00	100,000,000.00
Debentures issued no.5		100,000,000.00	100,000,000.00
Debentures issued no.6		100,000,000.00	100,000,000.00
Debentures issued no.7		100,000,000.00	100,000,000.00
Debentures issued no.8		60,000,000.00	60,000,000.00
Debentures issued no.9		400,000,000.00	400,000,000.00
Debentures issued no.10		100,000,000.00	-
Total		960,000,000.00	1,260,000,000.00
<u>Less</u> Redemption debentures issued no.2		-	(200,000,000.00)
Redemption debentures issued no.3		-	(200,000,000.00)
Redemption debentures issued no.4		(100,000,000.00)	-
Redemption debentures issued no.6		(100,000,000.00)	-
Redemption debentures issued no.8		(60,000,000.00)	-
Deferred cost of issuing debentures		(4,372,000.00)	(4,329,995.00)
<u>Add</u> Accumulated amortization of deferred			
cost of issuing debentures		2,765,381.34	2,157,690.79
Total debentures		698,393,381.34	857,827,695.79

		BAHT	
		CONSOLIDATED AND SEPARATE	
		FINANCIAL STATEMENTS	
		As of	As of
		December 31, 2018	December 31, 2017
Short - term debentures		99,286,465.70	-
Current portion of long - term debentures		399,642,962.43	259,858,653.05
Long - term debentures - net of current portion		199,463,953.21	597,969,042.74
Total debentures		698,393,381.34	857,827,695.79



Notes to Financial Statements

Debentures issued no.2

In March 2015, the Company issued and offered 200,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 200 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 2 years, with the redemption date being March 9, 2017. The debenture holders are entitled to receive interest at a rate of 4 percent per annum. Such interest is payable six - months in March and September of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

In March 9, 2017, the debentures have been redeemed.

Debentures issued no.3

In April 2015, the Company issued and offered 200,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 200 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 2 years, with the redemption date being April 30, 2017. The debenture holders are entitled to receive interest at a rate of 3.95 percent per annum. Such interest is payable quarterly in January, April, July and October of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

In May 2, 2017, the debentures have been redeemed.

Debentures issued no.4

In July 2015, the Company issued and offered 100,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 100 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 3 years, with the redemption date being July 16, 2018. The debenture holders are entitled to receive interest at a rate of 3.80 percent per annum. Such interest is payable six - months in January and July of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

In July 16, 2018, the debentures have been redeemed.

Debentures issued no.5

In August 2016, the Company issued and offered 100,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 100 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 3 years, with the redemption date being August 5, 2019. The debenture holders are entitled to receive interest at a rate of 3.80 percent per annum. Such interest is payable quarterly in February, May, August, and November of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

Debentures issued no.6

In September 2016, the Company issued and offered 100,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 100 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 2 years, with the redemption date being August 30, 2018. The debenture holders are entitled to receive interest at a rate of 3.50 percent per annum. Such interest is payable quarterly in March, June, September, and December of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

In August 30, 2018, the debentures have been redeemed.



Notes to Financial Statements

Debentures issued no.7

In September 2016, the Company issued and offered 100,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 100 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 3 years, with the redemption date being September 14, 2019. The debenture holders are entitled to receive interest at a rate of 3.80 percent per annum. Such interest is payable quarterly in March, June, September, and December of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

Debentures issued no.8

In November 2016, the Company issued and offered 60,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 60 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 1.5 years, with the redemption date being May 25, 2018. The debenture holders are entitled to receive interest at a rate of 3.80 percent per annum. Such interest is payable quarterly in February, May, August and November of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

In May 25, 2018, the debentures have been redeemed.

Debentures issued no.9

In June 2017, the Company issued and offered 400,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 400 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of 200,000 debentures is 2 years and 200,000 debentures is 3 years, with the redemption date being June 23, 2019 and June 23, 2020, respectively. The debenture holders are entitled to receive interest at a rate of 4.95 percent per annum and 5.10 percent per annum, respectively. Such interest is payable quarterly in March, June, September and December of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

Debentures issued no.10

In June 2018, the Company issued and offered 100,000 units of unsubordinated and unsecured debentures with a par value of Baht 1,000 each, or a total Baht 100 million to be used for supporting the Company's business expanding, and working capital requirement. The maturity period of the debentures is 1 years, with the redemption date being June 20, 2019. The debenture holders are entitled to receive interest at a rate of 5.25 percent per annum. Such interest is payable quarterly in March, June, September, and December of every year. The terms and conditions of the debenture holders' rights contain covenants, and restrictions pertaining to matters such as the maintenance of financial ratios, and the assumption of guarantees or commitments.

At the Annual General Meeting of Shareholders held on April 30, 2018, the shareholders approved issue and offer debentures not exceeding Baht 1,000 million and not longer than 7 years from the date of each issuance. The terms and conditions of the debentures shall be determined by the Board of Directors. Currently, the Company has issued and offered a part of the said debentures amount of Baht 100 million (Debentures issued no. 10).



Notes to Financial Statements

16. PROVISIONS FOR EMPLOYEE BENEFITS

- Movement in the present value of the provisions for employee benefits for the years ended December 31, 2018 and 2017 are as follows:

	MILLION BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
	2018	2017	2018	2017
Provisions for employee benefits				
at beginning of the years	99.86	109.15	74.53	87.26
Current service cost and interest	11.75	16.03	7.82	11.72
Benefits paid	(2.22)	(1.30)	(2.04)	(0.91)
Transferred to accrued expenses	(4.23)	-	(4.23)	-
Actuarial losses (gains) on defined employee benefit plans	(19.17)	(24.02)	(9.95)	(23.54)
Provisions for employee benefits at ending of the years	85.99	99.86	66.13	74.53

- Expenses recognized in the statement of income for the years ended December 31, 2018 and 2017 are as follows:

	MILLION BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
	2018	2017	2018	2017
Current service costs	9.43	12.74	6.03	9.07
Interest cost	2.32	3.29	1.79	2.65
Total	11.75	16.03	7.82	11.72

Total actuarial losses (gains) recognized in the other comprehensive income in Consolidated financial statements for the years ended December 31, 2018 and 2017 amounted of gains Baht 19.17 million and Baht 24.02 million, respectively (the Company only: amounted of gains Baht 9.95 million and Baht 23.54 million, respectively).

Notes to Financial Statements

- Principal actuarial assumptions as of December 31, 2018 and 2017 are as follows:

	PERCENT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Discount rate	2.13 - 3.02	2.40 - 2.99	3.02	2.40
Salary increase rate	5.00	5.00	5.00	5.00
Employee turnover rate	0 - 47.00*	0 - 36.00*	1.53 - 18.34*	0 - 36.00*
Mortality rate	TMO2017 - 105% of TMO2017**	TMO2017**	TMO2017**	TMO2017**

* Based on the weighted average by age group of employees

** Reference from TMO2017 : Thai Mortality Ordinary Table 2017

- Sensitivity analysis of significant actuarial assumptions

Significant actuarial assumptions for sensitivity analysis are discount rate and salary increase rate while holding all other assumptions constant. The sensitivity analysis of change in the relevant actuarial assumption that were reasonably possible as of December 31, 2018 as follows:

- If the discount rate increases (decreases) by 1%, the provisions for employee benefits in Consolidated financial statements would decrease Baht 8.88 million (increase Baht 10.68 million) and Separate financial statements would decrease Baht 6.98 million (increase Baht 8.41 million).
- If the salary increase rate increases (decreases) by 1%, the provisions for employee benefits in Consolidated financial statements would increase Baht 11.22 million (decrease 9.45 million) and Separate financial statements would increase Baht 8.94 million (decrease Baht 7.52 million).

In presenting the above sensitivity analysis, the present value of the provisions for employee benefits has been calculated by using the same method that applied in calculating the provisions for employee benefits recognized in the statements of financial position.

On December 13, 2018, the National Legislative Assembly approved draft of Labour Protection Act. The main point is increasing the rate of benefit of an employee who has past service 20 years or more from 300 days to 400 days. At the present, the draft is in the process of announcement in the Government Gazette. If the Act is effective, the provisions for employee benefits of the Group which calculated up to December 31, 2018 approximately amount of Baht 24.25 million (the Company : amount of Baht 20.56 million). The amount shall be recorded as expense in the statement of income on the effective date of the Act.



Notes to Financial Statements

17. FINANCIAL INSTRUMENTS

Interest rate risk

The interest rate risk is the risk that future movements in market interest rates will affect the results of the operations of the Company and its subsidiaries and their cash flows. The Company's and its subsidiaries' exposure to interest rate risk relates primarily to their deposits with financial institutions, lending and borrowings. However, these financial assets and liabilities bear interest rates at market interest rates which the Company and its subsidiaries anticipate non - material risk from interest rates.

Foreign currency risk

As of December 31, 2018 and 2017, the Company and its subsidiaries are exposed to foreign currency risk primarily to foreign currency denominated asset and liabilities, as follows:

	UNIT : MILLION			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
<u>Foreign currency denominated assets</u>				
Cash and cash equivalents				
- US DOLLAR	0.58	1.39	0.58	1.38
- EURO	0.02	-	-	-
Trade receivables				
- US DOLLAR	2.56	4.70	2.54	4.70
- EURO	0.22	-	-	-
- SINGAPORE DOLLAR	10.47	0.82	10.47	0.82
<u>Foreign currency denominate liabilities</u>				
Trust receipts				
- US DOLLAR	4.30	3.80	4.30	3.80
- EURO	0.25	0.17	0.25	0.17
- SWEDISH KRONA	6.24	6.62	6.24	6.62
- SWISS FRANC	0.63	0.38	0.63	0.38
Trade payables				
- US DOLLAR	2.16	3.00	2.15	2.85
- EURO	1.44	0.77	0.90	0.77
- SINGAPORE DOLLAR	-	0.03	-	0.03
- SWEDISH KRONA	0.50	2.61	0.50	2.61
- SWISS FRANC	-	0.12	-	0.12
Other payables - accrued expenses				
- US DOLLAR	0.54	0.81	0.54	0.81
- EURO	0.47	0.44	0.47	0.44
- SINGAPORE DOLLAR	0.18	-	0.18	-

Notes to Financial Statements

However, the Company and its subsidiaries has outstanding foreign currency purchase and sales agreements as of December 31, 2018 and 2017 are as follows:

	UNIT : MILLION							
	CONSOLIDATED				SEPARATE			
	FINANCIAL STATEMENTS				FINANCIAL STATEMENTS			
	Purchase Agreements		Sales Agreements		Purchase Agreements		Sales Agreements	
	2018	2017	2018	2017	2018	2017	2018	2017
- US DOLLAR	1.16	0.98	-	-	1.16	0.98	-	-
- EURO	0.36	-	-	-	0.36	-	-	-
- SWISS FRANC	0.23	-	-	-	0.23	-	-	-

Credit risk

The Company and its subsidiaries are exposed to credit risk deal with the trade receivable. However, due to the Company and its subsidiaries have diversified customer base and their prudent credit policies, they do not anticipate material losses from their collection from trade receivable.

Fair value

The management believes that the fair value of the Company and its subsidiaries' financial assets and liabilities does not materially differ from their carrying value.

18. LEGAL RESERVE

Under the Public Limited Companies Act., the Company is required to set aside as legal reserve of at least 5% of its net income at each dividend declaration until the reserve reaches 10% of authorized share capital. This reserve is not available for dividend distribution.

19. DIVIDEND PAYMENT

At the Annual General Meeting of Shareholders held on April 28, 2017, the shareholders approved to pay dividend amounted Baht 40.04 million at Baht 0.13 per share.

20. PROVIDENT FUND

Under Provident Fund Act., the Company, its subsidiaries and their employees have joined a TISCO Ruamtun 2 Registered Provident Fund scheme in September 2005. This fund is managed by an approved financial institution.

Each employee contributes an amount depending on his/her length of service and the Company contributes the same amount.



Notes to Financial Statements

21. EXPENSES BY NATURE

The significant expenses classified by nature for the years ended December 31, 2018 and 2017 are as follows:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Changes in inventories of finished goods and work in process decrease (increase)	(16,419,311.92)	(51,806,100.34)	(8,295,350.62)	(47,904,928.61)
Purchase finished goods	2,150,000.00	895,000.00	2,150,000.00	895,000.00
Raw materials and consumables used	1,491,463,700.33	1,350,456,415.68	1,307,595,803.70	1,127,146,427.98
Employee benefits expenses	528,750,645.33	523,571,252.61	225,881,386.94	227,524,894.58
Management benefit expense	42,611,786.48	42,303,684.82	28,998,599.07	28,439,070.69
Depreciation and amortization expenses	88,070,008.51	83,272,881.01	56,844,428.52	54,387,619.64
Loss on exchange rate	-	4,308,421.38	-	5,133,747.30
Loss on inventories declining value	-	7,183,559.85	-	7,325,802.88

22. TAX EXPENSES

Tax expenses for the years ended December 31, 2018 and 2017 consisted of:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Current tax expense	5,619,644.36	7,034,080.67	-	-
Deferred tax expense (income) of temporary differences	23,750,046.33	(27,677,820.98)	2,201,089.84	(15,045,781.10)
Tax expense (income) reported in the statement of income	<u>29,369,690.69</u>	<u>(20,643,740.31)</u>	<u>2,201,089.84</u>	<u>(15,045,781.10)</u>

Income tax relating to each component of other comprehensive income for the years ended December 31, 2018 and 2017, consisted of:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Deferred tax expense (income) relating to actuarial losses on defined employee benefit plans	<u>3,834,876.37</u>	<u>4,804,330.45</u>	<u>1,990,873.15</u>	<u>4,708,163.00</u>



Notes to Financial Statements

Reconciliation between tax expense (income) and the product of accounting profit multiplied by the applicable tax rates for the years ended December 31, 2018 and 2017 as follows:

	BAHT	
	CONSOLIDATED FINANCIAL STATEMENTS	
	2018	2017
Accounting profit (loss) before tax	(6,261,740.82)	(100,133,590.76)
Applicable tax rate	20%	20%
Accounting profit (loss) before tax multiplied by applicable tax rate	(1,252,348.16)	(20,026,718.15)
Losses of current year which no deferred tax assets was recognized	10,014,616.77	-
Adjustments deferred tax assets of unused tax benefit recognized in previous years	21,640,461.57	-
Tax effect of :		
- Non - deductible expenses	777,573.59	1,648,911.71
- Added deductible expenses	(1,810,613.08)	(2,265,933.87)
Tax expense (income) reported in the statements of income	29,369,690.69	(20,643,740.31)

	BAHT	
	SEPARATE FINANCIAL STATEMENTS	
	2018	2017
Accounting profit (loss) before tax	18,115,564.71	(68,993,028.86)
Applicable tax rate	20%	20%
Accounting profit (loss) before tax multiplied by applicable tax rate	3,623,112.94	(13,798,605.77)
Tax effect of :		
- Non - deductible expenses	337,211.46	952,741.85
- Added deductible expenses	(1,759,234.56)	(2,199,917.18)
Tax expense (income) reported in the statements of income	2,201,089.84	(15,045,781.10)



Notes to Financial Statements

The components of deferred tax assets and liabilities are as follows:

	BAHT	
	CONSOLIDATED FINANCIAL STATEMENTS	
	As of December 31, 2018	As of December 31, 2017
Deferred tax assets		
Allowance for diminution in value of investments	61,892.00	39,628.00
Allowance for doubtful accounts	3,575,873.44	3,740,898.87
Allowance for inventories declining value	4,084,603.40	4,707,666.66
Provision for loss on sale order for undelivered goods	-	479,958.23
Provisions for employee benefits	17,197,794.57	19,973,463.94
Unused tax benefits on loss carry forward	26,441,118.57	50,004,588.98
Total	51,361,281.98	78,946,204.68
Deferred tax liabilities	-	-
	BAHT	
	SEPARATE FINANCIAL STATEMENTS	
	As of December 31, 2018	As of December 31, 2017
Deferred tax assets		
Allowance for diminution in value of investments	61,892.00	39,628.00
Allowance for doubtful accounts	3,224,617.45	3,444,617.45
Allowance for inventories declining value	4,084,603.40	4,667,641.64
Provision for loss on sale order for undelivered goods	-	376,930.55
Provisions for employee benefits	13,225,474.85	14,905,650.20
Unused tax benefits on loss carry forward	8,867,474.72	10,221,557.57
Total	29,464,062.42	33,656,025.41
Deferred tax liabilities	-	-

As of December 31, 2018, its subsidiary's unused tax losses amount Baht 158.28 million for which no deferred tax assets are recognized due to the managements considered that it is not probable its subsidiary's future taxable profit will be available against which the unused tax losses can be utilized.

Notes to Financial Statements

23. EARNINGS PER SHARE

Earnings per share computation in the consolidated and separate financial statements for the years ended December 31, 2018 and 2017, consisted of:

	BASIC EARNING PER SHARE			
	FOR THE YEARS ENDED DECEMBER 31,			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
	2018	2017	2018	2017
Profit (loss) attributable to equity holders of the parent	(30.76)	(68.70)	15.91	(53.95)
Adjustment of profit (loss) for the years	-	-	-	-
Profit (loss) for the calculation of earning per share (million Baht)	<u>(30.76)</u>	<u>(68.70)</u>	<u>15.91</u>	<u>(53.95)</u>
The weighted average number of ordinary shares outstanding (million shares)	<u>308.01</u>	<u>308.01</u>	<u>308.01</u>	<u>308.01</u>
Earnings (loss) per share (Baht / share)	<u>(0.10)</u>	<u>(0.22)</u>	<u>0.05</u>	<u>(0.18)</u>



Notes to Financial Statements

24. FINANCIAL INFORMATION BY SEGMENT

The Company's and its subsidiaries' operations involve the manufacturing, repairing and maintenance service of transformer equipment and general custom metal work service which are carried on in both Thailand and foreign countries. Financial information of the Company and its subsidiaries for the years ended December 31, 2018 and 2017, and as of December 31, 2018 and 2017 broken down by geographic segment, are as follows:

	MILLION BAHT						
	CONSOLIDATED FINANCIAL STATEMENTS						
	FOR THE YEARS ENDED DECEMBER 31,						
	Domestic		Foreign		Eliminated		Total
	2018	2017	2018	2017	2018	2017	2017
Revenues from sales and services	1,818.24	1,647.97	1,024.69	1,015.26	(227.02)	(233.46)	2,429.77
Gross profit (loss)	315.66	277.31	249.93	201.85	7.26	9.29	488.45
Gain (loss) on exchange rate							(4.31)
Others income							18.27
Selling expenses							152.46
Administrative expenses							377.62
Doubtful debt (reversal)							(1.10)
Finance costs							64.63
Tax expenses (income)							29.37
Profit (loss) for the years							(35.19)
							(71.19)

Notes to Financial Statements

Information about major customers

For the year ended December 31, 2018, the Company and its subsidiaries' revenues from sales and service amounted Baht 1,059.24 million from two customers.

For the year ended December 31, 2017, the Company and its subsidiaries' revenues from sales and service amounted Baht 1,182.21 million from one customer.

MILLION BAHT

CONSOLIDATED FINANCIAL STATEMENTS					
AS OF DECEMBER 31,					
	Domestic		Foreign		Total
	2018	2017	2018	2017	2017
Trade receivables - net	347.81	353.91	418.59	291.21	645.12
Property, plant and equipment - net					1,109.21
Other assets					1,392.96
Total assets					3,147.29



Notes to Financial Statements

25. TRANSACTIONS WITH RELATED PARTIES

The significant business transactions with related parties for the years ended December 31, 2018 and 2017 are as follows:

	MILLION BAHT				Transfer pricing policy
	CONSOLIDATED		SEPARATE		
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS		
	2018	2017	2018	2017	
Revenues from sales	-	-	3.23	7.63	Cost plus agreed margin
Revenues from services	-	-	10.33	16.16	Cost plus agreed margin
Other income	-	-	0.08	1.30	Cost plus agreed margin
Interest income	-	-	13.45	11.38	According to note 6 and 10 to the financial statements
Rental income	-	-	0.62	0.62	Contract prices
Purchase	-	-	93.94	91.15	Not different from the unrelated parties
Purchase	-	-	109.82	100.06	At the rate agreed upon

The outstanding balances of the transactions with related parties as presented in the statements of financial position are as follows:

	MILLION BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS	FINANCIAL STATEMENTS
	2018	2017	2018	2017
Trade receivables	-	-	1.08	0.54
Short - term loans	-	-	-	55.00
Long - term loans	-	-	287.39	209.73
Accrued interest income	-	-	11.33	9.81
Advances payment for goods and service	-	-	0.75	-
Trade payables	-	-	38.09	35.36

Notes to Financial Statements

Management benefit expenses

Management benefit expenses consist the benefits paid to the Company's management such as salaries and related benefit including the benefit paid by other means. The Company's management are the persons who are defined under the Securities and Exchange.

Management benefit expenses for the years ended December 31, 2018 and 2017 are as follows:

	BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Short - term employee benefits	41,113,566.28	40,646,882.82	27,851,147.87	27,252,998.69
Post - employment benefits	1,498,220.20	1,656,802.00	1,147,451.20	1,186,072.00
Total	<u>42,611,786.48</u>	<u>42,303,684.82</u>	<u>28,998,599.07</u>	<u>28,439,070.69</u>

26. AGREEMENTS

As of December 31, 2018, the Company and its subsidiaries have commitments of the contract are as follows:

The Company has signed a license agreement with a foreign company and has been committed to pay fees at the rate specified in the agreements.

The Company and its subsidiaries have long - term lease commitments outstanding on a land, building and construction, vehicles, equipment and consultant fee for the expiration dates range from 2019 - 2023. Future minimum payments under the leases are as follows:

	PERIODS (MILLION BAHT)			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	Not later than one year	Later than one year and not later than five years	Not later than one year	Later than one year and not later than five years
Lease agreements				
Land, building and construction	12.69	8.94	-	-
Vehicles	2.46	2.17	1.22	-
Equipment	3.97	3.08	3.72	2.81
Consultant fee	1.80	1.80	-	-

Rental expenses and consultant fee under the above leases for the year ended December 31, 2018 amounted to Baht 21.83 million (the Company only : amounted to Baht 6.65 million).



Notes to Financial Statements

27. COMMITMENT AND CONTINGENT LIABILITIES

As of December 31, 2018 and 2017, the Company and its subsidiaries have commitments and contingent liabilities as follows:

	MILLION BAHT			
	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
27.1 Unused letter of credits	72.64	124.14	71.39	124.14
27.2 Contingent liabilities to bank for letter of guarantees	773.08	921.78	446.42	601.22
27.3 As of December 31, 2018 and 2017, the Company has contingent liabilities for guarantee to subsidiaries company's credit facilities of Baht 1,886.44 million and Baht 1,888.84 million, respectively, with financial institutions.				

28. CAPITAL MANAGEMENT

The primary objective of the Company's capital management is to ensure that it has an appropriate financial structure and preserves the ability to continue its business as a going concern.

The Company manages its capital position with reference to its debt - to - equity ratio and interest - bearing - debt - to - equity ratio also to comply with a condition in issued debentures, which require the Company to maintain interest - bearing - debt - to - equity ratio not more than 1.5 : 1.

According to the statements of financial position as of December 31, 2018 and 2017 as follows:

	CONSOLIDATED		SEPARATE	
	FINANCIAL STATEMENTS		FINANCIAL STATEMENTS	
	2018	2017	2018	2017
Debt - to - equity ratio	2.11 : 1	2.04 : 1	1.71 : 1	1.73 : 1
Interest - bearing - debt - to - equity ratio	1.41 : 1	1.41 : 1	1.19 : 1	1.23 : 1

Notes to Financial Statements

29. RECLASSIFICATION OF ACCOUNTS

Certain accounts in the financial statements as presented herein for comparative purpose have been reclassified to conform with the current year's classifications, with no effect on the net profit (loss) or shareholders' equity as previously reported. The significant reclassifications are as follows:

	BAHT					
	CONSOLIDATED FINANCIAL STATEMENTS			SEPARATE FINANCIAL STATEMENTS		
	As previously reported	Reclassification	After reclassification	As previously reported	Reclassification	After reclassification
Statement of financial position as of December 31, 2017						
- Other receivables	22,074,823.67	31,569,663.18	53,644,486.85	22,321,790.20	6,591,228.95	28,913,019.15
- Other current assets						
- Refundable input tax	30,818,818.43	(30,818,818.43)	-	6,019,275.97	(6,019,275.97)	-
- Other	1,752,090.79	(750,844.75)	1,001,246.04	731,452.98	(571,952.98)	159,500.00
- Other payables	108,672,800.29	13,398,176.01	122,070,976.30	84,974,055.04	9,238,085.39	94,212,140.43
- Other current liabilities - other	25,693,099.26	(13,398,176.01)	12,294,923.25	17,072,683.96	(9,238,085.39)	7,834,598.57

30. APPROVAL OF FINANCIAL STATEMENTS

The financial statements have been approved on February 28, 2019 by the Board of Directors of the Company.



General Information

Name	:	Tirathai Public Company Limited (“Company”)	
Nature of Business	:	Manufacturer and distributor for both distribution and power transformers including installation service, oil filtering and filling service, maintenance, modification and repair, and testing of the transformers together with providing transformer rental service to customers.	
Head office	:	516/1 Moo 4 (Bangpoo Industrial Estate), Sukhumvit Road, Tambon Prakekasa, Ampur Muang, Samutprakan, 10280	
Registration Number	:	0107574800498	
Website	:	www.tirathai.co.th	
Telephone	:	(02) 769-7699	
Fax	:	(02) 323-0910, (02) 709-3236	
Registered Capital	:	359,202,865 Baht	
Paid-up Capital	:	308,008,272 Baht (as of 31 December 2018)	
Number of Issued Ordinary Shares	:	308,008,272 shares (as of 31 December 2018)	
Par Value	:	Baht 1 per shares	
Investor Relation	:	Mr. Upakrom Thaweephoke	
	:	Executive Director and Company Secretary	
Email	:	ir@tirathai.co.th	
Tel	:	(02) 769-7699 ext. 1220	
Reference			
Registrar	:	Thailand Securities Depository Company Limited	
Address	:	93 Ratchadaphisek Road, Dindaeng, Bangkok 10400	
Telephone	:	(02) 009-9000	
Facsimile	:	(02) 009-9001	
Auditor	:	1. Mr. Chaiyut Angsuwittaya 2. Mrs. Natsarak Sarochahunjeen 3. Miss.Daranee Somkamnerd 4. Miss.Jarunee Nuammae	CPA No. 3885 or CPA No. 4563 or CPA No. 5007 or CPA No. 5596
Address	:	A.M.T Associates Company Limited 491/27 Silom Plaza, Silom Road Bangrak, Bangkok 10500	
Tel	:	(02) 234-1676	
Fax	:	(02) 237-2133	



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