



ANNUAL REPORT 2016

QTC Energy Public Company Limited

“พ่อหลวงของแผ่นดิน”



เจ็ดทศวรรษ ที่พระองค์ ทรงครองราชย์
อย่างพระบาท ยাত্রาไป ทุกแห่งหน
เหนืออีสาน ออกตกใต้ ทวีตกล
ทรงแยกย่อย แก้ปัญหา ประชาไทย

กว่าสี่พัน โครงการ พระราชดำริ
สร้างสันติ พัฒนา ถิ่นอาศัย
ทรงตรากตรำ เหน็ดเหนื่อย ด้วยห่วงใย
ไพร่ฟ้าไทย สุขเพราะ พระบิรบาล

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ฟ้าโศกเศร้า มืดมิด สิ้นดับชั้น
เสียงร่ำไห้ คร่ำครวญ ทุกซอ้นันต์
แสนจาบัลย์ น้ำตา ท่วมทั่วไทย

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ดังดวงแก้ว ประชา ก็ดับไข
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จะรู้จัก ประองตอง สามัคคี
เป็นคนดี ซื่อสัตย์ ไม่กังขา
จะเคารพ ในสิทธิ และกติกา
มีเมตตา ต่อพี่น้อง เพื่อนพ้องไทย

ด้วยความรัก ที่พ่อ มีต่อลูก
ข้าฯ ขอผูก ดวงจิต ทุกสัณ
จะเกิดดับ ก็ภพ ก็ชาติไป
ขออยู่ได้ ขำรองบาท ทุกชาติเทอญ

๖ สถิตในดวงใจตราบนิจนิรันดร์

ด้วยสำนึกในพระมหากรุณาธิคุณเป็นล้นพ้นอันหาที่สุดมิได้

ข้าพระพุทธเจ้าผู้บริหาร และพนักงาน

บริษัท คิวทีซี เอนเนอร์ยี จำกัด (มหาชน)

ประพันธ์โดย : นางทิพย์วิมล ถาวรชาติ หัวหน้าส่วนธุรการโรงงานและอาคารสถานที่ บมจ.คิวทีซี เอนเนอร์ยี



สมเด็จพระเจ้าอยู่หัวมหาวชิราลงกรณ บดินทรเทพยวรางกูร

ทรงพระเจริญ



ข้าพระพุทธเจ้า ผู้บริหารและพนักงาน
บริษัท คิวทีซี เอนเนอร์ยี จำกัด(มหาชน)

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Message from the Chairman of the Board

In 2016, the economy became sluggish due to many domestic and external factors of this country. In consequence, investment expansion in industrial factories, real estate, solar energy power plant projects and investments in key basic infrastructures of the government were slowed. These became the factors that intensified competition in the electrical transformer market. Electrical transformer manufacturers compete using pricing strategies, which impacted the company's sales.

Therefore, the expected trend in 2017 is slight continuous growth with moderate levels of economic growth due to pressure imposed by many risk factors. The factors that will drive growth in 2017 are government spending and domestic investment. Meanwhile, exports are showing signs of improvements.

In 2017, the company adjusted its strategic plan for improving sales from the previous year. Focus is put primarily on exports, increasing sale representatives and sending of expert teams to pioneer new markets with purchasing power abroad in order to decrease pressure from intense competition in the domestic market. Additionally, investments are distributed to energy businesses. All of these actions are a result of problems perceived by all members of the Board of Directors in 2016 and are revisions to strengthen and achieve growth for the company.

Furthermore, the Board of Directors gives great importance to good corporate governance, which is composed of four parts, namely, shareholder rights, equal treatment of all shareholders, roles of stakeholders, disclosure of information and transparency and Board of Directors' responsibilities. The company has an excellent score on corporate governance. Moreover, the company is governed to remain within the criteria and regulations of the Stock Exchange of Thailand and the Securities and Exchange Commission along with other relevant laws in business operations. In 2016, the company was awarded for outstanding corporate governance on business transparency and honesty from the National Anti-corruption Commission. Moreover, the company was authorized to use the Q-MARK symbol on sales and services by the Joint Standing Committee on Commerce, Industry and Banking (JSCCIB) (Thai Chamber of Commerce-Federation of Thai Industries-Thai Bankers Association). This shows that the company operates business with quality of service, business ethics and responsibility to customers, consumers and society.

The Board of Directors would like to express gratitude to all patrons, stakeholders and related persons inside the country and abroad for having always given great support to the company. Additionally, we would like to give assurance that the Board of Directors will work to the full extent of its capabilities with determination to govern and oversee the stable and sustainable growth of the company.

On behalf of the Board of Directors

Mr. Kirik-Krai Jirapaet

Chairman, Board of Directors

Message from the Chief Executive Officer and Managing Director



In 2016, the Company continued to face intense competition due to the slow economic growth of only 3.1 percent. Furthermore, projects from the state sector were launched for bidding later than in previous years. Moreover, public and private projects were halted. All of this resulted in work competition within the market, primarily concerning prices. Therefore, this is a year in which the Company encountered numerous challenges.

In 2016, the Company's total earnings amounted to 539.55 million baht, a decrease from 2015 by 56.54 percent. Furthermore, the net loss in financial statement was 80.59 million baht. This decrease in overall income was due to the private work sales of the solar energy power plant sector, which slowed in line with the recessive economic conditions. Hence, power plant projects were delayed, and the Company failed to meet its set sales target. In addition, delayed bidding of government works caused the company to perceive its earnings from government works in the third and fourth quarter with decreased sales according to bid ratios and heavy price competitions.

However, the board of executives has modified both short- and long-term business plans enabling the Company to gain larger sales and market shares. Focus will be directed at foreign ability and buying markets with changes in marketing and sales plans in conjunction with product research and development to meet the needs of all customers. Furthermore, production processes are to be improved together with human development in order to change old work procedures into new procedures with innovative ideas for effective and efficient work. Additionally, there are visible changes to the Company over the past year, i.e., the Company increased its registered capital from 200 million baht to 270 million baht to prepare to enter alternative energy investment projects, which would become another business that will provide sustainability and stability for the Company.

The Company is determined to give primary importance to operating business based on the principles of good business ethics and governance to ensure that the company complies with the criteria for good governance, act in compliance with the law and specifications to maintain transparency, verifiability and consideration to all stakeholders together with continual social and environmental support and development. Over the past 21 years, the Company has received no complaints from the communities around the factory for causing pollution, thereby showing business engagement based on determination to drive business toward sustainable growth.

As for the company's business trends in 2017, the Company has purchase orders from government and foreign works amounting to over 400 million baht to be delivered this year. Furthermore, the economy is gradually recovering with the support and stimulation of the government and drive for investment projects in basic infrastructure to be more structured.

On behalf of the Executive Board, we would like to express our thanks to all of you, our customers, trade partners and business allies, including everyone involved, who have placed confidence and trust in the work of the Company as we continue to improve every agency within the organization to perform based on set objectives to achieve sustainable stability and prosperity.

(Mr. Poonphiphat Tantanasin)
Chief Executive Officer

(Mr. Ruangchai Kritsnakriengkrai)
Managing Director

Financial Highlights

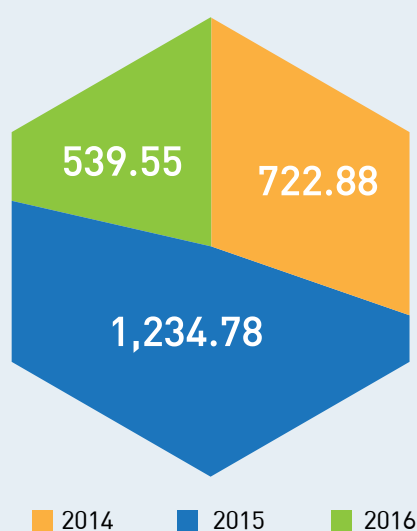
(Unit : Million)

Performance	2014	2015	2016
Revenue from sales and services	760.50	1,229.20	531.23
Total revenue	772.88	1,234.78	539.55
Cost of sales and services	(580.15)	(936.41)	(503.56)
Gross profit	192.73	298.38	35.99
Selling and Administrative expenses	(115.35)	(139.92)	(127.94)
Profit before interest and income taxes	77.38	158.46	(91.95)
Net profit	55.30	118.55	(80.59)
Total comprehensive income (loss) for the year	54.70	117.85	(80.60)
Net profit per share	0.28	0.59	(0.34)
Dividend per share	0.18 (200,000,000)	0.32 (200,000,000)	** (270,000,000)
Total assets	712.78	1,068.95	1,220.80
Total liabilities	224.66	495.69	463.14
Shareholders' equity	488.12	573.26	757.67

Note : ** waiting for the approval of the annual general meeting of shareholders 2017.

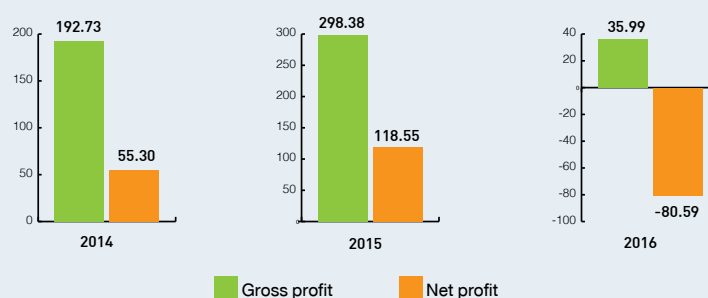
Total revenue

(Unit : Million Baht)



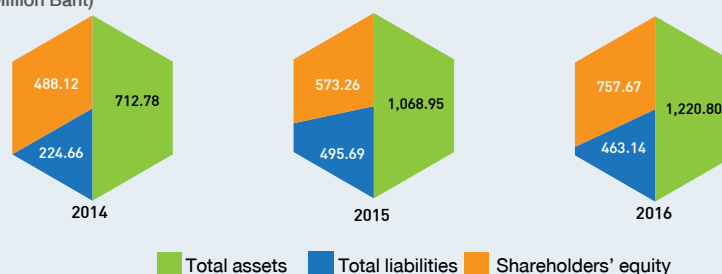
Gross profit / Net profit

(Unit : Million Baht)



Total assets, Total liabilities and Shareholders' equity

(Unit : Million Baht)





Policy and Overview of Business Operations

1. Background

Formerly known as Quality Transformer Co., Ltd., QTC Energy Public Co., Ltd., was registered on 19 July 1996 with a starting registered capital of 10 million baht to conduct the businesses of manufacturing and distributing electricity distribution transformers. On 4 July 2003, the company changed its name to QTC Transformers Co., Ltd., and on 19 August 2010, the company became a public company limited under the name of QTC Energy Public Co., Ltd., and listed on Stock Exchange Thailand on 28 July, 2011 with Mr. Poonphiphat Tantanasin as the founder. Mr. Poonphiphat Tantanasin has over forty-one years of experience working in the transformer manufacturing industry. He has worked with major and leading companies manufacturing transformers domestically and held responsibilities in various aspects, including design, assembly and production as well as sales and marketing, so he has knowledge and expertise covering all aspects in the field of transformers. Furthermore, the company's administrative team, engineers and most company employees have had knowledge, experience and expertise in the electricity transformer business for more than 27 years. Moreover, they have received training from leading transformer manufacturing countries in foreign countries, such as Germany and Japan. The aforementioned experience has helped the company develop high quality transformers which have become widely accepted among the government enterprise customer group involved with electricity, namely, the Metropolitan Electricity Authority, the Provincial Electricity Authority, and in private sector customer groups both domestically and abroad.

Throughout the past, the company has continually developed transformer products and received accreditation according to various standards, such as Thai Industrial Standards TIS 384-2543 from the Thai Industrial Standards Institute, Ministry of Industry, ISO 9001:2000 standards for designs, production, and maintenance of distribution transformers. Furthermore, the company is able to produce quality transformers meeting various international standards, which is proof of the international quality of the transformers manufactured by QTC.

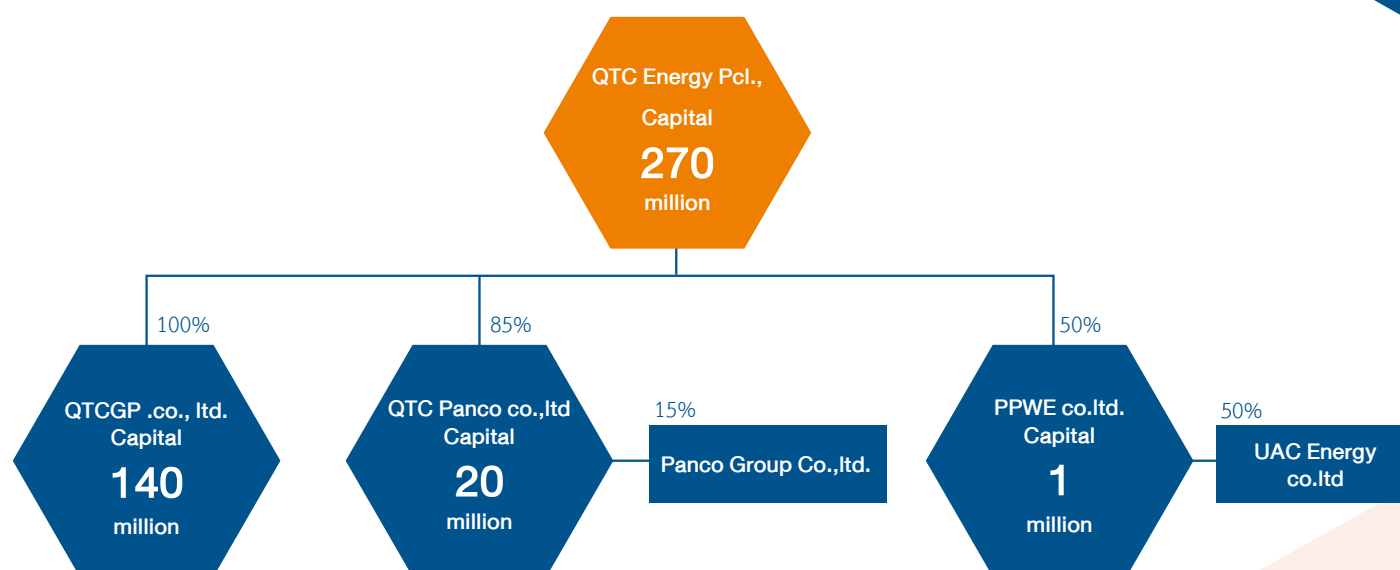
2 Overview of Business Operations & Key Developments

QTC Energy Public Co., Ltd., conducts the businesses of manufacturing and distributing custom made transformers to domestic and foreign customers under the "QTC" trademark and customer trademarks. At present, the company's transformer projects can be categorized as follows:

1. Distribution Transformers: 30-5000 KVA
 - 1.1 Hermetically Sealed Oil Type Distribution Transformers.
 - 1.2 Open Type Transformers with Conservators.
2. Power Transformers: 5000-30000 KVA
3. Special Transformer is designed and manufactured according to usage and features to customers such as Earthing Transformer, Dry-Type Class F&H, Unit Substation, Pad mounted.

Furthermore, the company also provides various types of services for customers, such as scheduled checks and maintenance, transformer repairs and maintenance, transformer oil fill services, transformer rental services, etc., in order to support customer needs and facilitate both customers who have purchased QTC transformers and other customers in general.

The company has two subsidiaries and one associated company include 1. Company QTC Panko Co., Ltd. (subsidiaries Company) produces and distributes transformer to Laos. Establishment on 19 March 2015 registered 20 million by the company holds 85% and Thipsiri Construction hold 15% of total shares 2. QTC Global Power Co., Ltd. (subsidiaries Company) produces electricity and other energy, the establishment on 28 September 2016 capital 140 million. And the company PPWE (associated company) produces energy, the establishment on 12 January 2016 capital 1 million.



Progress with Purpose & Vision

Quality of DETAILS

Attention to DETAILS is at the heart of our principles and encompasses every area of QTC with comprehensive coverage from staff, thought processes, work methods, technological advancement, factory operation, products and consideration for society and environment.

Vision

To be a technology provider with world-class standard in power industry along with social and environmental responsibilities and good governance

Mission

1. Providing integrated technology solution for businesses in power industry
2. Developing environmental-friendly products, services and internal processes to create added value in the value chain
3. Developing human resource to enhance professional capabilities in both hard and soft skills
4. Operating in good governance along with corporate social responsibility
5. Building sustainable growth businesses in long-term to gain trust of all stakeholders

Management Principles

QTC is firmly committed to three good corporate governance principles.

1. Ethical, just and transparent management.
2. Product and service provision meeting international quality standards.
3. Focus on corporate social and environmental responsibility in strict compliance with human rights principles.

The company's vision and mission are reviewed annually with review and approval from the company's Board of Directors on 13 September 2016 to ensure the concurrence of the company's vision and mission with current economic conditions.

The details of significant company developments in the past are as follows:

2004

- The company increased registered capital by 40 million baht from the original registered capital of 10 million baht by issuing 400,000 new common shares valued at 100 baht per share in order to propose sales to existing shareholders, which put the company's registered capital at 50 million baht.
- The company was accredited by Thai Industrial Standards TIS 384-2543 for power transformers from the Thai Industrial Standards Institute, Ministry of Industry.
- The company's 250 kVA and 1000 kVA transformers passed short circuit testing from CESI, Italy.

2005

- The company increased its registered capital by 50 million baht from the original registered capital of 50 million baht by issuing 500,000 new common shares valued at 100 baht per share in order to propose sales to existing shareholders, which put the company's registered capital at 100 million baht.

2007

- The company's 167 kVA transformers passed short circuit testing from KEMA, the Netherlands.
- The company received ISO 14001:1996 standards accreditation from RWTÜV, Germany (2001).

2008

- The company received OHSAS 18001:2007 accreditation for occupational health and safety management systems from UKAS, England. SGS Company (Thailand) provided accreditation.
- The company's 500 kVA and 2000 kVA transformers passed short circuit testing from CESI, Italy.
- The company was granted the right to use the Q-MARK from the Joint-Standing Committee on Commerce, Industries and Banking (JSCCIB) consisting of the Thai Chamber of Commerce, the Federation of Thai Industries, and the Thai Bankers' Association as a mark for certification of product quality, business ethics, responsibility to customers, consumers and society including the manufacturing, trade and service sectors as follows:
 1. Single phase oil type distribution transformers with sized 1-167 kVA with maximum voltage of 36 kv and three-phase oil type distribution transformers sized at 1-2500 kVA with maximum voltage of 36 kV with quality meeting the standards of trade partner countries and the standard quality of Thailand, which was issued on 27 May 2008 and effective until 26 May 2010.
 2. [Standards for] the distribution, services, repairs, and installations of transformers, including corporations, issued 21 March 2008 and effective until 20 March 2010.
- The company was granted ISO 14001:2004 accreditation for environmental management systems from UKAS, England, and NAC, Thailand. SGS Company (Thailand) provided certification.
- The company received the Thai Chamber of Commerce Business Ethics Standard Test Award of 2008 from the Thai Chamber of Commerce as an organization with ethical management according to the ethics of the Thai Chamber of Commerce comprising the following six key issues:
 - Fair treatment of all parties concerned.
 - Disclosure of information and transparency.
 - Risk management.
 - Promotion of excellent corporate practice.
 - Corporate social and national responsibility.
 - Yielding sustainable tangible returns for the nation.
- The company increased registered capital by 50 million baht from the original registered capital of 100 million baht by issuing 500,000 new common shares valued 100 baht per share for proposed sales to existing shareholders at the proposed sales price of 100 baht per share.
- The company was awarded the International Europe Award for Quality from exporting transformers for distribution in Spain.

2009

- The company was granted ISO 9001:2008 accreditation for quality management systems from UKAS, England, and NAC, Thailand. SGS Company (Thailand) provided accreditation.
- The company was awarded the “D” Class Certificate of Clean Food Good Taste standards from the Department of Health, Ministry of Public Health.

2010

- The company received the 2nd Annual SME National Award of 2009 in machinery and equipment category from the Office of Small and Medium Enterprise Promotion (OSMEP), Ministry of Industry.
- The company received the Prime Minister’s Industry Award 2010 for SME Industrial Management from the Ministry of Industry.
- In September of 2010, the company received extension of rights to use the Q-MARK from the Joint-Standing Committee on Commerce, Industries and Banking (JSCCIB) in the production sector and the trade and services sector as follows:
 1. Single phase oil type distribution transformers sized at 1-167 kVA with maximum voltage of 36 kv and three-phase oil type distribution transformers sized at 1-2500 kVA with maximum voltage of 36 kV and quality to meet the standards of trading partner countries as well as the quality standards of Thailand, which were issued on 10 September 2010 and effective until 9 September 2012.
 2. Distribution, sales, installation, and maintenance of transformers, which were issued on 10 September 2010 and effective until 9 September 2012.
- The company received a “D” Class Certificate for Clean Food Good Taste standards from the Department of Health, Ministry of Public Health.
- In August of 2010, the company became a public company limited and changed its name to QTC Energy Public Co., Ltd.

2011

- In March, the company registered changes in share value from the original value of 100 baht per share to 1 baht per share, including an increase in registered capital by 50 million baht from the original amount of 150 million baht, which put the registered capital at 200 million baht. Shares were divided as follows:
 - Forty-five million new common shares which were offered for public sales and
 - Five million new common shares which were offered for sale to company directors and employees.
- In April, the company constructed new offices at 2/2 Soi Krungthep Kritha 8 (5), Krungthep Kritha Rd., Huamark, Bangkok 10240
- In July, the company proposed an initial public offering (IPO) of shares and Stock Exchange of Thailand listed the company’s ordinary shares as registered shares and began buying and selling on 28 July 2011 under the company’s abbreviated name for buying and selling shares, QTC.
- In August, the company was a top recipient of a Zero Accident Award (no occupational accidents causing ongoing work to stop over the past year for no less than 1,000,000 working hours) from the Zero Accident Campaign of 2011 from the Department of Welfare and Labor Protection, Ministry of Labor.
- In October, the company received the Top Corporate Governance Award (Eastern Region) from the Thai Chamber of Commerce Good Corporate Governance Commission in cooperation with the Office of the NCCC and the Thai Chamber of Commerce University.
- In November, the company was considered by the Thai Laboratory Accreditation Scheme, Electronics-Telecommunications, which decided to approve accreditation of the company’s laboratory according to TIS 17025-2548 standards with the Thai Industrial Standards Institute
- In December, the company was awarded for food hygiene with a “D” Class certificate for “Clean Food, Good Taste” from the Health Department, Ministry of Public Health for the second consecutive year.

2012

- In February, the company was officially awarded laboratory accreditation for laboratory testing ability in compliance with TIS Standard No. 17025-2548 (ISO/IEC 17025:2005), Certificate No. 12007/T 309 from the Thai Industrial Standards Institute, Ministry of Industry.
- In February, the company moved to work at its new headquarters located at 2/2 Krungthep Kritha 8 (5), Krungthep Kritha Rd. Huamark, Bangkok, Bangkok 10240.
- In March, the company commenced the construction of a plant in order to expand production capacity by adding silicon steel slitting machines and silicon steel cutting machines. The construction was complete and the plant was open for operations in December in Pluak Daeng, Rayong.
- In April-September, the company participated in an industrial logistics efficiency building project by the Department of Primary Industries and Mines in cooperation with the Technology Promotion Association (Thailand –Japan).
- In June, the company was awarded a certificate for being a health-promoting workplace by Honorary Professor, Dr. Kasem Wattanachai, Privy Councilor.
- In July, the company participated in a cooperative project for the production of Amorphous Distribution Transformers (AMDT) with Hitachi Metals Japan.
- In October, 100 KVA 3 Ph 50 Hz 22000-400/230 V, 100,500 KVA 3 Ph 50 Hz 33000-400/230 V. and 150,300,750 KVA 3 Ph 50 Hz 24000-416/240 V electricity transformers passed short circuit testing by the CESI in Italy with Type Test Certificate No.B2030322-27.
- In September, the company was awarded a certificate for meeting clean technology criteria for entrepreneurial development from the Governor of Rayong.

2013

- In January, the company was granted accreditation for laboratory testing in compliance with TIS 17025-2548 (ISO/IEC 17025:2005) Standards, Certificate No. 12007/T 309 from the Thai Industrial Standards Institute for the second consecutive year in which the company applied for accreditation.
- In May, the company produced Amorphous Distribution Transformers (AMDT) in cooperation with Hitachi Metals Japan with 1000 kVA sized transformers for commercial distribution with the first transformer in October.
- In June, the company participated in an in-depth consulting project for SMEs with the lean standards of the Department of Industrial Promotion.
- In June, the company participated in a consultation project for 5-S activities by the Technology Promotion Association (Thailand –Japan) for corporate restoration and development in increase production capacity with the 5-S system.
- In June, the company was awarded a Class 3 Green Industry certificate by the Ministry of Industry.
- In June, the company signed a joint venture project contract for the construction of electricity transformers in Vientiane, Laos.
- In July, the company purchased a Distribution Transformer Test System DTTS 3-2500 from HAEFELY Switzerland in order to enhance the efficiency of testing and certification for increasing work volume in the future. The installation and use began in February of 2014.
- In July, the company commenced the construction of a plant for manufacturing tanks for electricity transformers.
- In November, the company was granted CSRI Recognition in the Rising Star category by the Corporate Social Responsibility Institute, Stock Exchange of Thailand.

2014

- In January, the company laid out its main foundation (Phase 1) for modifying processes by implementing the Total Quality Management System (TQM) to sustainably develop the organization.
- In February, the company applied for participation in TLC: ISO50001 Project with the Thai Industrial Standards Institute and the company is currently requesting certification from SGS Co., Ltd.
- In March, company has received the honor a card to show that they have been taken to prevent and solve the problem of drugs in operations by the white factory project. Level 3 from the Department of labour protection and welfare, and Rayong province.
- In May, the company completed construction of transformer tank factory buildings.
- In July company sent the first set of transformers to sell in Japan successfully.
- In November, the company received the 5S Model Award 2014 for the Bangkok Office area, the CSR Office area, Factory No. 3 areas and the Coiling Room area.
- In November, the company received three awards for registered companies for corporate social responsibility from the Stock Exchange of Thailand at the SET Award as follows:
 1. CSR Recognition 2014 in the general category.
 2. CSR Award 2014 in the outstanding category.
 3. CSR Award 2014 in the excellence category.

2015

- In January, the Company began to lay out key foundations (Phase 2) for process modification by implementing total quality management toward sustainable corporate development.
- In March, the Company was granted ESG100 Certification by Dr. Pipat Yodprudtikan, Director of Thaipat Institute, for outstanding business sustainability.
- In March, the Company established subsidiary company QTC Panco Co.,Ltd. The company hold 85% of total shares capital 20 million.
- In April, the Company signed an exclusive distribution agreement with Industrias Mecano Electricas Fontecha Yebenes, S.L. (IMEFY) to become the exclusive sales representative in Thailand for Cast Resin transformers from Spain. We will distribute under the QTC brand and manufacture under IMEFY.
- In July, the Company applied for participation in an organization health project with Share Foundation to develop processes and improve corporate happiness for work life balance.
- In September, the Company received a certificate for passing an evaluation by the Department of Disease Control, Ministry of Public Health, at good levels as a happy workplace free from disease and danger at the provincial level.
- In October, the Company was granted the SET Sustainability Award 2015 as the only MAI-listed company to receive this award and the Thai Sustainability Investment Award (Sustainable Shares) from the Stock Exchange of Thailand.
- In October, the Company was evaluated for CG Scorecard by IOD and found to be excellent as a confirmation of good and transparent governance.
- In November, the Company was certified by the 5S Model Award 2015 for production areas at Factory 4, warehouse areas and electrical transformer repair areas.
- In November, the Company received the Best Investor Relations Award and the Company was the only MAI-listed company to receive the Best Investor Relations Award from the Stock Exchange of Thailand
- In November, transformers with power capacity of 75 kVA and 300 kVA passed the Short Circuit Test by CESI, Italy.
- In December, the Company received the Best Corporate Governance Award of 2015 for the Central Region from Prof. Dr. Kasem Wattanachai in praise of entrepreneurs who operate businesses with principles of corporate governance by adhering to transparency and honesty.

2016

- In January, the Company laid key foundations (Phase 3) in the work to improve processes by applying the Total Quality Management system (TQM) to develop the company for sustainability.
- In January, the Company established a joint company, namely, PPWE Co., Ltd. and holds 50 percent of registered shares at the amount of one million baht to operate an energy business in a joint venture with UAC Global PCL.
- In June, the Company increased its registered capital from 70 million baht from the previous value of 200 million baht to become 270 million baht by the issuance of 70 million new ordinary shares at one baht marked price per share for sales to persons in a limited circle.
- In September, the Company was awarded a certificate for being a pioneer company registered by Thailand Greenhouse Gas Management Organization (Public Organization).
- In September, the Company established a subsidiary, namely, QTC Global Power Co., Ltd. to operate an energy business with a registered capital of 10 million baht.
- In September, the Company was given the Outstanding Corporate Governance Award (Eastern Region) from the Committee for Promoting Codes of Conduct and Anti-Corruption, Thai Chamber of Commerce, together with the Bureau of Corruption Prevention in State Enterprises and Private Sector.
- In October, the Company received the Innovative Organization Award of 2016 from Dr. CHaiyawat Wibulsawasdi, Chairman of the Stock Exchange of Thailand.
- In October, the company was rated excellence in the CG Scorecard by the IOD, thereby providing affirmation to good corporate governance and transparency.
- In December, the Company was awarded the Green Industry Level 4 by the Ministry of Industry.
- In December, the Company received the Sustainability Report Award for the year 2016 as organized by the CSR Club, Thai Listed Companies Association.

3. Policy and Business Performance Goals

The Company's objective is to become a world class manufacturer of electrical transformers. Therefore, we focus on developing the quality and standard for the electrical transformers of the company in order to build confidence and achieve the greatest effectiveness and acceptance by customers domestically and abroad. Furthermore, we aim to preserve our existing customer base and expand new customer bases, particularly in countries in the ASEAN Economic Community. Due to the Company's evaluation of the competitive conditions that is rising after the coming together of the AEC in early 2016, the Company adjusted production processes to become more effective beginning in since 2012-2015. Hence, the Company has strong competitive potential. Moreover, the Company realizes the value of human resources and has thus invested in its personnel with particular emphasis on human capital development, which can improve personnel in line with the strategies and tactics of the organization in order to compete in the new economic age of the next five years. In addition, supply chain management has to be improved. In 2015, movements of raw materials between AEC countries have been exempted from customs taxes, leaving 0 percent taxes. Accordingly, each nation has policies to reduce logistic costs. Therefore, the Company has to prepare for movements of goods between AEC nations in a convenient, fast and tax-free manner to improve further improve competitive capabilities in another channel. Additionally, the Company gives importance to improving the quality and effective of its services along with various other improvements under the Total Quality Management (TQM) in order to create the greatest satisfaction in customers. This is to become another channel for marketing and increased opportunities for electrical transformer sales of the company in the future.

In regards to organizational management to achieve the abovementioned objectives, the Company adheres to the management principles under the process of quality of details and good governance and conducts business based on business ethics in order to achieve sustainable growth.

Board of Directors



1. Mr. Krirk-Krai Jirapaet
Chairman of Board



2. Mr. Nattharphon Lilawathananun
Director



3. Mr. Pholrach Piathanom
Director



4. Dr. Kamol Takabut
Director



5. Mrs. Wasara Chotithammarat
Director



6. Mr. Poonphiphat Tantanasin
Director



7. Mr. Ruangchai Kritsnakriengkrai
Director

1. Name	Mr. Krirk-Krai Jirapaet
Position	Chairman of Board
Age	74 years
Educational qualification	<ul style="list-style-type: none"> Master of Economics, Sydney University, Australia B.A. (Hons) Political Science, Chulalongkorn University
Directorship training	<ul style="list-style-type: none"> Role of Chairman (RCP) Class 11/2005 Director Certification Program (DCP) Class 61/2005 Audit Committee Program Class 8/2005
Work Experience	<ul style="list-style-type: none"> Chairman/Independent director, Banpu Public Company Limited Member, National Reform Council Minister of Commerce Director ,Monetary Policy Committee, Bank of Thailand Vice Minister, Minister of Tourism and Sports Advisor to the Prime Minister, Office of the Prime Minister Permanent Secretary, Ministry of Commerce Director, Board of Directors, the Bank of Thailand
Current job positions	<ul style="list-style-type: none"> Chairman, QTC Energy Public Company Limited Chairman of Advisors to the Company, Banpu Public Company Limited Vice President, Council of Trustees of the University of the Thai Chamber of Commerce/Chairman of the Executive Directors, UTCC Chairman, Thai Garment Development Foundation Chairman, the Thai Institute of Directors(IOD)
In any listed companies	<ul style="list-style-type: none"> QTC Energy Public Company Limited Banpu Public Company Limited
In any non-listed companies	<ul style="list-style-type: none"> Thai Chamber of Commerce / Thai Garment Development Foundation / Thai Institute of Directors
Appointment Date	22 June 2016
% of shareholding in the Company	None

2. Name	Mr. Nattharphon Lilawathananun
Position	Director/ Chairman of the Audit Committee
Age	59 years
Educational qualification	<ul style="list-style-type: none"> Master of Business Administration Program (MBA) ,Chulalongkorn University
Directorship training	<ul style="list-style-type: none"> Director Accreditation Program (DAP), Class 10/2004 Audit Committee Program (ACP), Class 3/2004
Work Experience	<ul style="list-style-type: none"> Director, Unimit Engineering Public Company Limited Director, Unique Mining Services Public Company Limited Director and Director manager,Excellent Business Management Company Limited Director and Director manager ,NBS Research & Consulting Company Limited
Current job positions	<ul style="list-style-type: none"> Director and Chairman of Board Audit committee, QTC Energy Public Company Limited Director, Unimit Engineering Public Company Limited Director and Director manager ,Excellent Business Management Company Limited Director and Director manager , NBS Research & Consulting Company Limited
In any listed companies	<ul style="list-style-type: none"> QTC Energy Public Company Limited / Unimit Engineering Public Company Limited
In any non-listed companies	<ul style="list-style-type: none"> Excellent Business Management Company Limited / NBS Research & Consulting Company Limited
Appointment Date	28 July 2011
% of shareholding in the Company	None

3. Name Mr. Pholrach Piathanom	
Position	Director/ Chairman of the Nomination, Remuneration and Corporate Governance Committee/ Audit Committee
Age	64 years
Educational qualification	<ul style="list-style-type: none"> Master's Degree, Management, Sasin Graduate Institute of Business Administration of Chulalongkorn University Master's Degree, Business Administration, National Institute of Development Administration
Directorship training	<ul style="list-style-type: none"> Director Certification Program (DCP), Class 118/2009 Director Accreditation Program (DAP), Class 78/2009 Audit Committee Program(ACP), Class 31/2010 Role of the Compensation Committee (RCC),Class 31/2014)
Work Experience	<ul style="list-style-type: none"> Director, NIDA Center for Enhancing Competitiveness
Current job positions	<ul style="list-style-type: none"> Director and Audit committee, QTC Energy Public Company Limited Director, Srangkonkeng Company Limited Director, MDICP Intertrade Company Limited Director, MDICP Holding Company Limited
In any listed companies	<ul style="list-style-type: none"> QTC Energy Public Company Limited
In any non-listed companies	<ul style="list-style-type: none"> Srangkonkeng Company Limited/MDICP Intertrade Company Limited/MDIP Holding Company Limited
Appointment Date	28 July 2011
% of shareholding in the Company	Ordinary shares 177,000 shares, representing 0.09 per cent

4. Name Dr. Kamol Takabut	
Position	Director/The Nomination, Remuneration and Corporate Governance Director
Age	67 years
Educational qualification	<ul style="list-style-type: none"> Dr. Ing. (Thermodynamiques & Energetique) Perpignan University, 66025 Perpignan ,France
Directorship training	<ul style="list-style-type: none"> Director Certification Program (DCP), Class 67/2005
Work Experience	<ul style="list-style-type: none"> Independent Director/Audit Committee/Chairman of the Board Getabec Public Company Limited President, the Council of Engineers Committee, the Energy Conservation Fund, Ministry of Energy Arbitration Committee, Ministry of Justice CEO, Italian Thai Power Company Limited
Current job positions	<ul style="list-style-type: none"> Independent Director, QTC Energy Public Company Limited The 6th President, the Council of Engineers CEO, Italian Thai Power Company Limited Coordinating Committee for the preparation of Basic Nuclear Power Project Committee, the Energy Conservation Fund, Ministry of Energy Committee, the Arbitration Committee, Ministry of Justice Independent Director, Getabec Public Company Limited
In any listed companies	<ul style="list-style-type: none"> QTC Energy Public Company Limited/ Getabec Public Company Limited
In any non-listed companies	<ul style="list-style-type: none"> The Council of Engineers Italian Thai Power Company Limited
Appointment Date	28 July 2011
% of shareholding in the Company	None

5. Name	Mrs. Wasara Chotithammarat
Position	Director/Director of the Audit Committee
Age	52 years
Educational qualification	<ul style="list-style-type: none"> Master of Business Administration Program (MBA) ,Thammasat University Bachelor's Degree, Faculty of Commerce and Accountancy, Thammasat University
Directorship training	<ul style="list-style-type: none"> Director Certification Program (DCP), Class 117/2002
Work Experience	<ul style="list-style-type: none"> Chief Accounting Officer, Summit Group, Summit Auto Seat Industry Company Limited Director and Chief Financial Officer, Team Precision Public Company Limited Division Controller, Benchmark Electronics (Thailand) Public Company Limited Corporate Controller, Siam City Cement Public Company Limited
Current job positions	Director, QTC Energy Public Company Limited
In any listed companies	QTC Energy Public Company Limited
In any non-listed companies	None
Appointment Date	13 September 2016
% of shareholding in the Company	None

6. Name	Mr. Poonphiphat Tantanasin
Position	Director/The Nomination, Remuneration and Corporate Governance Director/ Chief Executive Officer
Age	64 years
Educational qualification	<ul style="list-style-type: none"> Bachelor's Degree, (Electrical Engineering) King Mongkut's Institute of Technology North Bangkok
Directorship training	<ul style="list-style-type: none"> Director Certification Program(DCP), Class of 117/2009 Director Accreditation Program(DAP),Class of 77/2009 Finance Statements for Director(FSD), Class of 4/2009 Role of the Compensation Committee (RCC),Class 20/2015
Work Experience	<ul style="list-style-type: none"> Director and Chief Executive Officer, QTC Managing Director, QTC Energy Public Company Limited Director, M-DIC Holding Co., Ltd. Director, Jarin Apartment Limited Partnership
Current job positions	<ul style="list-style-type: none"> Director, Chief Executive Officer and Managing Director, QTC Energy Public Company Limited Director, M-DIC Holding Co., Ltd. Director, Jarin Apartment Limited Partnership Director, QTC-PANCO Co., Ltd. Director, QTC Global Power Co., Ltd. Director, PPWE Co., Ltd.
In any listed companies	QTC Energy Public Company Limited
In any non-listed companies	M-DIC Holding Co., Ltd. / Jarin Apartment Limited Partnership / QTC PANCO Co.,Ltd. / QTC Global Power Co., Ltd. / PPWE Co., Ltd.
Appointment Date	28 July 2011
% of shareholding in the Company	Ordinary shares 598,600 shares, representing 0.22 percent

7. Name	Mr. Ruangchai Kritsnakriengkrai
Position	Director
Age	51 years
Educational qualification	<ul style="list-style-type: none"> Master of Economics ,School of Development Economics, National Institute of Development Bachelor's Degree, (Electrical Engineering) King Mongkut's Institute of Technology North Bangkok
Directorship training	<ul style="list-style-type: none"> Director Accreditation Program (DAP), Class 116/2015 Financial Statements for Directors (FSD) Class 27/2015
Work Experience	<ul style="list-style-type: none"> Deputy Managing Director, QTC Energy Public Company Limited International Sales Manager, QTC Energy Public Company Limited Sales Manager, PPC Asian Insulators Company Limited Sales Manager OEM, Gates Unita (Thailand) Company Limited
Current job positions	<ul style="list-style-type: none"> Deputy Managing Director Director, QTC Global Power Co., Ltd.
In any listed companies	QTC Energy Public Company Limited
In any non-listed companies	QTC Global Power Co., Ltd.
Appointment Date	13 September 2016
% of shareholding in the Company	None



Board Of Executive



1. Mr. Poonphiphat Tantanasin
Chief Executive Officer



2. Mr. Ruangchai Kritsnakriengkrai
Managing Director



3. Miss Boonpa Ruddist
Deputy, General Management



4. Miss Chotika Chumpoon
Deputy, Finance & Accounting

Power Transformer



Power transformers are transformers used to adjust electromotive forces transmitted from power generation sources along the transmission line to reduce force before entering the distribution line and then later to the end user. The power transformers the company is manufacturing and distributing are sized at 5,000-30,000 KVA with a maximum electromotive force of 72 KV.

General and Other Relevant Information

1.

General Information

Company Information

Company Name	:	QTC Energy Public Company Limited
Type of Business	:	Operating the business of manufacturing and distributing electricity Distribution transformers, including those for companies involved with electricity distribution transformers.
Main Office Address	:	2/2 Soi Krungthep Kritha 8 (5), Krungthep Kritha Rd., Huamark, Bangkok, Bangkok 10240
Factory Address	:	149 M.2 Tambol Mabyangporn, Ampur Pluakdaeng, Rayong 21140
Company Registration No.:	:	0107553000158
Registered Capital	:	270 million shares
Paid-up Capital (ordinary shares)	:	270 million shares
Website	:	www.qtc-energy.com
Investor Relations	:	0-2379-3089, ext. 241
Telephone	:	0-2379-3089-92
Facsimile	:	02-379-3097

Stock Registrar

Company Name	:	Thai Securities Depository Co., Ltd.
Office Address	:	92 Stock Exchange of Thailand Building, Ratchadapisek Road, Dindeng, Bangkok 10400
Telephone	:	0-2009-9000
Facsimile	:	0-2009-9991

Auditors

Auditors	:	Mr. Narin Churamongkol , Accounting Auditor's License No. 8593 or Miss Kanyanat Sriratchatchaval, Accounting Auditor's License No. 6549 or Mr. Teerasak Chausrisakul, Accounting Auditor's License No. 6624 or Ms. Sansanee Poolsawat, Accounting Auditor's License No. 6977
Company Name	:	Grant Thornton Co., Ltd.
Office Address	:	87/1 All Seasons Place, 18th Floor, Wireless Rd., Lumpini, Pathumwan, Bangkok 10330
Telephone	:	0-2205-8222
Facsimile	:	0-2654-3339

Legal Consultants

Company Name	:	Bangkok Jurist Ltd.
Office Address	:	Paso Tower, 19th Floor 88 Silom Road Suriyawong, Bangrak
Telephone	:	02 267 2460-3
Facsimile	:	02 267 2464

2.

Other Relevant Information

-none-

Always on call... whenever you need it!



No matter what, you can never predict the downtime

At QTC, we have a team of electrical engineering professionals always on duty, ready to provide the support and service our clients need in a most efficient and timely manner, all day, all night. Transformer maintenance checks, cleaning service, troubleshooting analysis, system testing and technical consultation... whatever support you need for your transformers - and no matter what time it is - dependable help is only a phone call away!

Business Characteristics

Business Operations of Each Product Line

1 Characteristics of products and service

1.1 Electricity Transformers

The electricity transformers manufactured and distributed by the company are custom-made or made to meet the specifications of customer orders. Customers provide product specifications such as high and low voltage, loss, impedance, vector group and temperature rise so the company can design high quality electricity transformers to meet customer needs. All of the electricity transformers sold domestically by the company are under the “QTC” trademark. For foreign supply, products are distributed under both “QTC” and customer trademarks. In addition, the main components of the electricity transformer are as follows:

1. **Steel Core** which acts as a magnetic circuit for the transmission of magnetic line of force to produce pressure on both low and high voltage coils. The steel core is made from cutting silicon steel and layering it to form a core.
2. **High Voltage (Primary) Coils** receive electric energy from high electric transmission lines and transform the electric energy into magnetic energy for transmission to a low voltage coil. High voltage coils are normally made from round copper coil soaked in chemicals and wrapped or put onto low voltage coils.
3. **Low Voltage (Secondary) Coils** act as distributors of electricity from transformers onto a load or accompanying equipment. Low voltage coils are made from flat copper coil covered by insulation or copper foil with relatively large sized wrapping on the insulator cover to be inserted onto the steel core
4. **Tanks and Tank Lids** are components that preserve transformer oil and release heat inside the transformer. The company uses the technique of producing electricity transformers hermetically sealed with prototype in a corrugated form with heat release fins attached to all the sides of the tank so the heat can be swiftly released from the inside to the outside. The fins are folded from long steel sheet making the connecting mark less visible while reducing the chance of tank leakage in comparison to previous specifications using radiator fin for heat ventilation. The tank lid is usually used to install the bussing and other tank protection equipment.
5. **Bushings** are part of the receiver or distributor of the transformer electrical current. The ingoing and outgoing wires are connected to the bushing and the inside of the bushing holds an electric conductor leading the electrical current to the coil. The bushing acts as an insulator to prevent the leakage of electricity into the tank.
6. **Transformer oil** acts as a good insulator that is high in purity and used as an electric insulator inside the transformer as in addition to helping ventilate heat from the coil inside the transformer to outside air.
7. **Taps** are equipment that changes the ratio of the coils, allowing the pressure proportion of the transformer to be at a the desired rate.
8. **Other equipment** used for protection such as tools for oil level measurement, thermometers and pressure release valves are used to measure various levels of the transformer. Once an error is detected, a warning signal is sent to control the corrective equipment and prevent severe damage to the transformer.



The electricity transformers produced and distributed by the company are divided into the following three types:

1.1.1 Distribution Transformer

Distribution transformers are equipment performing the task of transforming high voltage electricity from the Metropolitan Electricity Authority and the Provincial Electricity Authority distribution systems through distribution lines at 11-33 Kilovolts, or KV, so the electromotive force will be reduced to the same level required by the needs of customers such as industrial factories, households and high-rise buildings.

The distribution transformers manufactured and distributed by the company have electric power from 30-5,000 kilovolt amperes (KVA) and electromotive force less than 36 KV in both the first and third phases.

Distribution transformers can be divided into the following two types:

1. Hermetically Sealed Oil Type Distribution Transformers: This type of transformer uses transformer oil as an insulator to prevent short circuits inside the transformer and release heat from inside the coil to the outside area. The tank itself is carefully sealed to prevent external air from leaking inside and mixing with the oil. This type of transformer, therefore, is highly capable of withstanding moisture and deteriorates at a slower rate. It will also help preserve the quality of the insulator of transformer oil as well as extend the durability and reduce maintenance costs. This type of transformer is mainly installed outdoors.

2. Open Type with Conservator: A previous electricity transformer design that has been popular for a long time. It requires transformer oil as an insulator and heat release in the same manner as the hermetically sealed oil type distribution transformer. The difference is that it has a conservator installed to reserve the expansion of the oil during operations and a tube to let the air flow. On the end of the tube is a bulb filled with silica gel that absorbs moisture from the air before it enters the transformer. This type requires transformer inspection oil every 6-12 months.

The electricity transformers distributed by the company are quality transformers certified by standards such as Thai Industrial Standards 384-2543 by the Industrial Standards Institute, Ministry of Industry, ISP 9001:2000 for the design, production and maintenance of the distribution transformer. In addition, the company has been manufacturing electricity

transformers requiring compliance with international standards such as IEC 60076, IEEE Std C57.12.00, VDE 0532, JEC 204, AS 2374 or other standards to satisfy customers.

Furthermore, in order to ensure that the development of the electricity transformers are fully compliant with the standards of our customers in addition to building greater trust from our customers, the company has sent our electricity transformers for short circuit testing by a well-renowned global institution. The 250 KVA, 500 KVA, 1000 KVA, and 2000 KVA have all passed the test and received certification for short circuit resistance by CESI, Italy. Power plants with 167 KVA have passed the short circuit testing and received certification for short circuit resistance by KEMA, Netherlands. The company has been planning to have other electricity transformers submitted to short circuit testing to increase the chance of winning price bidding from electricity transformer manufacturers and distributors, including the government, in addition to expanding the domestic market. In 2012, 100 KVA 3 Ph 50 Hz 22000-400/230 V, 100,500 KVA 3 Ph 50 Hz 33000-400/230 V. and 150,300,750 KVA 3 Ph 50 Hz 24000-416/240 V. have all passed the short circuit testing by CESI in Italy.





1.1.2 Power Transformers

Power transformers are transformers used to adjust electromotive forces transmitted from power generation sources along the transmission line to reduce force before entering the distribution line and then later to the end user. The power transformers the company is manufacturing and distributing are sized at 5,000-30,000 KVA with a maximum electromotive force of 72 KV.

1.1.3 Transformers-dry (Dry Type Cast Resin Transformer)

Transformers-dry (Dry Type Cast Resin Transformer) transformer is suitable for installation in the building because of electrical insulation, dry. Do not use oil-insulated high-voltage coils series casting Resin Epoxy in Dune that has moisture resistance. The dust and the environment, and the fire resistant properties. A project that uses a transformer, dry, such as high-rise buildings. Residential building or condominium The hospital or who have limited space to use the transformer can be installed in the building. The company had invested both goods and personnel readiness for service to customers, to sell the dry transformer tested according to international standards in order to build the confidence to customers.

In addition, the company manufactures special types of electricity transformers that are custom-designed and produced to meet customer needs such as Earthing Transformers, Dry-Type Class F&H, Unit Sub-stations and pad mounted transformers.



Unit Substation



Earthing Transformer



Dry-Type Class F&H



Pad Mounted

In 2015, the Company generated 1,500 million baht in production from expanding production bases by building a factory building to manufacture transformer tanks in 2014. This has enabled the Company to increase production capacity by 30 percent. In 2015 – 2016, the Company did not invest in machinery purchases or production expansions requiring large amounts of funds.

1.2 Services

All services provided by the company are related to 24-hour transformer usage. Our highly experienced engineers and technical experts are ready to support and assist customers who have purchased QTC electricity transformers, as well as general customers. In cases where an electricity transformer belongs to the QTC brand, the details regarding emergency contact information are placed on the sides of all transformers. The electricity transformer-related services provided by the company include the following:

- Electricity transformer installation
- Inspection and maintenance according to the product cycle
- Restoration and maintenance of the electricity transformer
- Filling oil into the electricity transformer
- Electricity transformer rental
- Electricity transformer testing
- Advice on electricity transformers and electrical systems
- Service on steel cutting and coil wiring

2 Marketing and Competition

2.1 Competitive Strategy

1. Product Quality

The company is firmly committed to policy for constant development in the quality of the electricity transformers to comply with international standards from design to the selection of raw materials for production. Quality inspections are frequently conducted for the raw materials frequently purchased. The company's electricity transformers have been designed by a computer system that increases and precisely controls loss under the supervision of experienced engineers in the design field. Furthermore, the technology employed by the company in power plants is up-to-date and highly developed. The main machines used are imported from Germany and all of the production process, up to the products delivered to our customers, have been tested and controlled. All the company's operations described above have been adopted to ensure that products are standardized and customized for customer satisfaction. The company's products are clearly certified by ISO 9001:2008, and all of the electrical sizes and types of electricity transformers available in the market are certified with Thai Industrial Standards 384-2543. and all passed short circuit resistance testing by CESI, Italy. The 167 KVA has also passed short circuit resistance testing from KEMA, in the Netherlands. Both institutions are world famous testing institutes capable of ensuring the quality and durability of the coil and internal structure of electricity transformers.



2. Speed and Reliability in Product Delivery

Delivering products on schedule is another important factor considered by customers when deciding to purchase products from various suppliers. Most of the customers have a timeframe that is exact, especially those in the state enterprise sector that produce and distribute electricity or customers who have won price bidding for entire projects. If QTC is unable to deliver products on time, it may cause delays for the customer's projects and our company may be required to pay fines according to purchase/sales agreements. Therefore, our main policy is to deliver products on time to maintain customer satisfaction and ultimately build trust and loyalty, as well as brand promotion for our company.

3. Effective Capital Management

The company gives importance to the efficiency of capital management, which is a main cost with impact on the company's profit and competitive capacity, beginning with the selection of raw materials. A team of experts selects the manufacturers and/or suppliers who are required to pass inspection testing on their production processes to ensure the quality of the raw materials and reduce loss from production caused by low quality raw materials. In addition, the company has adopted the ERP system to plan the purchasing of raw materials to help control the amount of raw material production at acceptable and sufficient levels. Since the ERP system has linked information from all departments since orders began to be accepted from the customers, the system takes the orders and plans for production and raw material purchases.

In addition, the company has planned a production and technological production system to help save production costs as well as maintain product quality. Applying the Wound Core technology for steel core production, this technology will reduce steel input.

- Silicon and loss of silicon steel could reduce overall production costs
- Finding alternative raw materials for wider options and helping manage capital would be very efficient, e.g. copper foil or paper-wrapped flat wire is an important component for wrapping low voltage coils.

However, the selection of each raw material depends on the specifications of the electricity transformers requested by the customers.

4. Acquiring Experienced Staff and Experts in the Electricity Transformer Industry

With the company's team of directors, architects, and most of the staff with experience and expertise in the electricity transformer industry for over 40 years and having passed the training of world-renowned electricity transformer manufacturers from both Germany and Japan, the company is able to help develop technology both in terms of design and improve the production process for higher efficiency. The machines are therefore high tech and able to reduce production process, causing cost to be lower and able to compete well with competitors in the business. Also, the sales department has experience in the sales and marketing field for over 25 years, making them understand customer's demand and in-depth electricity transformer market condition. They are therefore able to command strategies which are suitable for each situation perfectly.

5. Trade Alliances and Good Relationship with Distributing Agents

In 2016, 2.78% of income from net sales of electricity transformer comes from distributing agents, both domestic and abroad. As of January, 31, 2016, the company has a total of 3 agents domestically and 6 agents abroad; covering Malaysia, Australia, South Africa, and Italy. Also, the company is focused on maintaining and developing relationship with the agents continuously. Also, to maintain good relationship among other companies in the market and distributing agents to share information for product and quality development, as well as service. This allows the company to improve product quality to directly serve needs of the customers at a high standard.

6. Post-Sale Services

The company offers after sale service by experts in electricity transformer to give advice and suggestions on problem solving 24 hours to customers. This service will not only impress the customers but allow the company to be aware of the existing problems caused by the product directly from the customer. The company will be able to take the complaints to develop and fix the product accordingly. The product will therefore have high quality and fully respond to customer's demand. Since the electricity transformer has high quality, we can ensure this by offering 2 year product warranty.

2.2. Characteristics of Customers

Customers of our company can be divided into 2 main groups as follow;

1. Domestic customers

Domestic customers of the company could be divided into 4 categories as follow;

1.1 State and state enterprise

State and state enterprise is a group combined of the main customer who is the electricity state enterprise producer and distributor. This includes The Provincial Electricity Authority (PEA), The Metropolitan Electricity Authority (MEA), Electricity Generating Authority of Thailand (EGAT), and other state and state enterprise customers such as, Ministry of Public Health, Public Works Department, and Royal Irrigation Department.

1.2 Project Contractors

This customer group ranges from small to large project contractors This type of customer includes Powerline engineering public company limited. ItalThai development public company limited, and Demco public company limited.

1.3 Distributing agents

Customers who are distributing agents and then onwards to end users. The company has a total of 3 distributing agents. Each agent is responsible for distributing the electricity transformer and offering service in their area of responsibility. This will help with marketing and service provided by the company to fully cover all the area.

1.4 Project or factory owners

This group of customer will purchase electricity transformer to use in their own factories or buildings such as Advance Pepper Mill Company Limited, True Universal Convergence Company Limited.

2. Foreign customers

2.1 Distributing agents

Currently, the company has 6 agents covering electricity transformer distribution in Australia, Malaysia Italy, and South Africa where the income from export (92%) mainly comes from selling through distributing agents.

2.2 Other customer groups

Other customer groups include contractor and trading firm which will purchase electricity transformer from the company and deliver it to end users in various industries such as paper industry, petrochemical industry, palm oil industry, textile industry, and electronic industry.

Chart showing revenue from each distributing channel by customer type

Customer Type	2014		2015		2016	
	Million Baht	%	Million Baht	%	Million Baht	%
Revenue from domestic sales						
(1) State and state enterprises	189.58	25.49	336.54	28.06	90.03	58.26
(2) Distributor	18.05	2.43	15.91	1.33	14.36	2.80
(3) Private	348.21	46.81	738.96	61.63	298.91	17.55
Total income from domestic sales	555.84	74.73	1,091.41	91.02	403.30	78.60
Revenue from foreign sales						
(1) Distributor	83.23	11.19	67.33	5.62	82.47	5.32
(2) Private	104.76	14.08	40.25	3.36	27.32	16.07
Total Revenue from Foreign Sales	187.99	25.27	107.58	8.98	109.79	21.40
Total Revenue from Sales	743.83	100.00	1,198.99	100.00	513.09	100.00

2.3 Pricing policy

The company has a policy towards pricing that follows the cost plus margin rule which will be different according to each customer type and consider the competitive condition in each market- both domestic and foreign, respond to the product of each customer group which takes in consideration of the product quality and effective after-sale service.

2.4 Details of the company's distribution channel could be categorised as follow;

1. Distribution through auctioning

Auctioning through price bidding is one of the main distributing channels for customers who are state enterprise producer and distributor of electricity. The process of bidding will begin with price offering. After the company studies information and analyze details of the electricity transformer to arrange documents and calculate price which will be offered. Documents used for price offering are divided to document presenting the qualification of the bidder and technical documents. Companies entitled to participate in price bidding must pass the basic qualifications in price offering. Once the company wins the bidding, trading contract of the model and time period will be written, along with the security guarantee- most value of the guarantee is 10% of the bidding price.

2. Distribution through distributing agents

In consideration to establish the distributing agents, both domestic and abroad, the company focuses on experience in business, proficiency in marketing, experience in the area, financial condition, and readiness of the agents. A contract will be written for each agent, in case there are more than one agent in each country, the company will determine the area of responsibility of each agent. Distributing agents will act as a channel for distribution of the company's products. They will be responsible in marketing of the electricity transformer in each area, including giving service and maintenance of the purchased product. The company will in addition give technical support to the agents and these agents are also responsible for seeking trend of the product in their respective country of duty so that the existing product will be developed to respond directly to the market demand. Distributing via distributing agents will help the company save management cost since products are sold to distributing agents are outright and agents distribute them directly to customers.

On December, 31, 2016, the company has a total of 3 agents domestically and 6 abroad- covering Australia, Malaysia, Italy, and South Africa.

3. Distributing directly to customers

Marketing officer and/or sales officer will directly contact the customers and take advantage of director's relationship with the customers to find channels to continuously reach the customers. They will present and give information regarding the product and take them to visit the company's factories. This group of customers include; contractor, architecture, and customers who use the products directly such as industrial factory.

3 Product provision

3.1 Production

The Company's plant is located at 149 Moo 2, Pluak Daeng-Huay Prab, Mabyangphon, Pluak Daeng District, Rayong, in a 32 rai piece of land. Nearly all electrical transformers are made-to-order transformers. The Company has a policy to manufacture electrical transformers that meet the specifications required by customers and primary emphasis on quality and standards. In addition, modern design and production technologies are used with machines as steel slitter machines, steel cutting machines, coiling machines, ovens, etc., all of which are imported from Germany and other leading manufacturers. Additionally, electrical transformer testing procedures concur with internal standards and are computer-controlled.

In order to accommodate future business growth, in 2016 the Company remains determined in applying the TQM system for continual improvement of manufacturing and production planning processes with the primary objectives of reduced production time for increased production capacity and line balancing in order to reduce loss such as from waiting and over production and with focus on complete utilization of production capacity. Furthermore, in 2016, the Company had purchased high-power and low-power coiling (foil) machines to improve capabilities in low-power foil coiling in large transformers and increase high-power coil production. Both types of coilers have already been installed and tested and begins production on January 2017.

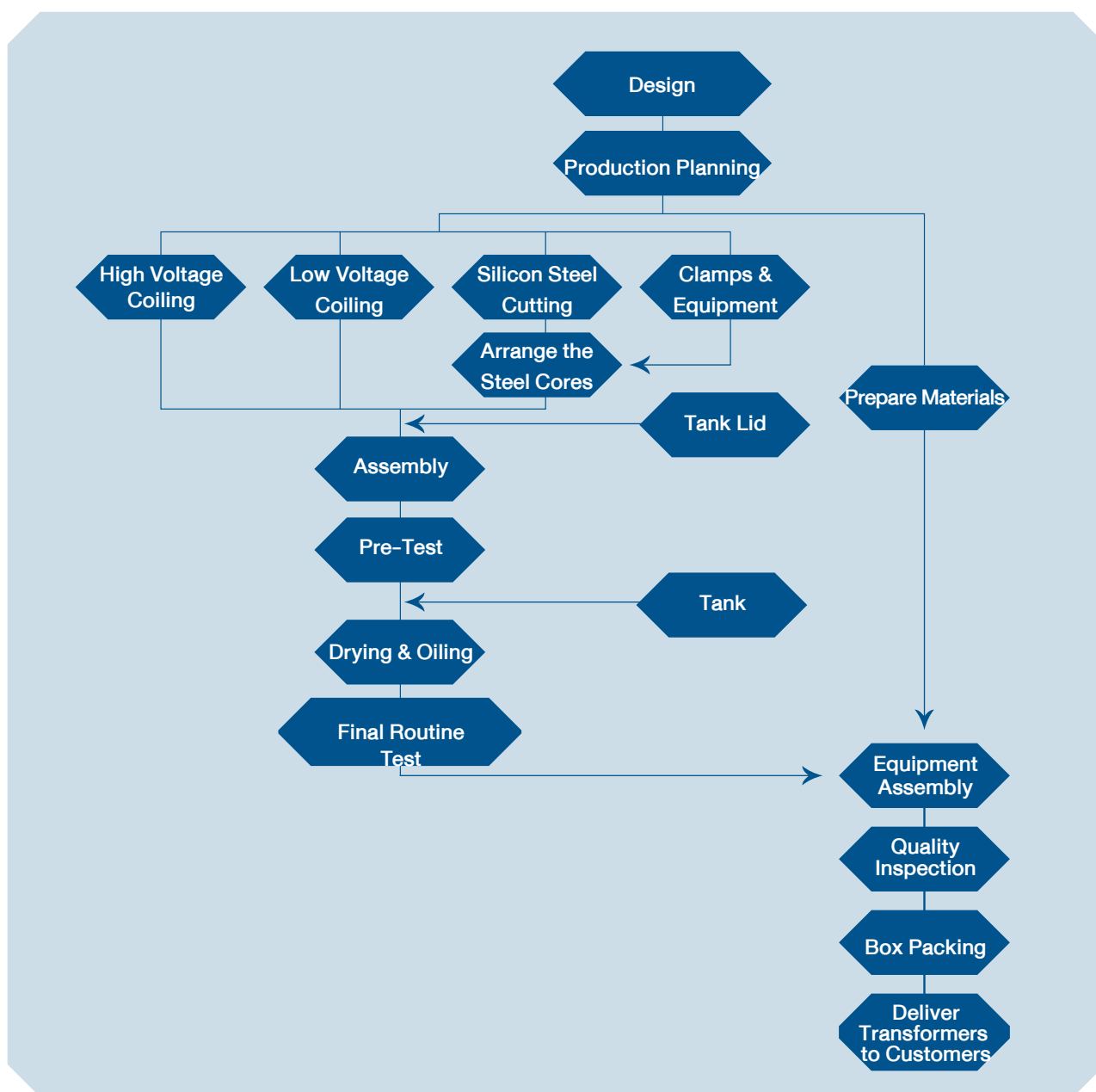
3.2 Production Capacity

	2010	2011	2012	2013	2014	2015	2016
Production Capacity (KVA)	952,000	976,000	1,215,000	1,482,000	1,701,000	1,715,000	1,722,000
Production Amount (KVA)	638,238	952,380	1,379,748	1,236,562	1,322,535	1,791,847	1,148,604
Production Capacity Rate (%)	67.04	97.58	113.56	83.44	77.75	104.48	66.70

In 2016, the production capacity increased slightly from the year 2015 about 0.41%, but the volume of production decreased by 35.90%, due to the sale volume decreased



3.3 Manufacturing & Production Processes



The Production Process for Company's Distribution Transformers is as follows:

1. Design

The company's electric transformers are custom-made to meet customer orders. The transformers are completely designed by using a modern computer program with high accuracy and capable engineers with extensive design experience to ensure the results meet the customers' specifications and purpose. The computer design can show immediately results as outline drawings.

2. Production planning and equipment preparations

The electric transformer's order information from customers is entered into the ERP system and used for the purchase plans of raw materials and equipment, including the production plan. The planning will include updates to the production plans for punctual delivery as per customer orders which will require close cooperation between the Sales, Production, and Procurement Departments.

3. Silicon steel cutting and steel core arrangement

The company uses silicon steel cutting machines from Germany controlled by a computer system, thereby making it possible to cut silicon sharply, quickly and precisely in which the computer will calculate the drilling locations of the steel core and cut silicon steel at the same time, fully preserving the electrical properties of the silicon steel core. The silicon sheet will then be cut to shape and sent to the steel arranging section. For steel arrangement, the steel pieces will be placed in overlapping levels (Step-Lap) using a stacking table. The aforementioned step-lap method results in no-load loss, exciting current of the steel cores and will reduce the transformers, thus reducing noise disturbance and costs for the loss values.

4. Primary (High Voltage) and Secondary (Low Voltage) Coiling

The company uses copper foil as the raw material used for primary coiling instead of using paper-insulated flat wires as in the past, thereby giving the transformer maximum resistance to power surges and short circuits because the copper foil has better current distribution properties combined with the secondary coiling using the long layer method with a high voltage winding machine to control the tension and arranging the wires with a computer system to make the quality of each coil layer meet uniform tension standard which will increase the effectiveness and quality of the coils.

5. Assembly of Wire Coils and Steel Cores

This step takes place when the wire coils are assembled with the steel cores in which the primary coil is assembled near the steel core and the secondary coil is placed on top of the outer part of the primary coil. Next, these are assembled with the upper yoke in combination with the installation of the tank lid, bushing and tap changer, and the internal wiring as in the design.

6. Pre-Testing

Once the steel core and the primary and secondary coils have been assembled, the Testing Department will then perform preliminary testing of the electric transformers as follows:

- Measurement of Winding Resistance
- Measurement of Turn Ratio
- Checking of Polarity or Vector Group
- Megger Testing

7. Drying and Oiling

In the drying of electric transformers, the company uses a modern vacuum oven controlled by a computer system from Germany. Furthermore, the company is the only company in South East Asia to use Electric Low-Frequency Heating technology to remove moisture from the electric transformer by directly delivering low frequency electrical currents to the coils of the electrical transformer in a vacuum environment which is a way to transmit heat from the inside to the outside. This method will remove moisture from the innermost part of the coils in a short time compared to the heater which is a method used to heat the coils from the outside, but unable to remove all moisture. Furthermore, the company also uses technology for oiling the transformer in a vacuum oven in a way for the oil to fully infiltrate the insulation system and can prevent 100% of moisture from coming in to contact with the inside of the transformer, which effectively extends the transformer's usage life.

8. Final Routine Testing

After the transformers have gone through all of the procedures, all transformers will be required to go through a final routine test. The company's testing equipment is controlled by computer and calibrated regularly, thereby yielding test results that are accurate and precise with ability to report test results immediately. The testing list is composed of the following:

- Measurement of winding resistance
- Measurement of voltage ratio and check of phase displacement
- Measurement of short circuit impedance and load loss
- Measurement of no-load loss and current

- Separate source AC withstand voltage test
- Short-duration induced AC withstand voltage test
- Measurement of insulation resistance
- Oil dielectric test
- Leakage test

3.4 Procurement of Raw Materials

The main materials used in the manufacturing of the Company's electrical transformers are silicon steel, coated round wires, transformer body unit, copper foil and transformer oil. The Company purchases these raw materials from both domestic and foreign manufacturers and/or suppliers. Accordingly, the factors considered as a policy by the Company in the purchase of raw materials are as follows:

1. Raw Material Quality

Since the Company makes it a main policy to give importance to product quality, the Company emphasizes quality raw material purchases from capable manufacturers or suppliers that can deliver quality raw materials according to specifications in full quantities and according to schedule. Accordingly, the Company has an approved vendor list for screening for quality manufacturers and suppliers. Moreover, the Company has procedures in place to test the quality of raw materials and conducts visits and inspections on new manufacturing factories before approving them to become manufacturers or suppliers of the Company. Furthermore, the Company reviews assessment results every six months based on the quality and history of raw material deliveries. Additionally, the Quality Assurance Unit (QA) conducts a random inspection of raw materials every time a vendor delivers raw materials in order to ensure guarantee the quality of raw materials used in the manufacturing of the Company's goods.

2. Raw Material Delivery Time

Domestic purchases generally has a delivery time approximately at 15-30 days, depending on the type of materials. On the other hand, raw materials ordered abroad takes approximately 45-90 days to be delivered because an allowance has to be made for shipping time based on the country of the purchase. Therefore, for the most part if raw materials are ordinary or if domestic manufacturers or suppliers can provide materials with similar quality to those offered by foreign manufacturers or suppliers or meet the quality specifications of the Company, e.g., solution-coated round wires, paper-coated band wires, solution-coated band wires and other transformer components, the Company order the aforementioned materials from domestic sources due to the shorter delivery time that allows more convenient and effective inventory management.

3. Prices of Raw Materials and Price Trends

In particular, silicon steel and copper are commodities with prices that fluctuate based on prices in the global market. Therefore, in ordering raw materials in each occasion, the Company has to consider the quantity of materials to be purchased combined with suitable delivery time. Accordingly, the Company closely monitors changes and trends in raw material prices to effectively management raw material costs.

4. Exchange Rates

Because the Company purchases raw materials from abroad for 36.12 percent of all raw materials, the Company closely monitors changes in the exchange rates of important financial currencies and appropriately enters into foreign currency purchase/sales contracts in advance in order to avoid risks from fluctuating exchange rates.

5. Avoidance of Dependency on Few or a Single Manufacturer or Supplier

The Company has policy to procure raw materials from many manufacturers or suppliers. For each type of materials, especially silicon steel, solution coated round wires, electrical transformer body, copper foil and transformer oil, the Company makes purchases from only 2-3 main manufacturers or suppliers because the aforementioned manufacturers and suppliers each have specified minimum purchase orders based on prices and delivery times of the aforementioned materials.

Table Showing Ratios of Domestic and Foreign Raw Material Purchases

	2014		2015		2016	
	Million baht	%	Million baht	%	Million baht	%
Domestic Raw Material Purchases	302.97	67.24	468.68	63.62	274.74	63.88
Foreign Raw Material Purchases	147.62	32.76	268.02	36.38	155.38	36.12
Total Raw Material Purchases	450.59	100.00	736.70	100.00	430.12	100.00

The Company's main raw materials are described as follows:

1. Silicon Steel

Silicon steel is considered an important material in the manufacturing of electricity transformers with a calculated percentage of total raw material purchase value of 24.14 percent and 26.02 percent in 2015 and 2016, respectively. The Company primarily imports silicon steel from the Republic of South Korea and partially from Japan. These purchases are made in advance on a quarterly basis. However, since high-quality silicon steel for electrical transformers has few manufacturers, there is a limited quantity of silicon steel that is manufactured. Therefore, the Company has to manage purchases to ensure sufficiency with usage requirements and successfully manufacture electrical transformers to customers on schedule.

2. Solution-coated Round Wires

Solution-coated round wires are a raw materials used in high-power coiling or high-power wire coils for receiving electrical energy from high-power transmission lines for conversion into magnetic energy circulating inside a steel core to transfer energy to the low-power coils. Accordingly, purchases are made from domestic manufacturers that offer quality similar to or equivalent to foreign raw materials but with a shorter delivery time, which thereby allow the company to more effectively manage inventories.

3. Electrical Transformer Body

Since 2015, the Company began to manufacture its own transformer body to cut production cost and meet short delivery times as well as control quality in line with customer specifications in order to improve competitive potential. Nevertheless, purchases are still made from 1-2 domestic manufactures based on suitability of specifications, work volume, prices and delivery time.

4. Transformer Oil

Transformer oil is oil produced specifically for use in electrical transformers and has good insulation properties, which functions to remove heat from inside the transformer to outside for ventilation. In transformer oil purchases, considerations are based on manufacturing plans, whereby purchases are made in advance from domestic manufacturers and suppliers, in order to prevent material shortages. Accordingly, the purchase department regularly monitors changes in oil prices in the global market to effectively manage transformer oil purchases.

5. Copper Foil

Copper foil is a raw material used in low-power coiling or low-power coils that function to distribute electricity from the transformer to load or connected devices. For copper foil, the Company purchases from both domestic and foreign manufacturers and jointly develops capable domestic manufacturers to enable purchases from domestic manufacturers that meet international standards for the Company to effectively manage raw material quantities.

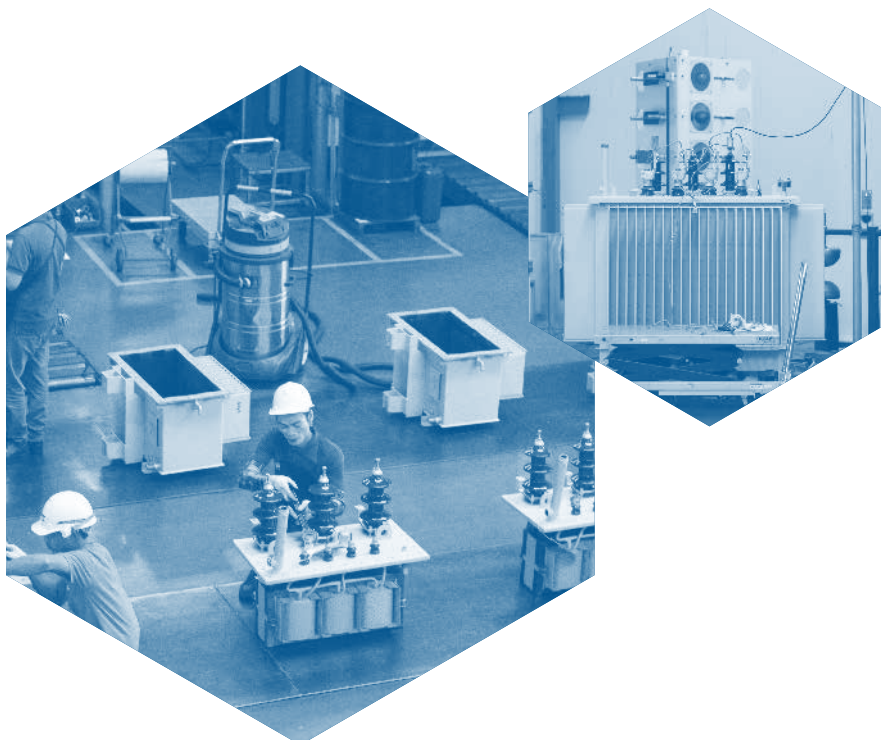
3.5 Environmental Impact

Throughout the past, the Company has never had disputes or legal cases concerning environmental issues. Moreover, the Company emphasizes electrical transformer designs that reduce energy consumption and are friendly to the environment, and the technologies used in the production processes effectively reduce energy consumption and environmental pollution. In 2013, the Company began to produce amorphous distribution transformers, a type of transformers that conserves energy and prevent energy wasted in steel cores by up to 70 percent. Additionally, the paints sprayed on transformers are primarily water-based paints that are not harmful to people and the environment and the de-humidifier and oil filling systems used decrease energy consumption and emission of hot vapors to the air.

Furthermore, the Company is certified for the Environmental Management Standard ISO 14001: 2004, which is proof that the Company has control and production improvement systems and environmental management plans to visibly decrease or prevent environmental impacts in concurrence with set standards. In addition, in 2015 the Company became certified with the Green Industry Level 3 by the Ministry of Industry, and in 2016 the Company released its greenhouse gas emission report based on 2015 and became certified by Thailand Greenhouse Gas Management Organization (Public Organization) and certified for greenhouse gas emission pursuant to the ISO 14064-3: 2006 standard by SGS (Thailand) Co., Ltd.

4. Research and Development

The Company continues to give importance to product research and development in order to achieve good product qualities that meet customer needs and competitive potential. Throughout the past, the Company has always been able to develop products with competitive quality in every market worldwide with improved effectiveness in manufacturing processes. In 2016, the Company's total spending exceeded four million baht.



QUALITY OF DETAILS >>

D - DYNAMICS E - ENVIRONMENT
T - TEAMWORK A - ACHIEVEMENT
I - INNOVATION L - LEADERSHIP S - SERVICE

Revenue Structure

Revenue Type	2014		2015		2016	
	Million Baht	%	Million Baht	%	Million Baht	%
Revenue from Electricity Distribution Transformer Sales	736.66	95.31	1,198.98	97.11	513.09	95.10
- Revenue from Domestic Transformer Sales	550.35	71.21	1,078.74	87.37	403.30	74.75
- Revenue from Overseas Transformer Sales	186.31	24.11	120.25	9.74	109.79	20.35
Revenue from Raw Material Sales ¹⁾	7.16	0.93	10.58	0.86	5.25	0.97
Consolidated Revenue from Sales	743.82	96.24	1,209.56	97.97	518.34	96.07
Revenue from Service Provision	16.67	2.16	19.63	1.59	12.89	2.39
Other Revenue ²⁾	7.96	1.60	5.59	0.44	8.32	1.54
Total Revenue	768.46	100.00	1,234.79	100.00	539.55	100.00

Remarks: ¹⁾ Revenue from raw material sales is revenue occurring as a result of the sales of raw materials used as a component for the manufacture of electricity transformers to customers, such as transformer oil, low voltage terminal lugs, bushing gasket sets, etc.

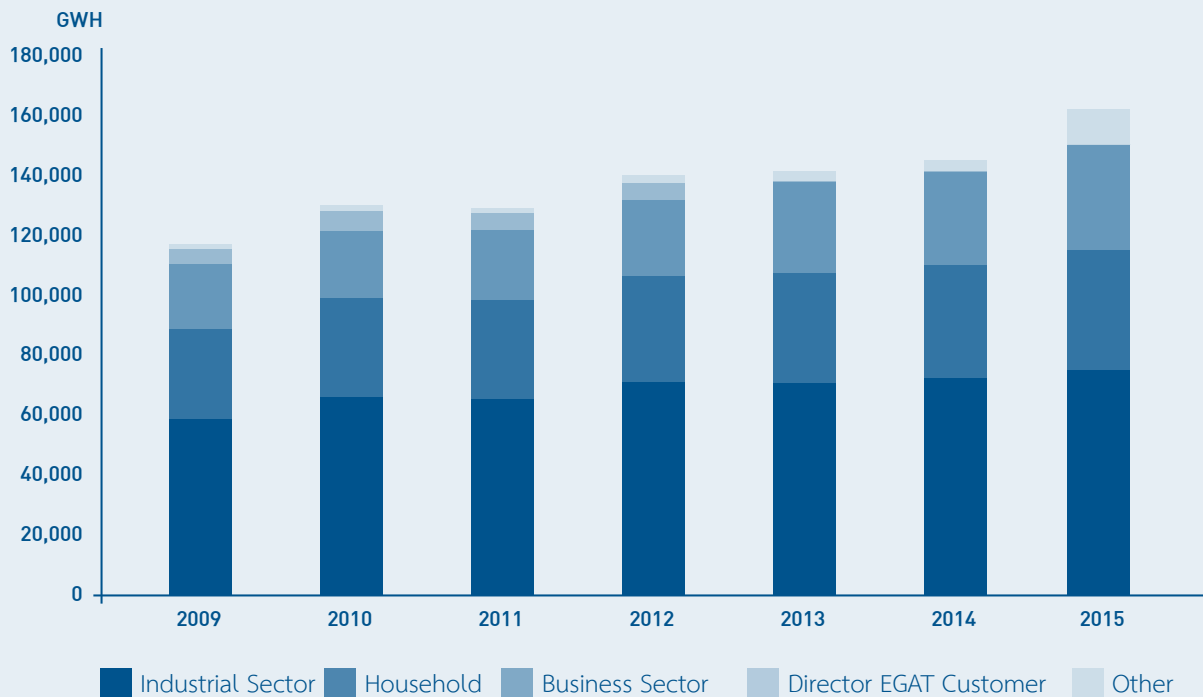
²⁾ Other revenue comprising revenue from scrap sales, profit from exchange rates, interest receivable, etc.

Industry and Competition Situational Analysis

Domestic Market

The electricity transformer manufacturing industry is related to the electricity industry, a basic necessity that plays an important role to the daily lives of people and national economic growth, because electricity transformers are equipment used to reduce the voltage of electrical currents sent from a power source at a level that suits the needs of users such as residents in homes, industrial factories, malls, or high-rise buildings such as hotels, condominiums and office buildings. Therefore, the growth of the electricity transformer industry is adjusted according to annual electricity requirements, which depend on primary factors composed of population, industrial and economic growth. Since electricity is necessary for living and economic growth, electricity users comprise a diverse range of users in industry, business, agriculture and homes. According to the graph below, which shows the amount of electricity used by user type, it is obvious that the industry sector has the highest proportion of electricity use, followed by homes and businesses. And in 2015, the electricity used by the aforementioned sectors amounted 74,773GWH, 41,286GWH and 33,219GWH, or proportions of 43.44 percent, 23.99 percent, and 18.49 percent of all domestic electricity consumption, respectively.

Graph showing the types of electricity users from 2009-2015



Source: Electricity Policy and Planning Office, Ministry of Energy

Apart from economic growth influencing the aforementioned demands for power, population growth is a significant factor determining national power demand. Thailand's continual population growth has resulted in community expansions and increased investment in the transmission system by the Provincial Electricity Authority and the Metropolitan Electricity Authority responsible for power distribution to power users in the country. Hence, the demand for electrical transformers in the power transmission system has escalated.

As previously mentioned, power is a basic, essential energy. Inadequate amounts of power for consumer demands will affect the living conditions of the public and the overall view of businesses and the national economy. In cooperation with the Electricity Generating Authority of Thailand, therefore, the Ministry of Energy has prepared the latest Thailand Power Development Plan. This plan is the Thailand Power Development Plan 2015 – 2036 (PDP 2015) approved by the National Energy Policy Office (NEPO) in a meeting held on 14 May 2015 and approved by the Ministerial Cabinet on 30 June 2015. The preparation of the aforementioned Power Development Plan was based on projections on Thailand's future power needs for the first time.

Thailand Power Development Plan of 2015 – 2036 (PDP 2015)

According to the guidelines for preparing the aforementioned plan, the Thailand Power Development Plan of 2015 – 2036 (PDP 2015) can be briefly summarized as follows: At the end of the plan in late 2036, Thailand will have a total net power production capacity of 70,335 megawatts composed of the current power production capacity from the end of 2014 of 37,612 megawatts and production capacity of expired power plans in 2015 – 2036 will be released at 24,736 megawatts.

Power Production Capacity in 2015 – 2036	megawatts
- Power Production Capacity in December 2014	37,612
- New Power Production Capacity in 2015 – 2036	57,459
- Power Production Capacity Released in 2015 – 2036	- 24,736
Total Power Production Capacity at the End of 2036	70,335

Power Production Capacity in 2015 - 2036

New power production capacity in 2015 – 2036 will be equal to 57,459 allocated in the following power plant types:

	megawatts
Renewable Energy Power Plants	21,648
- Domestic	12,105
- Foreign Power Purchases	9,543
Pumped Storage Power Plants	2,101
Cogeneration Power Plants	4,119
Combined Cycle Power Plants	17,478
Thermal Energy Power Plants	12,113
- Coal/Lignite Power Plants	7,390
- Nuclear Power Plants	2,000
- Gas Turbine Power Plants	1,250
- Foreign Power Purchases	1,473
Total	57,459

New Power Production Capacity in 2015 – 2026

At this phase of the plan (first ten years), power plant projects are mostly projects with contract obligations aimed at reinforcing power system security in key risk areas by having a new power production capacity of 36,804 megawatts as follows:

	megawatts
Renewable Energy Power Plants	10,644
- Domestic	8,101
- Foreign Power Purchases	2,543
Pumped Storage Power Plants	1,300
Cogeneration Power Plants	4,119
Combined Cycle Power Plants	14,878
Thermal Energy Power Plants	5,863
- Coal/Lignite Power Plants	4,390
- Foreign Power Purchases	1,473
Total	36,804

International Markets

The factors affecting power demand in foreign countries are economic growth and world population growth. The Energy Information Administration (EIA) in the US estimates electricity in each continent around the world until the year 2035, which have an average growth rate of approximately 2.30 % per year. The growth of power production of countries outside the Organization of Economic Cooperation and Development (OECD) to be considerably higher than that of OECD countries at 3.3% versus 1.1%, respectively. Asian countries outside OECD are the places where power production growth is the highest at 4.1% per year. Thus, current trends indicate growth for the demand for transformers to be higher than in other regions.

Australia, one of the company's key transformer exporting markets, which have sale revenue 53.94% of all total revenue. The Australian market is a large market with a strong industrial sector. The company have encouraged to expand regional foreign markets in Laos, Cambodia, Myanmar, Malaysia, the Philippines, Singapore and Bangladesh. These are developing basic industries such as the mining industry, power plants, industrial estate constructions, manufacturing industries and continually increasing investment from overseas to mitigate risks and expand customer bases. Our company has the capacity to manufacture transformers meeting international standards, thus we believe the company's transformer products can compete in the world market. Thus, there is a chance for consistent growth for the company's transformer exports in the future.

Competitive Conditions

The transformer market can be divided into the electricity transformer market for power systems and the electricity transformer market for distribution systems. Previously, all of the company's sales were from distribution transformer. There are about 24 manufacturers in the power distribution transformer comprising of small manufacturers that emphasize price strategy rather than quality, and medium and large manufacturers that focus on product quality. Therefore, each group of manufacturers has different customer groups. The company is a medium-sized manufacturer producing high quality transformers to support the work operations of both public and private sector companies. The company's products are TIS 384-2543 accredited and have passed short circuit testing by the CESI in Italy and the KEMA Institute of the Netherlands. Thus, the company's product quality is accepted by domestic and foreign customers; furthermore, our quality is constantly improving. These improvements are constantly enhancing the company's competitive capacity to equal to exceed that of larger manufacturers. Small manufacturers focusing on small groups of customers and putting emphasis on price strategy without giving consideration to product quality are not in the same market with the company.

New manufacturers entering the industry and developing electricity transformer manufacturing processes in order to achieve quality meeting international standards are difficult because they require costly investments for machinery. More importantly, know-how and advanced technology with skilled personnel and production expertise are also essential. Thus, domestic competition comes from about seven manufacturers with technology and ability to manufacture high quality transformers. These manufacturers all require manufacturing technology to enable their products to produce high quality transformers accepted by customers. The company manages production costs in order to achieve maximum efficiency with the goal of building capacity for consistent and sustainable competition. In addition to product development, we also emphasize building good relationships with every customer group to maintain customer bases and continually expand customer bases to have coverage. We can be considered as an organization that pays attention to every step and detail in line with our slogan, "Quality of Detail".

Risk Factor

The company is aware of various aspects of risk management and makes considerations and monitors the impacts of situations that potentially create risks to the company's business operations on a regular basis in order to ensure thorough and effective risk management. The company has formed the Risk Management Committee and a work committee in which high-ranking executives are involved to analyze various risk factors and assess potential risks in order to obtain adequate risk prevention or management. Furthermore, the Risk Management Committee reports to the Audit Committee and the Board of Directors for acknowledgement and considerations by at least once every three months. The risks that are significantly influential to the company are summarized as follows:

1 Risks of Revenue Fluctuations and Dependence on Large Customers

The company has revenue from the sales of electricity transformers to customers who produce and distribute state enterprise electricity composed primarily of the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA). The aforementioned customers amount to approximately 25-36 percent of overall sales revenue with a high proportion potentially affecting the company's income if lost. Furthermore, revenue generated by the sales of electricity to the aforementioned group of customers is primarily dependent upon the company's ability to win project auctions, economic conditions and budget of each agency. Therefore, if the company loses auctions, or if auction dates are changed, or investment budgets for the purchase of electricity transformers decrease, the company's revenue and performance results will decrease. Thus, the company is shifting focus its to expanding its customer base in the private sector and export sector. In 2016 the proportionate in of electricity transformer sales to export sector customers that increased. Although the overall of the proportion of public sector still increased to 58.26 % of total sales revenue. Moreover, the company has given consideration to increasing product diversity to meet the demands of all customer groups. At present, the company is capable of producing electricity transformers with up to 30 MVA and maximum electrical system of 72 KV and developed the capacity to manufacture amorphous electricity transformers, which are no-load-loss transformers.

2 Risks from Fluctuations in Raw Material Prices

The main raw materials used in transformer production comprise silicon metal, coated round wires and copper foils. The prices of the aforementioned raw materials will fluctuate according to the prices on the world market, which depend on supply and demand in the global market. In the past, the prices of silicon and copper underwent great fluctuations. Therefore, if the costs of raw materials increase rapidly, there may be impacts on the company's sales costs and gross profit margins because the company is unable to adjust product prices at an equal or higher rate than the aforementioned increase in raw material costs, which will have eventually have impact on the company's business performance. However, because the company has policies for setting product prices in line with costs added to the company's gross profit, the company is constantly checking the prices of raw materials, especially raw materials with highly fluctuating prices in order to be able to estimate production costs accurately and as near to real costs as possible so product prices can be set properly. Moreover, the fact that the company's executives have over 30 years of experience in the industry and good relationships with raw material suppliers enables the company to have reliable estimates for raw material price trends.

3 Risks from Foreign Exchange Rates

The company imports raw materials from foreign countries and exports products for distribution to foreign countries. In 2016, the company had revenue from the sales in foreign currency equal to 109.79 million baht, which was 21.40 % of all sales revenue. At the same time, the company has also ordered the purchases of raw materials from foreign countries equal to 155.38 million baht, which must be paid in foreign currencies, thereby enabling the company to partially reduce risks from exchange rate fluctuations with natural hedges. However, the company realizes the importance of preventing the aforementioned risks. The company's Finance & Accounting Department will closely monitor the news and movements of exchange rates and the company will consider preventing risks by using forward contracts according to situations and necessity. Moreover, in the sales of transformers to foreign customers, the Sales Department will calculate transformer prices by using mark-ups for foreign exchange rates to cover the costs of risks and fluctuations, which will help minimize risks from fluctuations of exchange rates to a certain degree.



Shareholder Structure

The Company's Top Ten Major Shareholders, as of 26 December 2016, which is the book closing date, is described below:

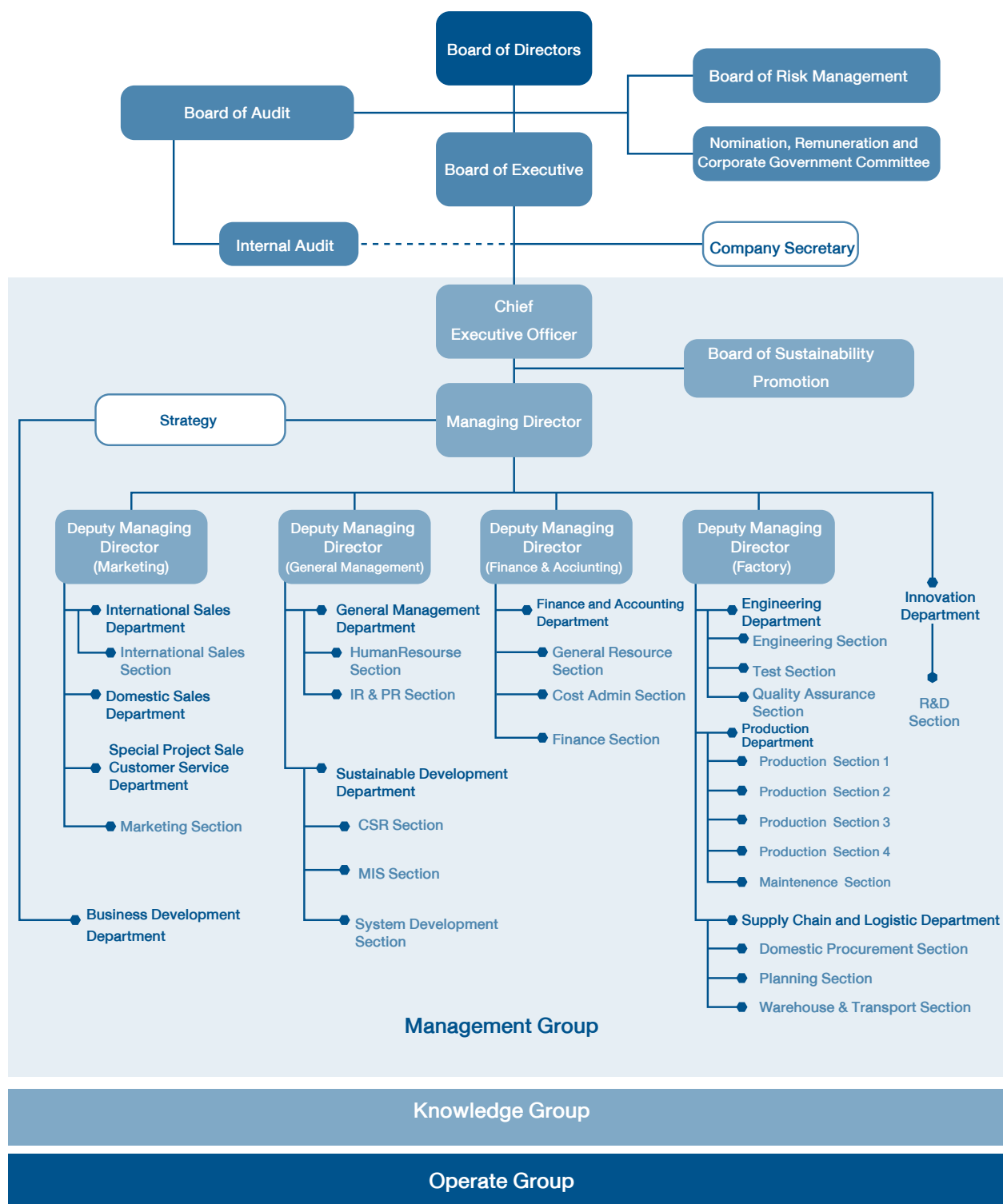
Top Ten Major Shareholders as of 26 December 2016			
No.	Shareholder	Number of Shares (Shares)	Shareholder Ratio (%)
1	1.1 Mr Sathit limpongpan	85,000,000	31.48
	1.2 Mr.Chanthanome Phommany	42,500,000	15.74
	1.3 Mr.Thatnakhone Thammavong	42,500,000	15.74
	A Group of Investor have Shares totally	170,000,000	62.96
2	Tantanasin Group		
	2.1 Miss Sasikarn Tantanasin	22,000,000	8.15
	2.2 Mr. Patcharapong Tantanasin	716,000	0.27
	2.3 Mrs. Alisara Charuenvanich	602,600	0.22
	2.4 Mr. Poonphiphat Tantanasin	598,600	0.22
	Tantanasin Group have shares totally	23,917,200	8.86
3	Mr. Wichan Vachirapong	12,603,800	4.67
4	Thai NVDR Co., Ltd.	11,410,700	4.23
5	Mr.Navapon Suanjaiyai	6,250,000	2.31
6	Mr. Songpol Chohnayothin	5,021,900	1.86
7	Miss. Wannee Boonyasiriwat	2,473,300	0.92
8	Mr. Visanu Prasattongsoth	2,149,600	0.80
9	Mr. Sayam Suwatnagkool	2,000,000	0.74
10	Mr. Chaiwit Arunneatthong	2,000,000	0.74
	Other Shareholders	32,173,500	11.92
	Total	270,000,000	100.00

Dividend Payment Policy

The company has policy for payment of annual dividends at no less than fifty percent of the net profit after deduction of juristic person income taxes and allocation of reserve funds in compliance with the law. However, the company may consider dividend payments differing from the set policy, depending upon business performance, financial liquidity, economic conditions and necessity to use current capital in order to manage operations and expand the company's business.

Management Infrastructure

1. Management Structure



The organizational structure of the company's Board of Directors consists of 5 series include the Board of Directors, the Executive Committee, the Audit Committee, the Nomination Committee. Compensation and corporate governance Committee and the risk management committee, with the names of members and scope of authority as follows:

1.1 Board of Directors

The company's board of directors consists of the following seven directors:

First-Last Name	Position
1. Mr. Krirk-Krai Jirapaet	Chairman and Independent Director
2. Mr. Nattapol Lilawattananan	Independent Director and Chairman of the Audit Committee Director
3. Mr. Polrachot Piyathanom	Independent Director and Audit Director
4. Mrs. Wasara Chotithammarat	Independent Director and Audit Director
5. Dr. Kamol Takabut	Independent Director
6. Mr. Poonphiphat Tantanasin	Director
7. Mr. Ruangchai Kritsnakriengkrai	Director

Miss Boonpa Ruddist is the corporate secretary appointed by the 1/2554 meeting of the board of directors on 24 February 2011.

Signatory Directors Authorized to Sign and Obligate the Company

Mr. Poonphiphat Tantanasin has signatory authority with Mr. Ruangchai Kritsnakriengkrai or Dr. Kamol Takabut and affixes the company seal.

Board of Directors Scope of Authority and Duties

1. The board of directors has the authority, duty and responsibility of managing the company according to the company's bylaws, objectives and regulations, including legal resolutions by the meeting of shareholders with integrity and must maintain the company's interests.
2. The board of directors must arrange a general shareholder's meeting within four months from the end of the company's accounting cycle.
3. The board of directors must arrange a meeting of the company's board of directors at least every three months.
4. The board of directors must arrange credible systems for accounting, financial reports and auditing, including efficient and effective systems for internal control, internal auditing and risk management.
5. The board of directors must arrange the company's balance sheets and profit-loss statements at the end of the company's accounting cycle, which must be audited by an auditor and presented to the meeting of shareholders for consideration and approval.
6. The board of directors must set the company's goals, guidelines, policies, business plans and budgets along with monitoring and supervision, so the administration and management of executives concurs with work planning policies and setting budgets with efficiency and effectiveness.

Furthermore, the scope of the board of directors' duties includes direction for the company to comply with laws on securities and securities exchanges, announcements of the Capital Market Supervisory Board, specifications of the Stock Exchange of Thailand such as engaging in connected transactions, acquisitions or sales of significant properties, or laws associated with the company's businesses.

7. The board of directors must consider reviews, audits and approvals of plans by the executives for business expansion, large investment projects, including participation in investments with other business operators proposed by the executives.
8. The board of directors must continually monitor performance for concurrence with plans and budgets.
9. The board of directors must consider designating executive structures with authority to appoint the Executive Board of Directors, Managing Directors and other sub-committees as deemed fitting, such as the Audit Committee, the Recruitment Committee, the Remuneration Committee, etc., including the setting of the scopes of authority and duties of the Executive Board of Directors, Managing Directors and various appointed sub-committees.

Authorizations according to designated scopes of authority and duty with no characteristics of allowing the aforementioned Executive Board of Directors, Managing Directors and various sub-committees to be able to consider and approve transactions with potential conflicts of interest or conflicts of any other interests with the company or its subsidiaries (if any), except for approval of transactions in line with policies and criteria considered and approved by the board of directors.

10. The board of directors may authorize a director, several directors, or any other persons to perform any actions on behalf of the board of directors under the control of the board of directors, or the board of directors may authorize the aforementioned persons to have authority as deemed necessary by the board of directors within the period of time the board of directors deems fitting. The board of directors may cancel, withdraw, change or revise authorizations as deemed necessary.

Authorizations must not have characteristics of allowing the aforementioned persons to consider and approve of transactions in which they or other persons with potential conflicts of interests as stakeholders or other potential conflicts of interest with the company or its subsidiaries (if any), except for approval of routine business transaction according to normal trade conditions or according to policies and criteria considered and approved by the board of directors under criteria, conditions and designated methods concerned with connected/related transactions and acquisition or distribution transaction of key properties of registered companies according to announcements by the Capital Market Supervisory Board and/or the Stock Exchange of Thailand and/or any other announcements by related agencies.

1.2 Executive Board of Directors

The company's Executive Board of Directors comprises the following Four directors:

First-Last Name		Position
1.	Mr.Poonphiphat Tantanasin	Chief Executive Officer
2.	Mr. Ruangchai Kritsnakriengkrai	Executive Director
3.	Miss Boonpa Ruddist	Executive Director
4.	Miss Chotika Chumpoon	Executive Director

Remarks: Mr. Siripong Boontam has resigned from Director and Executive Director on 7 September 2016

Miss Boonpa Ruddist is the secretary of the Executive Board of Directors appointed by the 1/2554 meeting of the board of directors on 24 February 2011.

Scope of Authority and Duties of the Executive Board of Directors

1. Proposal of goals, policies, business plans, including the company's business strategies and annual budgets for consideration of approval by the company's board of directors.
2. The executive board of directors must supervise compliance of the company's businesses with policies, work plans and budgets approved by the company's board of directors.
3. Consideration of approval of the company's regular business transactions, such as investments to purchase machinery and other properties in line with investments or budgets approved by the company's board of directors, purchases of raw materials into warehouses, sales of goods, etc. The balances for each transaction must be made under authority with the approval of the company's board of directors.
4. Establish corporate structure, authority to administrate the corporation and consider adjusting the salaries and bonuses of employees at levels lower than departmental managers, including consideration of approval of labor rates not included in annual budgets.
5. The executive board of directors has the authority to appoint or employ consultants associated with corporate administration for maximum efficiency.
6. The executive board of directors must consider the company's profits and losses and propose interim dividend payments or annual dividends for approval from the company's board of directors.
7. The executive board of directors has the authority to authorize any person or persons to operate under the control of the executive board of directors or authorize the aforementioned person or persons to have authority as deemed fitting by the executive board of directors within a period of time deemed fitting by the executive board of directors. The executive board of directors may cancel, withdraw, change, or revise authorized persons or authorizations as deemed necessary.
8. Perform other duties assigned by the company's board of directors.

Authorizations of authority, duties and responsibilities by the executive board of directors must not be characteristic of authorizations or temporary authorizations enabling the person or persons authorized by the executive board of directors to approve of transactions in which that person or other persons have potential conflicts of interest (according to the definitions set forth in the announcements of the Capital Market Supervisory Board and/or the Stock Exchange of Thailand and/or related agencies) as stakeholders or with any other conflicts of interest with the company or its subsidiaries and/or related companies. The executive board of directors does not have the authority to approve of actions regarding the aforementioned issues. The aforementioned issues must be presented to the meeting of the board of directors and/or the meeting of shareholders (depending upon the case) for approval, except for approval of transactions under normal business and trade conditions according to the announcements of the Capital Market Supervisory Board and/or the Stock Exchange of Thailand and/or related agencies.

1.3 Board of Audit

The entire Board of Audit is composed of three independent directors who possess knowledge, ability, experience and qualifications in line with the SET's regulations. The Board is composed of non-executive directors with office terms of three years each.

First-Last Name	Position
1. Mr. Nattapol Lilawattananan*	Chairman of the Board of Audit
2. Mr. Polrachot Piyathanom*	Audit Director
3. Mrs. Wasara Chotithammarat*	Audit Director

Remarks: * A director with sufficient knowledge and experience for reviewing the credibility financial statements.

Miss Pavinee khungeakkavin is the Internal Auditor and Secretary of the Board of Audit.

Scope of Duties and Responsibilities for the Board of Audit

- To review the accuracy and sufficiency of the company's financial reports.
- To review the suitability and effectiveness of the company's internal control systems and internal audits, and to consider the independency of the internal audit agency, and to approve consideration of the appointment, transfer, termination of the head of internal audit or any other agencies responsible for internal audits.
- To audit the company's compliance with the laws governing securities and exchange markets, the specifications set forth by the Stock Exchange of Thailand and the laws related to the company business.
- To consider, select and propose the appointment of independent individuals in order to serve as the company's auditors, to propose remuneration for the aforementioned persons, and to attend meetings with the auditors without the management at least once a year.
- To consider related transactions or transactions with potential conflicts of interest for compliance with the laws and regulations of the stock market in order to ensure that the aforementioned transactions are reasonable and in the company's optimal interests.
- To prepare Board of Audit reports for dissemination in the company's annual report. The aforementioned reports must be signed by the chairman of the Board of Audit and must contain the following minimum information:
 - Opinions on the accuracy, completeness and credibility of the company's financial report.
 - Opinions on sufficiency of the company's internal control system.
 - Opinions on legal compliance on securities and exchange, and securities market regulations or laws related to the company's business.
 - Opinions on auditor's suitability.
 - Opinion on potential conflict of interest transactions.
 - Number of Board of Audit's meetings and meeting attendance by each audit director.
 - Overall opinion or observation rendered by Board of Audit receives on execution of duty in line with charter.
 - Other transactions that should be known by shareholders and general investors with the scope of the duties and responsibilities set forth by the board of directors.
- Any other operations assigned by the board of directors with the Board of Audit's approval.

1.4 Nomination, Remuneration and Corporate Governance Committee

First-Last Name		Position
1.	Mr. Polrachot Piyathanom	Chairman of the Nomination, Remuneration and Corporate Governance Committee.
2.	Dr. Kamol Takabut	Director
3.	Mr. Poonhipat Tantanasin	Director

Miss Boonpa Ruddist serves as the Secretary of the Nomination, Remuneration and Corporate Governance Committee.

The Nomination, Remuneration and Corporate Governance Committee serves for three years per term.

Scope, Authority, Duties and Responsibilities of the Nomination, Remuneration and Corporate Governance Committee

Designates criteria and policy for recruiting company directors, sub-directors and high-ranking executives by considering the suitability of numbers, structures and composition of the Board of Directors along with designating director qualifications for presentation to the company's Board of Directors and/or the general meeting of shareholders to request approval, depending on the case.

Executive Recruitment and Appointment

1. Sets criteria and policy for recruiting company directors, sub-directors and high-ranking executives by considering the suitability of numbers, structures and composition of the Board of Directors along with setting director qualifications for presentation to the company's Board of Directors.
2. Considers recruitment, selection and currently qualified persons to the positions of directors whose terms are complete and/or in cases of vacant positions and/or additional appointments.
3. Considers and screens persons qualified for becoming Managing Directors to fill vacant positions, including the specification of succession plans for high-ranking executives.
4. Any other operations involved with recruitment according to assignments by the company's Board of Directors.
5. Assesses the performance of the Chief Executive Officer (CEO) for presentation to the meeting of the company's Board of Directors for consideration of approval.

Remuneration

1. Sets policies and criteria for paying remuneration to the company's Board of Directors, the Audit Committee, the Executive Committee and high-ranking executives by presenting to the company's Board of Directors.
2. Specifies necessary and appropriate amounts of annual monetary and non-monetary remuneration for the company's Board of Directors, the Audit Committee, the Recruitment, Remuneration and Good Governance Committee and the Executive Committee by considering amounts commensurate with duties, responsibilities, performance, comparisons with other companies in similar businesses and benefits expected from directors to present to the company's Board of Directors for consideration and present to the meeting of shareholders in order to request approval, depending on the case.
3. Considers the review of policies and criteria in setting remuneration and remuneration payment systems as deemed commensurate with duties and responsibilities in addition to reviewing concurrence with the company's performance and market conditions by primarily considering future benefits for the company.
4. Reports on policies and principles/reasons for remuneration set for directors and executives according to the specifications of the Stock Exchange of Thailand by disclosing in the annual information disclosure form (56-1) and the company's annual report (56-2).

5. Sets annual bonus and salary raise rates based on the company's performance.
6. Considers filtering the company's salary structures and other benefits and returns.
7. Performs any other relevant actions as assigned by the company's Board of Directors. The Administrative Department and various agencies are required to report or present information and relevant documents to the Recruitment, Remuneration and Good Governance Committee to support the Recruitment, Remuneration and Good Governance Committee in successfully operating according to assigned duties.

Corporate Governance

1. Considers reviews and presentations for the company's Board of Directors to approve of policies concerning good governance, business ethics, corporate social and environmental responsibility with sustainable development of the company and any other policies or practice guidelines promoting the company's sustainable growth.
2. Ensures that the Administrative Department implements various policies/practice guidelines in 1 for ongoing company development. The aforementioned policies and guidelines must be in line with and appropriate for the company's business, recommendations of associated agencies and comparable to international standards.
3. Follow-up and review various work systems in the organization for concurrence with good ethics and practice guidelines according to outlined policies and practice guidelines.
4. Supervise the company's operations according to good governance principles of agencies with regulatory authority in compliance with the law such as the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand, etc.
5. Report the organization's performance in line with corporate governance policies and other related policies to report to the company's Board of Directors and external organizations as appropriate.

1.5 The Board of Risk Management

First-Last Name		Position
1.	Mr. Poonphiphat Tantanasin	Chairman of The Board of Risk Management
2.	Mr. Ruangchai Krissanakriangkrai	Director
3.	Miss Boonpa Ruddist	Director
4.	Mr. Charoensak Sarawong	Director
5.	Mr. Chanvut Meeploi	Director
6.	Mr. Wichai Promsirisuk	Director
7.	Miss Suanya Phummanulap	Director
8.	Mr. Nipat Chingchamikorn	Director
9.	Miss Sureeporn Mitdhammana	Director
10.	Miss Sasikarn Tantanasin	Director
11.	Miss Chotika Chumpoon	Director & Secretary

Scope and Responsibilities of the Board of Risk Management

1. To set overall risk management policy and guidelines covering various types of important risks such as financial risks, exchange rate risks, marketing risks and other risks potentially affecting the company's operations and reputation for presentation to the board of directors for approval.

2. To perform assessment and analysis on potential risk factors including the setting of risk measuring criteria and acceptable risk ceiling.
3. To establish processes for managing, assessing, controlling and monitoring risks; to develop processes in to achieve optimum efficiency and suitability in managing all types of potential risks.
4. To regularly report to the board of directors on the management, operations and corporate risk status and changes as well as areas for improvement or correction and notify the Board of Audit to review the sufficiency and suitability of risk management.
5. Manages and controls overall corporate risk management for concurrence with good governance principles.
6. Reviews the sufficiency of policy and risk management systems as well as effectiveness of the system and compliance with set policy.
7. Arranges for a risk management team as necessary.
8. Executes duties as assigned by the board of directors.
9. The board of risk management holds meetings at least once every three months, and reports to the Board of Audit and the board of directors for awareness every quarter.

QTC recognize the importance of good corporate management in driving the organization toward stable growth and business expansion, steady financial status and earning apposite dividends for shareholders. Thus, the company has deemed it fitting to employ risk management practices with operational frameworks and risk management processes compliant with the standards of the Committee on Sponsoring Organizations of the Tread way Commission (COSO), which is an international standard, in order ensure that the people involved have understanding and proper application of risk management principles.

The Risk Management Committee specified the following corporate risk management policies:

1. Risk management is the responsibility of employees at all levels who are required to take into consideration the operational risks existing in their respective agencies and organization as well as prioritize risk management on appropriate and proper levels.
2. All departments are to be responsible for risk assessment; determining risk indicators, preventive guidelines and mitigation or prevention mitigation of potential risks, including regular monitoring and evaluation of risk management. Furthermore, all departments are required to make risk reports according to the operational framework and procedures for risk management.
3. Risk management procedures must be secondary to the decision-making, strategy planning, work plans and operations of the company.
4. When employees witness or become aware of risks with potential Impact on the company, the employee is required to immediately report the aforementioned risks to the persons involved for further risk mitigation.
5. Constantly promote and provide knowledge and understanding about risk management procedures and guidelines for executives and employees in order to emphasize the importance of awareness and participating in the organization's risk management as part of a culture leading to value creation.

1.6 Executives

The company has a total of eleven executives as follows:

First-Last Name	Position
1. Mr. Poonphiphat Tantanasin	Chief Executive Officer & Managing Director
2. Mr. Ruangchai Krissanakriangkrai	Managing Director
3. Miss Boonpa Ruddist	Deputy Managing Director(General Management)
4. Miss Chotika Chumpon	Deputy Managing Director (Finance & Accounting)
5. Mr. Charoensak Sarawong	Deputy Managing Director (Factory)
6. Mr. Chanvut Meeploi	Senior Manager, Engineering Department
7. Mr. Wichai Promsirisuk	Manager, Supply Chain and Logistics Department
8. Miss Suanya Phummanulap	Manager, Domestic Sales Department
9. Mr. Nipat Chingchamikorn	Manager, Special Project Sale Customer and Service Department
10. Miss Sureeporn Mitdhammana	Manager, Sustainable Development Department
11. Miss Sasikarn Tantanasin	Manager, Business Development Department

Scope of Authority and Duties of the Managing Director

1. Supervise business operations and/or administrate the company's daily work.
2. Carry out or administrate work in line with policies, work plans and budgets approved by the board of directors and/or the executive board of directors.
3. Set the company's policies, business plans, business strategies and annual budgets for presentation to the executive board of directors and request approval from the company's board of directors.
4. Consider approval of the company's regular business transactions, such as investments to purchase machinery and other assets in line with investment budgets or budgets approved by the company's board of directors, purchases of raw materials into warehouses and distribution of products, etc. The balance for each item must be approved by the authority of the company's board of directors.
5. The Managing Director has the authority to approve rates for labor, employment and filling employee positions, appointment and transfers of employees at levels lower than departmental managers as approved by the company's board of directors, including the consideration of duties and responsibilities of each unit and position.
6. Continually monitor and evaluate the company's performance. The Managing Director also has the duty of reporting on performance and management, including work progress, to the Executive Board of Directors, the Audit Committee and the company's board of directors.
7. Consider approval of entry into agreements regarding the company's regular business. The balance for each transaction must be in line with authorization already approved by the company's board of directors.
8. Issue orders, regulations, announcement sand various records for the company's performance in line with policies in the interests of the company, including the maintenance of discipline in the corporation.
9. The Managing Director has the authority to appoint committees or various working groups for benefits, efficiency and transparency in management. The Managing Director has the authority to authorize any person or persons to operate under the control of the Managing Director and the Managing director may authorize the aforementioned person or persons to have authority as deemed fitting by the Managing Director. The Managing Director may cancel, terminate, change, or amend persons who have been granted authority, or the granting of said authority, as the Managing Director deems it fitting to do so.
10. Perform other duties as assigned by the executive board of directors or the board of directors.

On any issues where the Managing Director, persons authorized by the Managing Director, or persons with potential conflicts of interest (according to the definitions set forth in the announcements of the Capital Market

Supervisory Board and/or the Stock Exchange of Thailand and/or related agencies) as stakeholders or other conflicts of interest with the company and/or its subsidiaries and/or affiliated companies, the Managing Director has no authority to approve of the aforementioned issues. The aforementioned issues must be presented to the meeting of the company's board of directors and/or the meeting of shareholders (depending upon the case) in order to request approval, except for approvals of transactions in accordance with the company's regular business and trade conditions as set forth in the announcements of the Capital Market Supervisory Board and/or the Stock Exchange of Thailand and/or related agencies.

The Chief Executive Officer is under obligation to perform the following:

1. Serve as Chairman at meetings of the company's Board of Directors.
2. Call the meeting of the company's Board of Directors.
3. Cast the deciding vote in cases where the meeting of the company's Board of Directors has voted and found the vote to be tied.
4. Serve as the Chairman at shareholders' meetings.

Setting Authority to Approve of Financial Amounts

The company has set authority for the approval of financial amounts for the company's regular business transactions, which can be summarized as follows:

	Department Managers	Deputy Managing Director	Managing Director	Executive Board of Directors	Board of Directors
(1) Investments from investment budgets (per project).	-	No more than 2 million baht	No more than 3 million baht	No more than 20 million baht	more than 20 million baht
(2) Investments outside of budget plans.	-	-	-	No more than 5 million baht	more than 5 million baht
(3) Expenses associated with assets: - Purchases of machinery according to investment budgets. - Purchases of other assets.	- -	No more than 2 million baht No more than 2 million baht	No more than 3 million baht No more than 3 million baht	No more than 24 million baht No more than 24 million baht	more than 24 million baht more than 24 million baht
(4) Sale of products by setting prices according to price policies (Price List).	No more than 5 million baht	-	No more than 10 million baht	No more than 50 million baht	
(5) Sale of products by setting prices lower than price policies (Price List) ¹	No more than 10%	-	No more than 15%	> 15%	
(6) Requests to purchase raw materials into warehouses for production ²	No more than 1 million baht	No more than 5 million baht	No more than 10 million baht	> 10 million baht	
(7) Requests to purchase machinery/instruments/buildings and facilities ³	No more than 200,000 baht	No more than 2 million baht	No more than 3 million baht	> 3 ล้านบาท	

Remarks:

1. Considerations for approval of product sales at prices lower than price lists must also include consideration of sales values apart from proceeding as authorized in (5) by requesting approval from authorized persons in line with the sales values set forth in (4).
2. The company has considered granting the executive board of directors the authority to approve of requests to purchase raw materials for production into warehouses without financial limitations, because the main raw materials which need to be ordered, e.g. silicon and copper foil, are raw materials with few producers and sales prices referenced to prices on the global market which is constantly changing. Therefore, considerations of each purchase order will be made in terms of need for raw materials, including trends in the fluctuating prices of main raw materials, which rely on flexibility and speed in the process. In practice, however, the company reports the aforementioned issue to the company's board of directors in board of directors meetings.
3. Investments to purchase machinery must concur with investment structures approved by the company's board of directors. In terms of procedures, the party to purchase the assets must request approval to purchase assets as authorized in (3). The authority in (7) involves signing for approval of purchase requests.

2. Self – Evaluation of the Board of Directors

The board of directors requires the evaluation on the operation of the board of directors annually at least 1 time per year to perceive problems and threats during the last year and improve the efficiency of operation of Board of Directors because they can perceive their responsibilities and duties explicitly. In addition to improve the relationship between Board of Directors and Management Team as well as improve direction of problem solving to meet with good corporate governance. Assessment criteria has the following details: Performance, policies, correctional guidelines in cases where operations did not occur according to specifications, preparations before attending meetings, practices concerning the governance of the company's business, performance of duties as the Chairman and risk management monitoring, etc. The results of the assessment, the Commission analyzed statistical data. And the outcome of the evaluation of the Company's Board of Directors in order to contribute to the implementation of the next administration. And in 2016, the Company assessed the performance of every sub-committee, namely, the Audit Committee, the Recruitment, Remuneration and Corporate Governance Committee and the Risk Management Committee with the following assessment criteria: 1. Suitable sub-committee structure and qualifications resulting in effective work; 2. Effective sub-committee meeting performance and 3. Roles, duties and responsibilities of sub-committees.

Managing Directors' Performance Evaluation

The company's board of directors has scheduled annual evaluations of the performance of directors. The company adapted its evaluation form based on a sample self-evaluation form for directors of the Stock Exchange of Thailand as deemed fitting and concurrent with the organization's goals and strategic plans. The assessment criteria are divided into the following topics: 1. Leadership; 2. Setting Strategy; 3. Strategy Performance; 4. Planning and Financial Performance; 5. Relationship with the Board of Directors; 6. External Relationships; 7. Management and Personnel Relationships; 8. Handing Over Positions; 9. Product and Service Knowledge; 10. Personal Qualities. The scores of the board of directors' self-evaluation were submitted to statistical data analysis for the purpose of improvement and development of various and different aspects as well as the consideration of setting remuneration rates and commensurate incentives.

3. Board of Directors Structure and Components

The company's board of directors allocated for a suitable number of directors based on its business size. At present, there are seven directors; two are executive directors and five are non-executive directors. All five non-executive directors are independent directors. All independent directors are independent from Management and major shareholders of the company.

Independent directors account to 71 percent of the entire board of directors.

- | | |
|-------------------|----------------|
| 1. Mr. Krirk-Krai | Jirapaet |
| 2. Mr. Natthaphon | Lilawatthanun |
| 3. Mr. Pholrach | Piathanom |
| 4. Dr. Kamol | Takabut |
| 5. Mrs. Wasara | Chotithammarat |

The definition of its independent directors

The company has determined the definition of its independent directors as the director who is non-executive director and do not involve in the management permanently, and is not the company's major shareholder. The company has specified requirements equal to the minimum requirements set by the SEC and the SET. Nominated independent directors of the company are fully qualified according to the definitions as below:

- (1) Holding share of no more than 1 percent of the total voting shares of the company, parent company, subsidiary company, related company or juristic person of person who might have conflict of interest by including the shares held by the related persons
- (2) Not a director or used to be a director who has a managing role, an employee, officer or consultant who receives the salary or authorized person of the company who has the influence on parent company, subsidiary company, related company, subsidiary company at the same level or juristic person who might have a conflict of interest

unless such person has been released from such status not less than 2 years before the application is submitted to Securities and Exchange Commission Thailand

- (3) Not a person who is related by blood or by legal registration as father, mother, spouse, siblings and child including the spouse of the child of the managing executive, major shareholders, authorized controlling persons or those nominated to be managing executives or authorized controlling persons of the company or subsidiary company
- (4) Does not have or used to have the business relationship with the company, parent company, subsidiary company, related company or juristic person who might have the conflict of interest in the way that might obstruct independent decision making. The person is not or used to be a major shareholder, director who is not an independent director, or managing executive of those who have business relationship with the company, parent company, subsidiary company, related company or juristic person who might have a conflict of interest unless such person has been released from such status not less than 2 years before the application is submitted to Securities and Exchange Commission Thailand
- (5) Is not or used to be the auditor of the company, subsidiary company, related company, or juristic person who might have a conflict of interest and not a major shareholders, director who is not an independent director, managing executive or audit partner of the company, parent company, subsidiary company, related company or juristic person who might have conflict of interest unless such person has been released from the status not less than 2 years before the application is submitted to Securities and Exchange Commission Thailand
- (6) Is not or used to be professional service provider including legal consultant or financial consultant who receives the service fee more than 2 million baht per year from the company, parent company, subsidiary, related company or juristic person who might have a conflict of interest. In the case where the professional is a juristic person, this shall include major shareholders, director who are not an independent director, managing executive or managing executive partner of the service providing entity unless such person is no longer in the status for at least 2 years before the application is submitted to Securities and Exchange Commission Thailand
- (7) Is not the appointed director who represents the directors of the company, major shareholders or the shareholders who are related to the major shareholders
- (8) Does not possess any characters that prevent giving an independent opinion on the operation of the business
- (9) Do not engage in the same business and competing with the company or its affiliates. Do not hold significant portion of shares in the limited partnership, or be a management director, employee, officer, consultant who earned permanent salary, or hold more than half of voting shares in other companies that engage in the same business and competing significantly with the company or its affiliates.

The Board of Directors does not have independent directors holding positions as directors in more than five registered companies and none of the directors or high-ranking executives are employees or partners in outside auditing companies whose services were commissioned by the Company during the past two years.

4 Appointment of Directors and High-Ranking Executives

The company's plan is to appoint directors and high-ranking executives appropriately and transparently to ensure that the company has directors and high-ranking executives who are professionals capable of independent management from major shareholders or other shareholders. The Recruitment Committee determines remunerations and corporate governance, and is responsible for appointing suitable people into selection according to specified selection methods, the criteria and selection method of which is dependent upon the propriety of the company's situation during which time.

5 Director and Executive Development

- 5.1 The company's board of directors has policy for promoting and facilitating training and education the people involved in directing and managing the company's business, which includes the company's directors, auditing directors, executives and secretaries to ensure that operations are constantly improving, which includes organizations such as the Thai Institute of Directors Association (IOD).
- 5.2 The company has prepared documents and information beneficial to the performance of new directors to accompany business study manuals and practice guidelines of the company to new directors.

5.3 The company has plans to ensure that selection of people who undertake responsibilities in any important executive position is fitting and transparent for the purpose of ensuring that the company has professional executives capable of independent management from major shareholders or other shareholders. The company's board of directors makes considerations and reviews the aforementioned plans annually. Executives appointed to succeed the aforementioned positions will be provided with an individual development plan to prepare them for future promotions.

6 Board of Directors Meetings

As a means of supporting and promote the company, the board of directors is to attend every company board of directors' meeting, for which the company scheduled meetings in advanced every year in order to notify the board of directors in each meeting. Clear meeting agendas are set whether they are memoranda or agendas for consideration. Documents completely accompany meetings in sufficient numbers of decision-making and are delivered to the board of directors at least seven days in advance in order to ensure that every member of the board of directors has the ability to discuss and express opinions transparently. The chairman of the board will evaluate comments and summaries obtained from the meeting. Meeting reports are created by the company's secretaries, and after approved by the meeting, are stored in document cabinets on the second floor of the company's main office in Bangkok, where documents can be verified and audited by directors and other people involved. Finally, the company has set policy concerning the quorum for meetings of the board of directors in which at least half of the all directors must be present in order to form a meeting quorum and Directors and related parties are auditable. The Company has set policy on the quorum of a meeting of the Board of Directors requiring no less than half of all directors in attendance to have a meeting quorum. Moreover, the minimum quorum when the Board of Directors passes meeting resolutions must be no less than two-thirds of the directors.

The attendance details of each director for 2016 are summarized as follows:

First-Last Name	Position	Meeting Attendance/All Meetings (Times)		
		Company Director	Auditing Director	Nomination Director
1. Prof.Dr. Somchop Chaiyavej	Chairman of the Board	3/3	-	-
2. Mr. Padetpai Meekun-iam	Chairman of the Board of the Auditing Committee/Director	6/6	3/3	-
3. Mr. Nattharphon Lilawatthanun	Director/Auditing Director	9/11	4/5	
4. Mr. Pholrach Piathanom	Chairman of the Nomination, Remuneration and Corporate Governance Committee / Auditing Director	11/11	4/5	4/4
5. Mr. Nakorn Pharaprasert*	Director/the Nomination, Remuneration and Corporate Governance Director	2/2	-	2/2
6. Mr. Poonphiphat Tantanasin	Director/the Nomination, Remuneration and Corporate Governance Director	11/11	-	4/4
7. Mr. Siripong Boontam*	Director	5/6	-	-
8. Mr. Krirk-Krai Jirapaet	Chairman of the Board	6/6	-	-
9. Dr. Kamol Takabut	Director/the Nomination, Remuneration and Corporate Governance Director	9/9	-	2/2
10. Mrs. Wasara Chotithammarat	Director/Auditing Director	4/4	2/2	-
11. Mr. Ruangchai Kritsnakriengkrai	Director	4/4	-	-

- Remarks: *
1. Assoc. Prof. Somchob Chaiyavej resigned from the positions of Chairman of the Board and director on 3 May 2016.
 2. Mr. Nakorn Phrprasert's term as director ended on 31 March 2016.
 3. Mr. Padetpai Meekhun-iam resigned from the positions of director and Chairman of the Audit Committee on 8 September 2016.
 4. Mr. Siripong Boontam resigned from the positions of director and Deputy Managing Director on 7 September 2016.
- **
1. Mr. Krirk-krai Jirapaet took over the positions of Chairman of the Board and director in place of Assoc. Prof. Somchob Chaiyavej on 22 June 2016.
 2. Dr. Kamol Takabut took over the position of director in place of Mr. Nakorn who vacated office according to term on 31 March 2016.
 3. Mrs. Wasara Chotithammarat took over the position of director in place of Mr. Padetpai Meekhun-iam on 13 September 2016.
 4. Mr. Ruangchai Kritsnakriengkrai took over the position of director in place of Mr. Siripong Boontam on 13 September 2016.

7 Term of Office

The company's board of directors is composed of skilled and knowledgeable people. The company has made arrangements as compatible with the size of its business. At present, the company has a total of seven directors; two are executive directors and five are non-executive and independent directors for a number over 70 percent of the entire board of directors. The descriptions of the positions held by individual directors are as follows:

First-Last Name	Year of Appointment	Most Recent Date of Selection	Type of Director	Recruited/ Appointed to Directorship in 2015	Next Appointment
1. Prof.Dr. Somchop Chaiyavej*	2011	2015	Chairman of the Board/ Independent Director	No	-
2. Mr. Padetpai Meekun-iam*	2011	2013	Independent Director	Yes	-
3. Mr. Nattharphon Lilawatthananon	2011	2015	Independent Director	No	2018
4. Mr. Pholrach Piathanom	2011	2014	Independent Director	No	2017
5. Mr.Nakorn Pharaprasert*	2011	2013	Independent Director	No	-
6. Mr. Poonphiphat Tantanasin	2011	2014	Executive Director	No	2017
7. Mr. Siripong Boontam*	2011	2015	Executive Director	No	-
8. Mr. Krirk-Krai Jirapaet**	2016	-	Independent Director	Yes	2018
9. Dr. Kamol Takabut**	2016	2016	Independent Director	Yes	2019
10. Mrs. Wasara Chotithammarat**	2016	-	Independent Director	Yes	2019
11. Mr. Ruangchai Kritsnakriengkrai**	2016	-	Executive Director	Yes	2018

Remarks: All five independent directors hold the position of independent director beginning from the year of appointment for a term of five years.

- *
1. Assoc. Prof. Somchob Chaiyavej resigned from the positions of Chairman of the Board and director on 3 May 2016.
 2. Mr. Nakorn Phrprasert's term as director ended on 31 March 2016.
 3. Mr. Padetpai Meekhun-iam resigned from the positions of director and Chairman of the Audit Committee on 8 September 2016.
 4. Mr. Siripong Boontam resigned from the positions of director and Deputy Managing Director on 7 September 2016.

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1. Mr. Krirk-krai Jirapaet took over the positions of Chairman of the Board and director in place of Assoc. Prof. Somchob Chaiyavej on 22 June 2016.
 2. Dr. Kamol Takabut took over the position of director in place of Mr. Nakorn who vacated office according to term on 31 March 2016.
 3. Mrs. Wasara Chotithammarat took over the position of director in place of Mr. Padetpai Meekhun-iam on 13 September 2016.
 4. Mr. Ruangchai Kritsnakriengkrai took over the position of director in place of Mr. Siripong Boontam on 13 September 2016.

The procedures for nominating directors to fill vacant positions from directors vacating office according to term as follows:

1. The company gives opportunities for shareholders to nominate persons for appointment as company directors through the company's website in line with the specifications of the SEC and the Stock Exchange of Thailand. However, it appeared that no minor shareholders submitted names for appointment as directors.
2. Inquiries are made into the willingness of independent directors vacating position according to term and the intentions of major shareholders are asked in order to nominate directors to replace directors vacating office according to term.
3. The Nomination, Remuneration and Corporate Government Committee makes screening considerations before making proposals to the Board of Directors for consideration to further propose to a meeting of shareholders to consider appointing directors based on qualifications of directors as specified by relevant laws, company regulations and the charter of the Board of Directors.

8. Corporate Secretary

As a means of building knowledge about the work of the corporate secretary and to enable efficient performance of the corporate secretary's duties, the company has stipulated that the corporate secretary be required to pass various training courses such as basic legal courses and courses on criteria associated with listed companies, courses for corporate secretaries and attendance at various seminars held by the Stock Exchange of Thailand and the Thai Institute of Directors (IOD).

In Board of Directors Meeting No. 1/2554 on 24 February 2011, the company's board of directors passed a resolution for the appointment of Boonpa Ruddist, a person possessing knowledge and ability who has passed training courses in relation to the performance of the duties of company secretaries, to serve as the Corporate Secretary in compliance with Section 89/15 of the Securities and Exchange Act of B.E. 2535 (1992), revised with the Securities Exchange Commission Act (No.4) of B.E. 2551 (2008). The duties and responsibilities of the Corporate Secretary are as follows:

1. Serves as a center for storing various important documents/certificates.
2. Registers directors and reports direct and executive stakeholders.
3. Makes arrangements for meetings of the board of directors and shareholders, meeting invitations and minutes to the meetings.
4. Reports on resolutions and policies passed by the board of directors and shareholders' meetings to related executives and follows up on the aforementioned resolutions and policies through the chief executive officer.
5. Observes and makes arrangements for the disclosure of information and information technology reports on the areas under his/her responsibility to agencies; directs and supervises in compliance with the law, regulations and policies concerning the company's disclosure of news and information.
6. Contacts and communications with ordinary shareholders to inform them of various shareholders' rights/privileges and company news.

7. Delivers news and information to directors on topics concerning the company's business operations in order to accompany the performance of directors' duties.
8. Makes arrangements for the provision of advice for newly appointed directors.
9. Other matters as assigned by the company's board of directors.

Brief Background of Corporate Secretary

Mrs. Boonpa Ruddist

Education: Bachelor of Business Administration, Kaset School of Graduate Studies

Training Courses: Company Secretary Program (CSP), Class No. 29/2009

Effective Minute Taking (EMT), Class No.13/2009

Board Reporting Program (BRP), Class No. 2/2010

Company Reporting Program (CRP), Class No. 1/2011

Qualifications: Ability to coordinate tasks, summarize topics and arrange minutes to meetings; competent work performance, creative thinking, good skill in interpersonal relationships, leadership capacity, communications techniques and strategic planning.

9. Remuneration for Directors and Executives

9.1 Monetary Remuneration

Remuneration for the Board of Directors

At the shareholders general meeting in 2016 which was held on 31 March 2016, a resolution was passed on the setting of director remuneration for 2016 in the form of meeting gratuities and annual remuneration for a total amount not to exceed 4,200,000 baht (four million and two hundred thousand baht only), which the company paid as follows:

(Unit: Baht)

Name	Position	Meeting Gratuity			Annual Remuneration	Total
		Company Director	Audit Director	Nomination, Remuneration and Corporate Governance Director		
1. Prof. Dr. Somchob Chaiyavej*	Chairman	45,000	-	-	-	45,000
2. Mr.Padetpai Meekun-iam*	Chairman of the Audit Committee / Director	60,000	45,000	-	-	105,000
3. Mr. Nattapol Lilawattananan	Director / Audit Director	90,000	50,000	-	188,800	328,800
4. Mr. Polrachot Piyathanom	Director / Audit Director/ Chairman of the Nomination, Remuneration and Corporate Governance Director	110,000	40,000	60,000	188,800	398,800
5. Mr. Nakorn Phrprasert*	Director	20,000	-	10,000	-	30,000

Name	Position	Meeting Gratuity			Annual Remuneration	Total
		Company Director	Audit Director	Nomination, Remuneration and Corporate Governance Director		
6. Mr.Poonhiphat Tantanasin	Director	110,000	-	40,000	188,800	338,800
7. Mr.Siripong Boontam*	Director	50,000	-	-	-	50,000
8. Mr. Krirk-Krai Jirapaet**	Chairman	90,000	-	-	220,500	310,500
9. Dr. Kamol Takabut**	Director	90,000	-	20,000	157,300	267,300
10. Mrs. Wasara Chotithammarat**	Director / Audit Director	40,000	20,000	-	62,900	122,900
11. Mr.Ruangchai Kritsnakriengkrai**	Director	40,000	-	-	62,900	102,900
Total		745,000	155,000	130,000	1,070,000	2,100,000

- Remarks: *
1. Assoc. Prof. Somchob Chaiyavej resigned from the positions of Chairman of the Board and director on 3 May 2016.
 2. Mr. Nakorn Phraprasert's term as director ended on 31 March 2016.
 3. Mr. Padetpai Meekhun-iam resigned from the positions of director and Chairman of the Audit Committee on 8 September 2016.
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1. Mr. Krirk-krai Jirapaet took over the positions of Chairman of the Board and director in place of Assoc. Prof. Somchob Chaiyavej on 22 June 2016.
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 4. Mr. Ruangchai Kritsnakriengkrai took over the position of director in place of Mr. Siripong Boontam on 13 September 2016.

No other form of remuneration.

9.2 Executive Remuneration

In 2015 and 2016, the company paid remuneration to executives amounting to 19.71 million baht and 24.80 million baht, respectively. The aforementioned remuneration includes salaries, bonuses and providence fund contributions.

The only other form of remuneration would be a company car.

Accordingly, remunerations for executive directors and high-ranking executives are considered for approval by the Board of Directors.

10. Supervision of Subsidiaries' and Affiliates' Operations

At present, the company has two subsidiaries and one joint company as follows:

1. Subsidiary, QTC Panco Co., Ltd.: Engages in the manufacture and distribution of electrical transformers in Laos PDR. The company was founded on 19 March 2015 with a registered capital of 20 million baht. The company holds 85 percent of shares, while Panco Group Co., Ltd. holds 15 percent of shares.

2. Subsidiary, QTC Global Power Co., Ltd.: Engages in the production of electricity and other forms of energy. The company was founded on 28 September 2016 with a registered capital of 140 million baht; and
3. Joint company, PPWE Co., Ltd.: Engages in the energy business. The company was founded on 12 January 2016 with a registered capital of one million baht.

The Company governs subsidiaries and/or associates based on good governance guidelines. The Company appointed the Chairman of the Executive Committee and the Managing Director as the Chief Executive Officer and a director of the subsidiary to set business guidelines, goals and good governance guidelines consistent with the mother company.

11. Securities Trading Policy and Using the Company's Inside Information and Trade Secrets

1. The company strictly forbids its directors, executives, employees and staff, including the spouses and under-age children of the aforementioned, from trading the company's shares during a period of one month before the financial statements are disclosed to the public.
2. The company forbids its directors, executives, employees and employees, including spouses and under-age children of the aforementioned, from using the company's internal data available or in a way which might affect the company's security price changes which have not yet been disclosed to the public for the purpose of purchasing, selling, purchase/sale proposals or persuading other individuals to purchase, sell, propose to purchase/sell the company's securities, whether directly or indirectly, before the data is disclosed to the public, whether the aforementioned actions are for personal gain or the gain of others, or aimed at having the other persons take the aforementioned actions with the benefit of personal gain/remuneration. Any person found in violation will be subject to penalties according to the disciplinary measures set forth by the company.
3. The company's directors, executives, staff and employees are forbidden from disclosing company secrets and/or internal data to other individuals for personal gain or for the gain of other individuals, whether directly or indirectly, with or without remuneration.
4. The interests and trade secrets of the company or the company's customers must be maintained. Disclosure of company's trade secrets to outside individuals, especially to the company's rivals, even when a director, manager or employee term of office has expired is strictly forbidden.

The company's policy on securities trading, the use of inside information and trade secrets is recorded in the code of conduct which the company has made into a manual book given to all directors, executives and employees, all of whom are required to sign to assure complete compliance. Moreover, compliance with the code of conduct is supervised. The full version of code of conduct can be viewed at www.qtc-energy.com.

12 Personnel

1 Number of Employees

As of 31 December 2016, the company had a total of 198 employees (not including ten executives) with 187 as regular employees. Their are daily 11 employees according to the following details:

Department	Regular Staff (persons)	Daily Staff (persons)	Total (persons)
Special Project Sale & Customer Service	15	-	15
SupplyChain and Logistics	18	-	18
International Sales Department	11	-	11
Domestic Sales Department	2	-	2
Administration	10	1	11
Business Development	-	-	-
Accounting and Finance	9	-	9
Production 1	60	10	70
Production 2	32	-	32
Engineering	21	-	21
Security	4	-	4
Research and Development	1	-	1
MIS	2	-	2
Marketing	2	-	2
Total	187	11	198

Remarks: Under the company's organizational structure, the Special Project Sale & Customer Service Department, the International Sales Department, the Domestic Sales Department, the Management Department, the Accounting and Finance Department, the Business Development Department and the MIS Department report directly to the Managing Director, while the Supply Chain and Logistics Department, Production and Engineering Departments, the Security Section and Research and Development Department report to the Deputy Managing Director(Factory)

2 Labor Disputes

-None-

3 Employee Remuneration

The board of directors has set policies and practice guidelines concerning employee remuneration and benefits Taking into account the results of the operation. Each year, profitability and performance measures based on Balanced Scorecard for which employee compensation is as follows:

Monetary Remuneration

In 2016, the company paid remuneration to its employees (not including executives) amounting to 56.26 million baht in the form of salaries, bonuses, overtime pay, provident fund contributions and other benefits.

Other Remuneration

-None-

The company has created employee handbooks and distributed to all employees in the organization for acknowledgement of rules, regulations and benefits.

4 Personnel Development Policy

It is the company's vision to be a world class transformer manufacturer with a mission to respond to challenges in developing the customers' electrical systems to meet world class quality standards leading to the setting of all personnel development policy so personnel have capability to achieve the organization's mission and vision based on the following key tenets:

- 1 Constructive Engagement: Having employees at all levels participate in setting work policy at differing levels. However, the extent of participation varies and is focused on joint solutions involving development with emphasis on seeking solutions for resolving issues (rather than pinpointing the guilty party) by providing opportunities to hear and respect differing opinions.
- 2 Sharing Success: Build a working atmosphere where everyone participates in corporate success, which will be reflected in the form of remuneration focused more on overall corporate success than individual achievements, and promoting employees to learn from practice by using the knowledge obtained from previous practice to generate replication, improvement and development of knowledge for future practice by encouraging learning exchanges within the corporations and remaining updated on changing business conditions and responding to those changes. Since everyone must achieve together, value must be given to the success of each employee, agency and business unit which will lead to the success of the entire corporation.
- 3 Better Attitude: Having an attitude that everything must “be better than before” in order to promote continual improvement to meet the expectations of customers, society, organizations and shareholders.

13 Auditor Remuneration

The remuneration of the auditors for the year 2016 amount 910,000 baht, up from 190,000 baht in 2015 the company did not pay a fee to the auditor. Auditing the Auditor's Office. The parties related to the auditor and the audit firm affiliated auditor. During the fiscal year, the company did not pay a fee and subject. No company directors and executives who are employees or partners of the audit firm

Non-Audit Fees

The company does not have other non-audit fees.

14. Director and Senior Executive Share Holdings

Company Director/ Senior Executive	Position	Characteristics Of Shareholdings	No. of Common Shares As of 30 Dec. 2015	No. of Common Shares As of 30 Dec. 2016	Increase (Decrease) During financial year
1. Prof. Dr. Somchob Chaiyavej	Chairman	No	0	0	0
2. Mr. Padetpai Meekun-iam	Independent Director	No	0	0	0
3. Mr. Polrachot Piyathanom	Independent Director	Direct	177,000	203,700	26,700
4. Mr. Nattapol Lilawattananan	Independent Director	No	0	0	0
5. Mr. Nakorn Phrprasert	Independent Director	No	0	0	0
6. Mr. Poonphiphat Tantanasin	Director /CEO	Direct	598,000	598,000	0
		Indirect(Wife)	36,602,600	602,600	(36,000,000)
7. Mr. Siripong Boontam	Director / Duty Director Managing	Direct	522,000	2,000	52,000

Company Director/ Senior Executive	Position	Characteristics Of Shareholdings	No. of Common Shares As of 30 Dec. 2015	No. of Common Shares As of 30 Dec. 2016	Increase (Decrease) During financial year
8. Mr. Ruangchai Kritsnakriengkrai	Director Managing	No	0	0	0
9. Mr. Krirk-Krai Jurapaet	Chairman	No	0	0	0
10. Dr. Kamol Takabut	Independent Director	No	0	0	0
11. Mrs. Wasara Chotithammarat	Independent Director	No	0	0	0
12. Miss Boonpa Ruddist	Duty Director Managing	Direct	121,000	0	(121,000)
13. Miss Chotika Chumpoon	Duty Director Managing	Direct	100,000	100,000	0
14. Mr. Jaroensak Sanwong	Duty Director Managing	No	0	0	0

Remarks: 1. Assoc. Prof. Somchob Chaiyavej resigned from the positions of Chairman of the Board and director on 3 May 2016. Mr. Krirk-krai Jirapaet took over his position on 22 June 2016.

2. Mr. Padetpai Meekhun-iam resigned from the positions of director and Chairman of the Audit Committee on 8 September 2016. Mrs. Wasara Chotithammarat took over his position on 13 September 2016.

3. Mr. Siripong Boontam resigned from the positions of director and Deputy Managing Director on 7 September 2016. Mr. Ruangchai Kritsnakriengkrai took over his position on 13 September 2016.

Corporate Governance

The board of directors of the company realizes the importance of good governance since it is an important mechanism that leads to an efficient, transparent and verifiable management system which, in turn, creates trust and confidence in the shareholders, investors, stakeholders and all parties involved. Having good governance will be a value adding tool that helps build the competitiveness and promotes sustainable growth of the company in the long run. The board of directors has, therefore, assigned the Remuneration and Good Governance Committee the task of following up on compliance with policy and human resources development to build good people with sound morals and ethics.

In following up on compliance with corporate governance policies in 2016, the company made arrangements for the companywide promotion and communication of information to directors, executives and employees at all levels by the distribution of letters, good governance and the business code of conduct. The company's board of directors, executives and employees has acted in compliance with good governance policy and the business code of conduct. Moreover, compliance has been regularly monitored and there were no issues or situations involving non-compliance with the abovementioned. By removing the IOD's approach comes as the next Pat guidance.

The aforementioned commitment in 2016 has resulted in the company's evaluation in the annual meeting of shareholders 2016 with a score of 100 points, or a good level according the Quality of Annual General Meeting (AGM) Project, the Thai Investors Association (TIA) Project, which is another means of building sustainable good governance. In addition, the results of the survey of information on Corporate Governance Report of Thai Listed Companies 2016 earned an overall score of 92%, which falls within a Excellent CG Scoring range  , which is above average for listed company scores. Nevertheless, the company remains firmly committed to developing the company's good governance policies for sustainability.

The company has set policies for good corporate governance as set forth by the Stock Exchange of Thailand in the 11/2016 meeting of the board of directors on 15 December 2016, which covered five sections of principles detailed as follows:

Section 1: The Rights of Shareholders

The company is aware of and gives importance to the basic rights of shareholders such as rights to purchase, sell, or transfer shares, rights to receive shares in the business, rights to receive sufficient news and information about the business, rights to participate in meetings to exercise rights to vote in shareholders' meetings to appoint or remove directors, appointments of auditors and issues with impact on the company, such as distribution of dividends, specifications or reviews of regulations, memorandums of association, regulations, reductions or increases in capital, etc.

Apart from the above mentioned basic rights, the company has also acted on various issues to promote and facilitate the exercising of shareholders' rights as follows:

- The company sends letters of notification to attend shareholders' meetings to shareholders no less than twenty-one days before the meeting date for 2016 sending it at 10 March, 2016. Letters contain schedules for dates, times, places and agendas of the meetings, including data regarding topics requiring resolutions at the meeting. The information is also posted at the company's website in Thai and English for at least one month for 2016 it was posted at 26 February, 2016 so shareholders are given a sufficient amount of time to study the information accompanying the meeting before receiving information in the form of documents from the company.
- The company has set agendas for the annual shareholder's meeting for compliance with the principles of corporate good governance as follows:

- | | |
|----------|--|
| Agenda 1 | Consideration to approve the minutes to the shareholder's general meeting. |
| Agenda 2 | Consideration to acknowledge the company's performance for the previous year. |
| Agenda 3 | Consideration to approve the company's financial budget for the accounting cycle for the year ending 31 December of the previous year. |
| Agenda 4 | Consideration to approve the allocation of profits from operations for the previous year. |
| Agenda 5 | Consideration of the nomination of replacement directors for directors whose terms of office have expired. |
| Agenda 6 | Consideration to approve director's compensation. |
| Agenda 7 | Consideration of the appointment of auditors and set compensation for the annual audit. |
| Agenda 8 | Consideration of other matters by giving the shareholders opportunities to inquire about key issues. |
- In the event that a shareholder is unable to attend a meeting, the shareholder may authorize an independent director or an individual to attend the meeting on his/her behalf by using any one of the letters of proxy sent by the company with the meeting invitation.
 - Shareholders are given opportunities to send questions on meeting agendas to the board of directors no less than 20 days before the meeting date via the company's website at 26 February, 2016 or investor relations e-mail notified through the SET news system.
 - Shareholders are fully and independently given opportunities to ask questions, express opinions and suggestions.
 - The company fully facilitates shareholders in exercising their rights to attend meetings and cast votes. The meetings are held on working days at hotels in Bangkok and Bangkok suburb areas where transportation is convenient for the shareholders travelling to attend the meetings and prepare a revenue stamp for the shareholder proxy.
 - All directors and high-ranking executives attend the meeting and address questions raised in the shareholder's meetings together.
 - After the meetings, the company posts the voting results for each agenda from the shareholder's general and special meetings on the next day at the company's website, at 31 March, 2016 and prepares minutes to the meetings with accurate and complete data disclosed via the company's website within 14 days from the meeting date, so shareholders are able to verify the results. The company post it at 8 April, 2016
 - The company employs technology in the shareholder's meetings in terms of shareholder registration, vote counting and display so the meeting can proceed quickly, accurately and precisely.

Section 2: The Equitable Treatment of Shareholders

The company has policies for practicing and protecting the rights of every shareholder equally and fairly, including shareholders who are executives, shareholders who are not executives, Thai shareholders or foreign shareholders, major shareholders or minor shareholders and corporate shareholders. Shareholders are entitled to equal fundamental rights.

- The company allows shareholders who are unable to attend meetings to authorize an independent director or an individual as a proxy to attend the meeting on the shareholder's behalf.
- The company allows shareholders to propose issues to be listed as meeting agendas and nominate persons as director candidates in the shareholder's meeting in advance in line with criteria set by the company as posted

at the website <http://www.qtc-energy.com>. The proposal must be made three months before the shareholder's meeting. For 2016 the company post it between 29 September, 2016 until 1 December, 2016

- 2016, the company will not add meeting agendas without sending notification to shareholders, particularly agendas that are important and require time to study information before making decisions.
- The board of directors grants shareholders opportunities to exercise the right to appoint individual directors and encourages the use of voting cards to ensure voting transparency.
- The board of directors sets up measures to prevent insider trading by related individuals, including directors, executives, employees, employees as well as the spouses and underage children of the aforementioned individuals.
- The board of directors has also set up punitive regulations on the company's disclosure of information, or the use of the company's information for personal gain in line with the policy to prevent insider trading.
- The company educates directors and its executives on the burden and duty to report shareholdings of the directors as well as the director's spouses and underage children, and to report changes in shareholdings to the Securities and Exchange pursuant to Article 59 and the punitive clauses of the Securities and Exchange Act of 1992.

Section 3: The Role of Stakeholders

The company gives importance to the rights of stakeholders and treats all related parties with fairness, as follows:

- **Employees:** The company is aware of the importance of every company employee who will take part in pushing the company toward developing its business to the future. Therefore, the company is focused on continually developing the capabilities, knowledge and skills of employees, including considerations of suitable remuneration according to the knowledge and capacity of each employee in addition to the maintenance of work environments by considering quality of life and occupational safety. The company treats every employee equally and fairly.
- **Trading Partners and Trade Accounts Receivable:** The company treats trading partners who are suppliers and financial debtors fairly, equally and without taking advantage by strict adherence to trading conditions and/or agreements made with one another in order to improve business relations in the interests of both parties.
- **Customers:** The company pays attention to customers and takes responsibility by focusing on production of high quality standardized products and responding to the needs of customers while maintaining customer confidentiality. The company also gives importance to setting proper equal prices for products sold to customers.
- **Competitors:** The company behaves in compliance with the rules of good competition and set laws, maintaining the norms of codes of conduct for competition with avoidance of fraudulent methods which would destroy competitors.
- **Community and Society:** The company conducts its business with consideration of environmental impact. The company emphasizes continually building conscience, social and community responsibility in the company and support of activities in the interests of the public without violating laws.
- The company has a compensation measures published in the company's code of conduct in case where stakeholders are damaged by the company's violation of the stakeholder's legitimate rights.
- The company declares that directors, executives and employees who learn of important inside information potentially affecting securities trading prices must stop trading the company's securities within one month before the company announces its performance or before the inside information is disclosed to the public.

- The company has clear procedures for cases where persons disclose matters of legal violation, financial reporting accuracy, internal control errors or misconduct. These persons can report such matters by letter to the board of audit. Furthermore, the company has set up measures to protect the informants' rights.
- In order to lead to earnest practice, the company has established a manual on ethics as a part of discipline. The directors, executives and employees at all levels are required to strictly adhere to the aforementioned and violations or non-compliance will be subject to disciplinary action under the regulations governing human resources management.
- The company has set policy involving conflicts of interest in the manual on ethics in order to prevent the use of opportunities for seeking personal gain.

Notification of Complaint Policy

The committee provides employees and interested persons channels of providing complaints, comment and inform the trace of any illegal action through mail to the audit committee of the company at: QTC Energy Public Company Limited 2/2 Soi Krungthep Kritha 8 Yaek 5, Krungthep Kritha Road, Huamark sub-district, Bangkok district, Bangkok 10240 or send e-mail to audit@qtc-energy.com

Section 4: Disclosure and Transparency

The board of directors places importance on correct, complete and transparent information disclosure, from reports on financial data and general data according to the criteria of the SEC and the Stock Exchange of Thailand to the key information which may affect the company's security's prices and potentially affect the decision-making process of the company's investors and stakeholders, so the company's related individuals receive equal the information. Following this proposed sale of stock and following the company's listing on the Stock Exchange of Thailand, the company will disclose information to the shareholders and the public via Stock Exchange of Thailand data dissemination channels and the company's website.

The board of directors is aware of its responsibilities and firmly committed to strictly overseeing compliance with the laws and regulations related to information disclosure and transparency as follows:

- The company publishes information in line with the set criteria through channels of the SET, Annual Disclosure Form (Form 56-1) and the Annual Report (Form 56-2) and via the company's website in both Thai and English with regular information updates.
- The board of directors reports corporate governance compliance results through the Annual Disclosure Form (Form 56-1) and the Annual Report (Form 56-2) and company's website.
- The board of directors compiles reports on the board of directors' responsibilities for financial transactions displayed together with the auditor's report and arranges for reports on corporate governance by the Board of Audit in the Annual Report (Form 56-2).
- Annual Disclosure Form (Form 56-1) and the Annual Report (Form 56-2) the board of directors publishes name list, roles and responsibilities of members of the board of directors and sub-committees, number of meeting and number of meetings attended by each director in each year through the Annual Disclosure Form (Form 56-1) and the Annual Report (Form 56-2).
- The company has set policy for information disclosure through the Annual Disclosure Form (Form 56-1) to assure compliance with the Capital Market Supervisory Board's notification on the criteria, terms and methods for information

- disclosure regarding a company's financial status and business performance in the following areas: 1) general information; 2) risk factors; 3) characteristics of business operations; 4) business operations of each product line; 5) assets utilized in business operation; 6) legal disputes; 7) capital structure; 8) management; 9) internal control; 10) related transactions; 11) financial status and business performance; and 12) other related information.
- The board of directors and executives report shareholdings and the changes in shareholdings in line with regulations set by the Securities and Exchange Commission.
- The first four directors and executives counted from the Managing Director are under obligation to submit a report on their own stake holdings and the stake holdings of related individuals to the chairman of the board and the chairman of the Board of Audit with disclosure of information for all directors' awareness in line with the Securities and Exchange Act of 2008. The board of directors has set policy to designate executive level employees with the title of division manager to submit to the Board of Audit their personal stake holdings and the stake holdings of related individuals in order to assure transparency and fairness in business conduct.
- The board of directors arranges for the maintenance of effective internal controls in order provide reasonable assurance that accounting records are recorded accurately, completely and sufficiently to maintain the company's assets, and in order to be aware of the weaknesses so misconduct or significant irregular operations can be prevented. The board of directors has established the Board of Audit composed of non-executive directors serving to audit financial transactions, related party transactions and internal control systems. The Board of Audit directly reports to the board of directors.
- The company has established an investor relation unit for the purpose of communications with outside individuals, namely, shareholders, institution investors, general investors and related public analysts as follows:
 1. To disclose important information for public awareness.
 2. To thoroughly publish information to the people.
 3. To clarify rumors or news.
 4. To prevent the promotional disclosure of unreasonable information.
 5. To use inside information in the trading of listed companies with accuracy, sufficiency, modernity, equity, transparency and fairness.
 6. To carry out procedures when the securities trading of listed companies deviates from the market's normal conditions.

he unit can be contacted through the following channels:

Telephone	: (66) 2379 3089, extension 241
Fax	: (66) 2379 3099
Email	: ir@qtc-energy.com
Website	: http://www.qtc-energy.com/irs/investor_th.html

In addition, the company has appointed the Chief Executive Officer or the Managing Director as the party with the authorization to provide the aforementioned information.

- The company has appointed contact persons who are authorized to coordinate with the SET in disclosing information.
 1. Matters on the disclosure of information in line with events occurring, namely, asset acquisition/discharge (sales) transactions, related transactions, shareholders' meeting schedules, changes in directors and auditors, relocating headquarters, minutes to the shareholders' meetings and investment projects, dividend payments/ dividend payment suspensions are to be made by the Managing Director.

2. The disclosure of information according to accounting cycle, namely, annual financial statements, and quarterly financial statement, Annual Disclosure Form (Form 56-1) and the Annual Report (Form 56-2) are to be made by the Managing Director.
- The Chairman of the Board or the Managing Director are the parties authorized to provide general news and information on corporate management to the media.
 - Appointing contact persons with other related agencies:
 1. The corporate secretary is the party to coordinate with Thailand Securities Depository Company Limited
 2. The corporate secretary is the party to coordinate with the Securities and Exchange Commission.

Section 5: Responsibilities of the Board of Directors

The company gives importance to showing the duties and responsibilities of directors in order to maintain the interests of stakeholders and shareholders such as setting annual strategies for business practices and reviewing the aforementioned strategies semi-annually and monitoring performance audits. And to ensure transparent business practices for added company value and sustainability, the company will take the following actions:

- 5.1 The board of directors is made up of qualified experts with knowledge, ability and experience at the executive level from various corporations. The board of directors is able to use its experience, knowledge and ability to effectively develop and set the company's policies and governance to maximize benefits to the company and shareholders. The board of directors plays a significant role in setting corporate policies and overall business in addition to supervising, auditing and monitoring management performance and evaluating the company's performance according to plans. Each director is allowed to hold the office of director for no more than three listed companies.
- 5.2 The company has set policy for the Chairman of the Board and the Managing Director are held by different persons in order to prevent any one person from holding absolute power in any specific matter. The board of directors will set the scope of the power and responsibilities in addition to selecting the persons to hold the aforementioned offices.
- 5.3 The number of companies in which each director holds office must be compliant with good corporate governance and each director must be a director in no more than three listed companies.
- 5.4 The Managing Director and high-ranking executives can hold the office of director in no more than three companies, and must be approved by the board of directors in advance.
- 5.5 Each independent director may be an independent director for no more than nine consecutive years.
- 5.5 The board of directors will appoint a new director to serve for the remaining term of office for the previous director with approval from the board of directors.
- 5.7 The board of directors discloses information on office holding in other companies to the shareholder's awareness in the Annual Disclosure Form (Form 56-1) and the Annual Report (Form 56-2).
- 5.8 The company has policy for non-executive directors to hold meetings for the purpose of discussing various problems concerning management issues of interest without the presence of management at least once per year. In 2014, the aforementioned meeting was held once in the month of April.
- 5.9 The company's board of directors has participated with the management in setting the company's vision, mission, strategies, goals, business plans and budgets. Thus, the company has scheduled annual reviews of the company's vision, mission, strategies, goals, business plans and budgets.

5.10. The Roles, Duties and Responsibilities of Directors

The company stipulates that directors comply with the code of best practice in line with SET guidelines. Directors must understand and be aware of their roles, duties, and responsibilities, performing those duties in compliance with the law, company objectives and regulations as well as shareholders' resolutions with integrity, honesty and maximum consideration of the interests of the company and its shareholders. Director's roles, duties and responsibilities are as follows:

1. The board of directors must arrange a general shareholder's meeting within four months from the end of the company's accounting cycle.
2. The board of directors must arrange a meeting of the company's board of directors at least every three months.
3. Arranges a credible accounting system, financial statement reports and financial audits for the company. The board of directors must arrange credible systems for accounting, financial reports and auditing, including efficient and effective systems for internal control, internal auditing and risk management.
4. The board of directors must arrange the company's balance sheets and profit-loss statements at the end of the company's accounting cycle, which must be audited by an auditor and presented to the meeting of shareholders for consideration and approval.
5. The board of directors must set the company's goals, guidelines, policies, business plans and budgets along with monitoring and supervision, so the administration and management of executives concurs with work planning policies and setting budgets with efficiency and effectiveness.

Furthermore, the scope of the board of directors' duties includes direction for the company to comply with laws on securities and securities exchanges, announcements of the Capital Market Supervisory Board, specifications of the Stock Exchange of Thailand such as engaging in connected transactions, acquisitions or sales of significant properties, or laws associated with the company's businesses.

6. The board of directors must consider reviews, audits and approvals of plans by the executives for business expansion, large investment projects, including participation in investments with other business operators proposed by the executives.
7. The board of directors must continually monitor performance for concurrence with plans and budgets.
8. The board of directors must consider designating executive structures with authority to appoint the Executive Board of Directors, Managing Directors and other sub-committees as deemed fitting, such as the Audit Committee, the Recruitment Committee, the Remuneration Committee, etc., including the setting of the scopes of authority and duties of the Executive Board of Directors, Managing Directors and various appointed sub-committees.
9. The board of directors may authorize a director, several directors, or any other persons to perform any actions on behalf of the board of directors under the control of the board of directors, or the board of directors may authorize the aforementioned persons to have authority as deemed necessary by the board of directors within the period of time the board of directors deems fitting. The board of directors may cancel, withdraw, change or revise authorizations as deemed necessary. The power to authorize must not be in a manner that would enable the aforementioned individual to consider or approve transactions or persons with potential conflicts of interest, stakeholders or any other types of conflicts of interest occurring with the company or its subsidiaries (if any), unless the approval involves normal business transactions in line with general trade conditions or compliance with policy

and criteria already considered and approved by the board of directors under the criteria, terms and methods set forth regarding related transactions and acquisitions or discharges of listed company main assets pursuant to SEC and/or SET notifications and/or any other notifications by related agencies.

10. The board has prepared corporate governance policy in writing with performance evaluation and policy review at least once a year, promoting the preparation of written code of conduct so all directors, executives and employees understand the ethical code by which the company conducts its business, monitors compliance with the aforementioned ethical codes, and sets up risk management policy with evaluation of risk management effectiveness at least once a year.

5.11 Development of Directors and Executives

Orientation for New Directors

The company's board of directors has scheduled orientation for every new director in order to build knowledge and understanding about the business, including the performance of various company tasks. In order to prepare directors for the performance of their respective duties, the company has policy for promoting the building of new knowledge for every director in learning about good governance, industrial conditions, technology businesses and new innovations in order to enable directors to efficiently take over their respective duties as soon as possible. The Corporate Secretary will coordinate various issues as follows:

1. Things to Know: Business infrastructure, director infrastructure, scope of duty, laws directors need to know.
2. General Business Knowledge: Guidelines for practice in line with various policies and visiting the production process.
3. Make arrangements for collaborative meetings with the entire board of directors, so in-depth questions can be asked about the business operations.

In 2016, the company provided orientation for four new directors, namely, Mr. Krirk-krai Jirapaet, Dr. Kamol Takabut, Mrs. Wasara Chotithammarat and Mr. Ruangchai Kritsnakriengkrai. The secretary prepared various information that the aforementioned directors needed to be aware of and to follow various regulations and rules in addition to asset purchase-sales and business ethics.

Learning Development

The company's board of directors has policy for supporting and facilitating training to impart knowledge about the company's governance system, which included directors, auditing directors and recruitment directors in the setting of remuneration and corporate governance, and directors for risk management and the corporate secretary in order to improve practice on a continual basis as arranged by the Stock Exchange of Thailand, the Office of the Securities and Exchange Commission and courses sponsored by the Thai Institute of Directors Association (IOD). In 2015, the company director who participated in the training and seminars was Mr. Poonhiphat Tantanasin trained CG Forum 2/2016 the course. In addition, the company has made arrangements for documents and information for the benefit of new directors in performing their respective duties as well as a manual on business characteristics and guidelines for conducting the company's business operations for new directors. The aforementioned was given to the Recruitment, Remuneration and Corporate Governance Committee with follow-up on succession plans for managing directors, deputy managing directors and executives. Hence, the executives who have been assigned the role of succession will be developed according to Individual Development Plans in order to prepare them for future succession.

5.12 Making Succession Plans

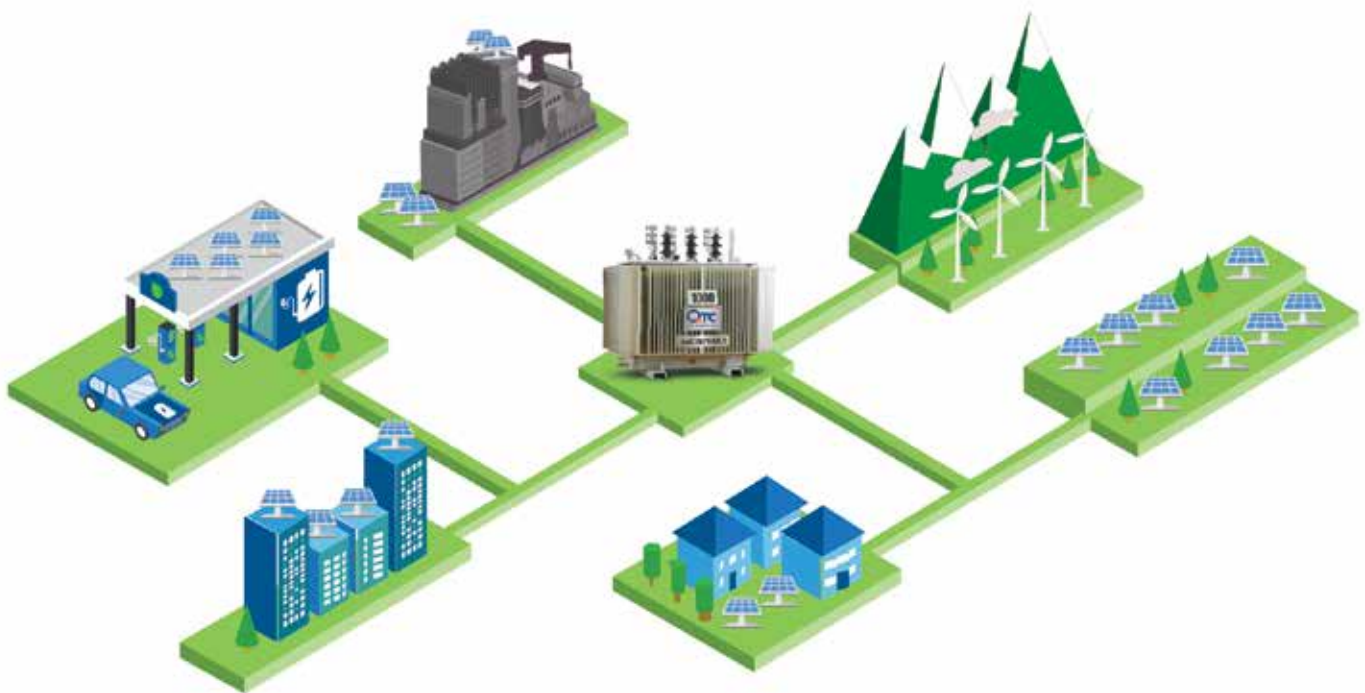
In order to assure that the company has knowledgeable directors with sufficient ability to perform their respective duties, the company's board of directors has made capacity building plans for high ranking executives by appointing the Remuneration and Good Governance Committee with the task of making plans for succession in the positions of managing director, deputy managing director and department manager based on consideration of knowledge, ability and experience required for each position for the selection of executives possessing set qualifications with ability to succeed to each position. Furthermore, the Human Resources Management Department has been assigned the task of monitoring training and the development of knowledge and ability for persons succeeding to the positions of managing director, deputy managing director and department manager.

5.13 Report of Interest of Directors and shareholding report

Our company assigns the committees and Board of Directors to report their own interests and those of related persons when they commence to hold the position or when there is any changing of information. In addition, they have to revise all information annually according to rules and methods of report on interests of company's committees and executives defined by Board of Directors. In 2016, the company stipulated that directors, executive directors and executives send reports on stake holdings on 10 November 2016.

Corporate Social and Environmental Responsibilities

QTC Energy public company limited is committed to conduct its business under the corporate governance. Based on principles of good governance coupled with attention to environmental care. There is the sense of social responsibility truly. In consideration of those who are consistently involved both inside and outside of the Organization, from employees, customers, shareholders, communities and the broader society to contribute to the development of sustainable business to provide a corporate joint venture successful. There are standard actions seriously and ensure that the actions are based on the defined vision and mission. Build confidence to stakeholders with a real organization, as well as to demonstrate social responsibility in various aspects of the policy have been set up a sustainable development policy and the appointment of the Board of Directors. And the Board of supervision work to make sure for the details listed in the sustainable development report.



Internal Control and Risk Management

In Board of Directors Meeting No. 2/2017 on 14 February 2017 where all three audit directors were in attendance, the board of directors assessed the adequacy of the company's internal control system risks by submitting inquiries to the Management Department and was able to draw conclusions based on the assessment of the company's internal control system in terms of the following aspects:

1. Internal Control
2. Risk Management
3. Control Activities
4. Information and Communication Measures
5. Monitoring

The board of directors has rendered the opinion that the company already has adequate internal control activities concerning business conducted with major shareholders, directors, executives or persons related to the aforementioned (in Part 3, Clause 12 of the assessment form). As for internal control activities under other categories, the board of directors has rendered the opinion that the company also has adequate and appropriate controls.

Internal Control-Related Performance

The company has a Board of Audit to perform the duty of checking to ensure that the company has proper and effective internal control systems and internal audits. The Board of Audit has also checked the company's performance to ensure compliance with the laws governing securities and stock exchanges, the specifications set forth by the Stock Exchange of Thailand and laws related to the company's businesses. The Board of Audit will hold meetings at least once every quarter in order to consider and take steps toward ensuring the compilation of accurate financial reports with complete and sufficient disclosure, including the consideration of related transactions or transactions with potential conflicts of interest to ensure compliance with the law and the specifications set forth by the Securities and Exchange Commission and the Stock Exchange of Thailand. Auditors are present at the meetings in order to observe based on the company's audits.

The Company don't have internal audit of the company itself, the company has hired BK IA & IC Co., Ltd. as auditors of the company for the year 2016, the company BK IA & IC Co., Ltd. has assigned Miss Boonnee Khusonsopit is the primary responsible to act in the company's internal auditors. The Audit Committee has considered the property of the company, BK IA & IC Co., Ltd. and Boonnee Khusonsopit charity overthrew governance, then that is sufficient. with such duties as an independent. And experienced in performing the audit in a business or industry, with the same company for 20 years. So subject to review and approve the appointment, transfer and dismissal of the incumbent head of the internal audit department of the Company to be approved by audit Committee.

Related Transactions

1. Relationship Characteristics

QTC Energy Public Company Limited (“Company”) has transactions with persons with potential conflicts of interest, composed of shareholders and/or company executives. Related company means a company that holds persons who might have conflicts of interest with the company and relationships between the executives and shareholders of the aforementioned company. The summary of relationship characteristics is as follows:

Persons with Potential Conflicts of Interest	Characteristics of Relationship
QTC Service Chiang Mai Co., Ltd.	Mrs. Sasipim Wongdam is a director with signatory authority and a shareholder of QTC Service Chiang Mai holding 99.94 percent of shares who is related as the younger sister of Mr. Poonphiphat Tantanasin and holding the positions as Chairman of the Executive Board and Managing Director of the company. In addition, the ex-wife and child of Mr. Poonphiphat Tantanasin holds a total of 8.86 percent of the company’s shares.
Mr. Poonphiphat Tantanasin	Holds the position of Chairman of the Executive Board and Managing Director. In addition, his ex-wife and child hold a total of 8.86 percent of the company’s shares.
QTC PANCO CO., LTD., Electrical Transformer Manufacturing and Distribution Business.	A subsidiary, the company holds 85 percent of issued and paid up shares of QTC Panco Co., Ltd. and shares a director, namely, Mr. Poonphiphat Tantanasin who holds positions as Chairman of the Executive Board and Managing Director. In addition, the ex-wife and child of Mr. Poonphiphat hold a total of 8.86 percent of the company’s shares.
PPWE Co., Ltd., Energy Investment Business.	A joint company, the company holds 49.98 percent of issued and paid up shares of PPWE Co., Ltd. and shares a director, namely, Mr. Poonphiphat Tantanasin who holds position as the Chairman of the Executive Board of the company. In addition, the ex-wife and child of Mr. Poonphiphat hold a total of 8.86 percent of the company’s shares.

2 Description of Related Transactions

In 2016 and 2015, the company conducted transactions with persons with potential conflict of interests according to the details shown in the list as follows:

1. Sales of Goods and Services

Person with Potential Conflict of Interests	Transaction Type	Value of Related Transaction (million baht)		Necessity and Reasonability of Transaction
		2016	2015	
QTC Service Chiang Mai Co., Ltd. (“QTC Chiang Mai”), Electrical System Service Business.	Sales of goods and services.	5.28	3.70	The company sold electrical transformers and raw materials that are components to electrical transformers, namely, transformer oil, low-power terminal tugs, gaskets, insulators, etc., along with providing electrical transformer services to QTC Service Chiang Mai, which is a retail representative of the company. The sales prices of products to QTC Service Chiang Mai Co., Ltd. were discount prices equal to the rates offered to other retail representatives of the company and had the same trade conditions as other retail representatives of the company. The Audit Committee had evaluated the transaction and deemed the aforementioned goods sales transaction to be in accordance to the normal commercial characteristics of the company and was reasonable.
	Trade debtor.	0.68	0.82	

2. Expenses in Sales and Management

Person with Potential Conflict of Interests	Transaction Type	Value of Related Transaction (million baht)		Necessity and Reasonability of Transaction
		2016	2015	
QTC Service Chiang Mai (“QTC Chiang Mai”), Electrical System Service Business.	Purchase of goods and services.	0.19	0.04	The transaction occurred as an expenditure from the company employing QTC Service Chiang Mai to provide services for the company’s clients located in areas/provinces near the office of QTC Service Chiang Mai Co., Ltd. such as fees for electrical transformer transportation, inspection, repairs, cranes, etc. because the trucks and/or service personnel of the company were fully occupied with work and unable to provide service to the aforementioned clients and QTC Service Chiang Mai Co., Ltd. is able to provide service to clients quickly and reliably. The service fees for QTC Service Chiang Mai collected from the company is comparable to expenses that actually occur from services provided by the company and/or comparable to service fees for employing external parties. The Audit Committee evaluated the aforementioned transaction and holds the opinion that the aforementioned transaction occurred due to necessity and was reasonable with appropriately calculated service fee rates.
QTC PANCO CO., LTD., Electrical Transformer Manufacturing and Distribution Business.	Other creditor.	-	0.29	This is an expense from the company’s payment of legal fees to QTC Panco Co., Ltd. in advance. The expense is for legal proceedings and various government criteria and marketing research for which QTC Panco Co., Ltd. has paid in advance. The Audit Committee has evaluated the transaction and holds the opinion that the aforementioned transaction occurred due to necessity and was reasonable.
	Other debtor.	-	0.73	
PPWE Co., Ltd., Energy Investment Business.	Interest received.	0.66	-	The company provided short-term loan to PPWE Co., Ltd. for use as circulating capital and conducting feasibility studies in investment projects with appropriate interest rates. The Audit Committee has evaluated the transaction and holds the opinion that the aforementioned transaction occurred due to necessity and was reasonable.
	Other debtor	0.40	-	
	Short-term loan.	17.00	-	

Measures or Procedures for Approving Related Transactions

The company has set measures for conducting related transactions between the company and persons with potential conflict of interests by assigning the Audit Committee to give opinions on the necessity of transactions, reasonability and propriety of transaction amounts with considerations based on various conditions according to normal commercial operations at market prices comparable to prices occurring to external parties. In cases where the Audit Committee lacks the expertise to evaluate a related transaction that might have occurred, the company will assign a persons with specialized knowledge and skills such as an auditor, asset valuator, legal office, etc. that are independent from the company and person with potential conflict of interest in the aforementioned related transaction to provide information to accompany the decision of the Audit Committee to allow the Audit Company to make proposals to the meeting of the Board of Directors or shareholders, depending on the case.

Furthermore, the company has set measures to prohibit executives or stakeholders from participating in approving transactions in which they have direct or indirect interest. In addition, the Board of Directors is required to oversee the company to ensure compliance with the law governing securities and the Stock Exchange and regulations, notifications, orders or specifications of the Capital Market Supervisory Board and the Stock Exchange of Thailand along with following regulations on disclosure of information on related transactions and obtainment or sales of important asset of companies or subsidiaries in addition to complying with the accounting standards set by the Federation of Accounting Professions and Licensed Auditors of Thailand. Additionally, the company discloses related transactions in annotations accompanying financial statements audited or examined by the company's auditor.

Likelihood of Related Transactions in the Future

The company might continuously conduct related transactions in the future in line with normal commercial business operations and will clearly specify policies for conducting related transactions. Prices and trade conditions will follow the normal business operations as specified for unrelated persons and/or companies such as sales of goods or provision or obtainment of services. Related transactions occur due to necessity in the company's business operations and for the benefit of the company. Accordingly, the Audit Committee will make considerations and examine practices to ensure compliance with criteria and provide opinions on the reasonability of transactions that occur on a quarterly basis.

As for sales of goods to QTC Service Chiang Mai Co., Ltd. and QTC Panco Co., Ltd. (Laos), which are persons with potential for continuous conflicts of interest in the future, the company had set policies for specifying prices and discounts for sales of electrical transformers and raw materials or equipment that are components to electrical transformers for each type of client, including sales representative, which has been effective as of 15 May 2011. The purpose of this is to increase clarity and allow price and discount comparisons in the sales of goods to QTC Service Chiang Mai Co., Ltd., which has to be according to prices and discounts provided to other sales representatives, for the considerations and opinions of the Audit Committee on fairness and reasonability of goods sold to both companies to be provided systematically, especially in instances where the company does not sell products to other sales representatives. For potential related transactions not occurring due to normal business operations in the future, the company has assigned the Audit Committee to review practices in line with criteria and provide explanation about the reason for conducting the aforementioned related transactions before the company conducts the aforementioned transactions by complying with the measures and procedures for approving related transactions as mentioned above. In any case, for related transactions that might cause conflicts of interest in the future, the Board of Directors is required to ensure compliance with laws governing securities and the Stock Exchange and rules, notifications, orders or specifications of the Capital Market Supervisory Board and the Stock Exchange of Thailand along with following regulations on disclosure of information about related transactions and obtainment or sales of assets of companies or subsidiaries along with standards set by the Federation of Accounting Professions and Licensed Auditors of Thailand.

Board of Audit Report

The Audit Committee of QTC Energy PCL is composed of Mr. Nattharphon Lilawatthananon as the Audit Committee Chairman and Mr. Pholrach Piathanom and Mrs. Wasara Chotithammarat as the audit directors. The Audit Committee's important scope and responsibilities pursuant to its charter are to oversee and ensure that the company's financial reports are in accordance with generally accepted accounting standards and principles, reviewing the company's performance to be in accordance with good corporate governance principles with effective system of internal control and pursuant to related laws and regulations, along with looking after cases of conflicts of interest between the company and related parties. Hence, the company's Audit Committee has organized five meetings in 2016 with the essential content as follows:

1. The Audit Committee has reviewed the quarterly finances and financial statement for 2016 with the management and auditor to ensure that the company's financial report was made correctly as should be according to generally accepted accounting standards and adequate and complete disclosure of information credibly in the footnotes of financial statements along with providing observations and acknowledgement of beneficial resolutions to the company's problems.
2. Discussion of the disclosure of information of related transactions and transactions related to the company and people who might be in conflict of interest. The Audit Committee deems that the disclosure of information of related transaction and transactions related to the company is correct, complete and sufficient and in accordance with business conditions and criteria set by the Stock Exchange of Thailand.
3. Govern and ensure that internal audits are carried out independently by employing BK IA&IC CO., LTD., which is a company that provides internal and external audit services, as the company's internal auditor with the Audit Committee as the considerer of the annual internal audit plan, reporter of internal audit results, follower of internal audit results for the management, along with providing advice to the internal auditor in order to ensure confidence that the annual internal audit plan is carried out effectively and efficiently. The internal audit results for 2016 found no indicators of corruption or flaws in internal control in essential content.
4. Evaluation of the internal control system in accordance with set guidelines by the Securities and Exchange Commission, which governs corporate internal control, risk management, information technology system control and data communication along with monitor systems. The Audit Committee deems the company's internal control to be adequate and effective.
5. Consideration for the appointment of and proposal for remuneration payment to the auditor for 2017. A proposal was made for the company's board of directors to appoint Mr. Narin Churamongkol, Certified Public Accountant No. 8593 and/or Miss Kanyanat Sriratchatchaval, Certified Public Accountant No. 6549 and/or Mr. Teerasak Chuasrisakul, Certified Public Account No. 6624 and/or Miss Sansanee Poolsawat, Certified Public Accountant No. 6977, of Grant Thornton Limited to be the auditors of the Company with their remuneration 1,210,000 baht for later proposal to the General Shareholders' Meeting.

Hence, the Audit Committee has performed its duties thoroughly and independently, rendered opinions directly without limitations to information access, and has given importance to good corporate governance in accordance with principles set by the Stock Exchange of Thailand with transparency and good ethics in order to establish confidence in shareholders, investors, customers and all related parties.

On behalf of the Board of Audit,



(Mr. Nattharphon Lilawatthananon)

Chairman, Board of Audit
14 February 2017

Board of Nomination Remuneration and Corporate Government Report

The Nomination, Remuneration and Corporate Government Committee of QTC Energy Public Company Limited is composed of two independent directors and one executive director, namely, Mr. Polrach Piathanom, Independent Director, as Nomination Committee Chairman; and Dr. Kamol Takabut, Independent Director, and Mr. Poonphiphat Tantanasin, Executive Director. Their scope of duties and responsibilities are set by the charter of the Nomination, Remuneration and Corporate Government Committee.

In 2016, the Nomination, Remuneration and Corporate Government Committee convened a total of four meetings. All directors were present at every meeting to monitor and discuss important issues assigned by the Board of Directors as summarized as follows:

1. Consideration of the work performance of company directors, sub-committee directors and high-ranking executives.
2. Consideration of selecting persons to hold position in place of resigning directors and proposed for the Board of Directors to make appointment considerations.
3. Review of good corporate governance policies and followed up on recommended practices that the company has yet to implement pursuant to the CG Checklist.
4. Reviewed business ethics to ensure concurrence with current situations.
5. Consideration of remunerations for company directors, executive directors and sub-committee directors before submitting a proposal to the company and shareholders for consideration of approval with consideration based on suitability with duties, obligations and responsibilities according to assignments and the company's performance along with overall economic conditions.
6. Considered acknowledging progress on the drafting of the succession plan for high-ranking executives and career path creation.
7. Considered selecting and submitting names of persons to hold position as director from the list submitted by shareholders with consideration based on qualifications and diversity of knowledge, skills, experience and gender and submitted a proposal to the Board of Directors and shareholders. Minor shareholders were encouraged to propose agendas and persons in advance to be appointed as directors vacating office according to term from 29 September 2016-1 December 2016 by the company's website.

On Behalf of the Recruitment, Remuneration and Corporate Governance Committee



(Mr. Polrach Piathanom)

Chairman, Recruitment, Remuneration and
Good Governance Committee

Board of Directors' Reports & Responsibility for Financial Reports

Dear Shareholders,

The board of directors is responsible for the financial statements of QTC Energy PCL, including the financial information appearing in the company's annual report and financial statements. The board of directors holds the view that the company's financial statements for the year ending 31 December 2016 have been compiled in compliance with generally accepted accounting principles by using proper accounting policy in line with the principles of caution and consistent practice. Moreover, the company has carefully exercised discretion with reasonable estimations in the compilation. Moreover, sufficient information has been disclosed in the remarks accompanying the company's financial statements. Hence, the aforementioned financial statements have passed the audit and unconditional opinions have been rendered by the independent licensed auditor.

The board of directors supports the company in good corporate governance with structural development for the board of directors in order to promote continued good corporate governance and efficient work performance with transparency and reliability. The board of directors has appointed a board of audit composed of three independent directors as the parties responsible for checking the financial reporting system, the internal control systems and internal audits. The board of audit has rendered opinions concerning the aforementioned matters as appearing in the board of audit's report as already shown in the annual report.

The board of directors has rendered the opinion that the company's internal control systems are sufficient and appropriate. Moreover, the aforementioned have the ability to build reasonable confidence in the reliability of the company's financial statements for the year ending 31 December 2016



(Mr. Krirk-Krai Jirapaet)

Chairman of Board

Report of Independent Auditor

To the Shareholders of QTC Energy Public Company Limited

Opinion

I have audited the consolidated financial statements of QTC Energy Public Company Limited and its subsidiaries (the “Group”), which comprise the consolidated statement of financial position as at 31 December 2016, the consolidated statements of profit or loss and other comprehensive income, changes in shareholders’ equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and I have also audited the separate financial statements of QTC Energy Public Company Limited (the “Company”), which comprise the separate statement of financial position as at 31 December 2016, the separate statements of profit or loss and other comprehensive income, changes in shareholders’ equity and cash flows for the year then ended, and notes to the separate financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2016, and its consolidated financial performance and cash flows for the year then ended and the separate financial position as at 31 December 2016, and its separate financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Opinion

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

Key Audit Matters

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

Key audit matters	How my audit addressed the area of focus
<p>Recognition of deferred tax assets</p> <p>As at 31 December 2016, the Company has deferred tax assets of Baht 24.41 million. The deferred tax assets increased from last year by Baht 19.51 million mainly from the Company records deferred tax assets from taxable loss carry forward not exceed five years amounted Baht 16.64 million, from taxable loss for the year ended 31 December 2016 of Baht 83.20 million.</p> <p>Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized.</p> <p>I have focused on the reasonableness of assessment whether the future taxable profits will be available against which the temporary differences can be utilized, and correctness of calculation the deferred tax assets.</p> <p>Refer to the note 18 to financial statements and significant accounting policies.</p>	<p>I reviewed the taxable profit forecasts for five years period for determining whether Company has the future taxable profits will be available against which the temporary differences can be utilized, and I also examined its supporting documents.</p> <p>I, on the test basis, examine revenue forecast of some major customers which the Company expected to receive purchase order in the future, and I also considered the past sell experience of said customers to evaluate reliability of the forecasts.</p> <p>I also test the mathematical accuracy of the profit forecasts for five years period.</p>

Other Matter

The consolidated financial statements of QTC Energy Public Company Limited and its subsidiary and the separate financial statements of QTC Energy Public Company Limited for the year ended 31 December 2015, were audited by other auditor in the same office as mine who expressed an unmodified opinion on those statements on 4 February 2016.

Other Information

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

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

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

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

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

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

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

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

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

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

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

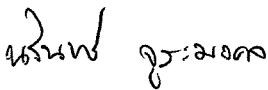
- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

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

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

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

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



Mr. Narin Churamongkol

Certified Public Accountant

Registration No. 8593

Grant Thornton Limited

Bangkok

14 February 2017

Financial Position and Performance

1. Auditing Report Summary

(a) The financial statement of 2014 was audited by Mr. Somckid Tiatragul, Certified Public Accountant Registration No. 2785 of Grant Thornton Co., Ltd.

The auditor has examined the Company's financial statement and renders the opinion that the Company's financial statement presenting financial position as of 31 December 2014 and the performance for the year ending on the same day is appropriate in terms of relevant contents based on generally accepted accounting principles.

(b) The financial statement for 2015 was audited by Mr. Somckid Tiatragul, Certified Public Accountant Registration No. 2785 of Grant Thornton Co., Ltd.

The auditor has examined the Company's financial statement and renders the opinion that the financial statement presenting financial position as of 31 December 2015 and performance for the year ending on the same day is appropriate in relevant contents based on the financial report standards of Thailand.

(c) The financial statement of 2016 was audited by Mr. Narin Chooramongkol, Certified Public Accountant Registration No. 8593 of Grant Thornton Co., Ltd.

The auditor examined the Company's financial statement and renders the opinion that the Company's financial statement presenting financial position as of 31 December 2016 and performance for the year ending on the same day is appropriate in relevant contents based on financial report standards of Thailand.

2. Table Summarizing Financial Position and Performance

Statement of Financial Position

	2014 (Separate F/S)		2015 (Consolidated F/S)		2016 (Consolidated F/S)	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
<u>Assets</u>						
<i>Current Assets</i>						
Cash and Cash Equivalents	86.24	12.10	93.56	8.75	98.65	8.08
Temporary Investment	0.11	0.02	20.00	1.87	221.87	18.17
Trade Accounts Receivable						
- General Customers - Net						
- Related Companies	146.17	20.51	469.62	43.93	234.55	19.21
- Other Accounts - Subsidiary	2.99	0.42	0.82	0.08	0.68	0.06
Inventories – Net	-	-	-	-	0.04	0.03
Refundable Value Added Tax	136.29	19.12	155.28	14.53	207.54	17.00
Expenses Paid in Advance	1.93	0.27	-	-	7.70	0.63
Other Current Assets	4.74	0.67	6.95	0.65	4.68	0.38
	4.52	0.63	5.11	0.48	6.86	0.56
Total Current Assets	382.98	53.73	751.33	70.29	782.94	64.13

	2014 (Separate F/S)		2015 (Consolidated F/S)		2016 (Consolidated F/S)	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
<i>Non – Current Assets</i>						
Restricted Deposits with Bank	0.77	0.11	-	-	-	-
Loans for Joint Companies	-	-	-	-	17.00	1.39
Other Investments	0.05	0.01	0.05	0.00	0.05	0.00
Deposits for Feasibility Studies of Recoverable Investment Projects	-	-	-	-	81.11	6.64
Property, Plant and Equipment – Net	323.42	45.37	308.63	28.87	307.20	25.16
Computer Software	2.11	0.30	4.13	0.39	6.54	0.54
Deferred Income Tax Asset	3.44	0.48	4.81	0.45	23.92	1.96
Non – Current Assets	-	-	-	-	2.04	0.17
Total Non – Current Assets	329.80	46.27	317.62	29.71	437.86	35.87
Total Assets	712.78	100.00	1,068.95	100.00	1,220.80	100.00
<u>Liabilities and Shareholders' Equity</u>						
<i>Current Liabilities</i>						
Overdrafts and Short-term Loans from Banks	66.68	9.35	215.12	20.12	311.06	25.48
Trade Accounts Receivable	66.17	9.28	164.56	15.39	108.38	8.88
Other Payables	3.05	0.43	5.22	0.49	6.27	0.51
Current Portion of Long-term Loans	24.68	3.46	18.08	1.69	-	-
Current Portion of Payables According to Lease/Purchase Contracts	3.63	0.51	4.06	0.38	2.71	0.22
Accrued Income Tax	12.93	1.81	29.23	2.73	-	-
Accrued Expenses	12.37	-	24.95	2.33	15.34	1.26
Related Companies	-	0.53	-	-	0.05	0.00
Deposits for Received Goods	3.76	-	3.76	0.35	7.25	0.59
Accrued Value Added Tax	-	0.81	11.21	1.05	-	-
Other Current Liabilities	5.77	-	8.99	0.84	5.22	0.43
Total Current Liabilities	199.02	27.92	485.17	45.39	456.28	37.38
<i>Non – Current Liabilities</i>						
Long-term Loans – Net	19.52	2.74	0.75	0.07	-	-
Lease/Purchase Contract Payables – Net	3.55	0.50	5.49	0.51	2.75	0.23
Liabilities Under Employee Benefits Obligation	2.57	0.36	4.28	0.40	4.11	0.34
Total Non – Current Assets	25.64	3.60	10.51	0.98	6.86	0.56
Total Liabilities	224.66	31.52	495.69	46.37	463.14	37.94

Remarks: The Company had subsidiaries in 2015.

Statement of Financial Position (Continued)

	2014 (Separate F/S)		2015 (Consolidated F/S)		2016 (Consolidated F/S)	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
Shareholders' Equity						
Share Capital						
Registered	200.00	28.06	200.00	18.71	270.00	22.12
Issued and Fully Paid	200.00	28.06	200.00	18.71	270.00	22.12
Premium on Common Shares	45.94	6.45	45.94	4.30	304.94	24.98
Retained Earnings						
Appropriated for Legal Reserve	20.00	2.81	20.00	1.87	20.00	1.64
Unappropriated	222.19	31.17	303.93	28.43	159.40	13.06
Other Components of Equity	-	-	0.36	0.03	0.35	0.03
Total Equity of the Company's Shareholders	488.12	68.48	570.23	53.34	754.69	61.82
Non – Controlling Interests in Subsidiary	-	-	3.04	0.28	2.97	0.24
Total Shareholders' Equity	488.12	68.48	573.26	53.63	757.67	62.06
Total Liabilities and Shareholders' Equity	712.78	100.00	1,068.95	100.00	1,220.80	100.00

Remarks: The Company has subsidiaries in 2015.

Statement of Comprehensive Income

	2014 (Separate F/S)		2015 (Consolidated F/S)		2016 (Consolidated F/S)	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
Income						
Sales	743.83	96.24	1,209.57	97.96	518.34	96.07
Services	16.68	2.16	19.63	1.59	12.89	2.39
Other	12.38	1.60	5.59	0.45	8.32	1.54
Total Income	772.88	100.00	1,234.79	100.00	539.55	100.00
Costs and Expenses						
Cost of Sales	(565.14)	(73.12)	(924.77)	(74.89)	(493.53)	(91.47)
Cost of Services	(15.01)	(1.94)	(11.64)	(0.94)	(10.02)	(1.86)
Selling and Administrative Expenses	(115.35)	(14.92)	(139.92)	(11.33)	(127.44)	(10.02)
Total Expenses	(695.50)	(89.99)	(1,076.33)	(87.17)	(631.50)	(117.04)
Profit (Loss) Before Deducting Interest and Income Tax	77.38	10.01	158.46	12.83	(91.95)	(17.04)
Financial Costs	(7.54)	(0.98)	(8.77)	(0.71)	(7.76)	(1.44)
Juristic Person Income Tax	(14.54)	(1.88)	(31.14)	(2.52)	19.11	3.54
Net Profit (Loss) for the Year	55.30	7.15	118.55	9.60	(80.59)	(14.94)
Comprehensive Profit (Loss) for the Year						
Actuarial Loss	(0.59)	(0.08)	(1.06)	(0.09)	-	-
Exchange Differences from Foreign Currency	-	-	0.36	0.03	(0.00)	(0.00)
Other Comprehensive Profit (Loss) for Year-Net from Taxes	(0.59)	(0.08)	(0.70)	(0.06)	(0.00)	(0.00)
Total Comprehensive Profit (Loss) for the Year	54.70	7.08	117.85	9.54	(80.60)	(14.94)
Basic Net Profit (Loss) Per Share						
Net Profit (baht Per Share)	0.28	-	0.59	-	(0.34)	-
Par Value (Baht)	1.00	-	1.00	-	1.00	-

Remarks: The Company had subsidiaries in 2015.

Statement of Cash Flows

(Unit: Million Baht)	2014 (Separate F/S)	2015 (Consolidated F/S)	2016 (Consolidated F/S)
Cash Flows from Operating Activities			
Net Profit Before Income Tax	69.84	149.69	(99.71)
Adjustments to Reconcile Net Profit to Cash from Operating Activities			
Depreciation and Amortization			
Provision for Doubtful Accounts	38.10	40.02	42.81
Provision (Reversal of Allowance) for Obsolete Inventories	3.21	2.50	7.96
Profit (Loss) from Sales of Assets	0.08	1.03	5.35
Unrealized Loss (Gain) on Exchange Rate	(2.44)	(0.71)	0.03
Unrealized Loss (Gain) on Reevaluation of Investment	(3.80)	0.49	1.26
Share of Loss of Joint Companies by the Equity Method	0.01	(0.00)	(1.87)
Provision for Employee Benefits Obligation	-	-	0.50
Interest Payment	1.25	0.27	1.25
	7.54	8.77	7.76
Cash Provided from Operations before Changes in Operating Assets and Liabilities	113.78	202.05	(34.66)
Decrease (Increase) in Operating Assets			
Ordinary Trade Debtors-Customers	(24.11)	(326.60)	227.33
Related Company Debtors	0.12	2.17	0.13
Other Debtors-Subsidiaries	-	-	(0.40)
Inventories	14.98	(20.02)	(57.61)
Refundable Value Added Tax	(1.56)	13.14	(18.91)
Other Current Assets	(1.49)	(2.80)	2.16
Other Non-Current Assets	-	-	(2.04)
Increased (Decreased) Operating Liabilities			
Trade Accounts Payable	(11.41)	100.73	(55.26)
Accrued Expenses	0.06	12.58	(9.61)
Deposits for Received Goods	(3.89)	0.01	3.49
Other Current Liabilities	(4.36)	3.24	(3.78)
Payment for Employee Benefits Obligation	(1.97)	-	(1.60)
Cash Gained from Operations	80.03	(15.49)	49.23
Tax Payment	(13.47)	(16.03)	(30.56)
Interest Payment	(7.02)	(8.25)	(7.14)
Net Cash Provided (Used) from Operations	59.54	(39.77)	11.53

Statement of Cash Flows (Continued)

(Unit: Million Baht)	2014 (Separate F/S)	2015 (Consolidated F/S)	2016 (Consolidated F/S)
Cash Flows from Investing Activities			
Decrease (Increase) in Restricted Cash Deposits	(0.19)	0.77	-
Decrease (Increase) in Temporary Investment	10.74	(19.89)	(200.00)
Increased Short-Term Lending-Joint Companies	-	-	(17.00)
Increased Investment in Joint Companies	-	-	(0.50)
Deposits for Feasibility Studies for Repayable Investment Projects	-	-	(81.11)
Proceeds from Sales of Assets	5.14	1.27	0.01
Purchase of Other Fixed Assets	(45.73)	(19.32)	(40.87)
Purchase of Computer Program	(1.65)	(2.89)	(3.26)
Net Cash Gained (Used) from Investing Activities	31.69	(40.06)	(342.74)
Cash Flows from Financing Activities			
Increase (Decrease) in Overdrafts and Short – Term			
Repayment of Long-term Bank Loans	(2.57)	148.44	94.66
Payment of Liabilities Under Purchase/Lease Contracts	(9.82)	(25.37)	(18.82)
Proceeds from Paid Up Share Capital	(4.59)	(3.65)	(4.52)
Subsidiaries Receive Paid Up Share Capital in Parts Not under Control	-	-	329.00
Dividend Cash Payment	-	3.29	0.00
	(41.99)	(36.00)	(64.00)
Net Cash Provided from (Used in) Financing Activities	(58.97)	86.71	336.31
Exchange Differences from Conversion of Subsidiary's Foreign Currency Financial Statements	-	0.45	(0.00)
Net Increase (Decrease) in Cash and Cash Equivalents	(31.12)	7.32	5.09
Cash and Cash Equivalents on 1 January	117.36	86.24	93.56
Cash and Cash Equivalents on 31 December	86.24	93.56	98.65

Remarks: The Company had subsidiaries in 2015.

3. Table Summarizing Significant Financial Ratios

Transactions	2014 (Separate F/S)	2015 (Consolidated F/S)	2016 (Consolidated F/S)
Liquidity Ratio			
Liquidity Ratio (Times)			
Quick Ratio (Times)	1.92	1.55	1.72
Cash Flow Ratio (Times)	1.18	1.20	1.22
Current Trade Accounts Receivable Ratio (Times)	0.28	(0.12)	0.02
Average Collection Period (Days)	5.31	3.87	1.45
Current Inventories Ratio (Times)	68.72	94.37	252.32
Average Sale Period (Days)	3.84	6.18	2.62
Trade Accounts Payable Ratio (Times)	95.14	59.10	139.45
Repayment Period (Days)	6.68	6.76	3.14
Cash Cycle (Days)	54.64	54.02	116.22
(วัน)	109.20	99.45	275.54
Profitability Ratios			
Gross Profit Margin (%)	23.71	23.82	5.21
Operating Profit Margin (%)	8.55	12.44	(18.78)
Other Profit Margin (%)	0.63	(0.26)	0.10
Cash to Profit Ratio (%)	91.61	(26.02)	(11.55)
Net Profit Margin (%)	7.15	9.60	(14.94)
Return on Equities (%)	11.48	20.72	(12.11)
Efficiency Ratio			
Return on Assets (%)	7.63	11.10	(7.04)
Return on Fixed Assets (%)	29.30	51.66	(12.27)
Asset Turnover (Times)	1.07	1.16	0.47
Financial Ratio			
Debt to Equity Ratio (Times)	0.46	0.86	0.61
Interest Coverage Ratio (Times)	15.32	22.64	(6.33)
Debt Service Coverage (Times)	0.45	(0.39)	0.07
Dividend Payout Ratio (%)	75.96	30.37	(79.41)

Remarks: The Company had subsidiaries in 2015.

Analysis and Explanations of the General Management Department

1 Overall Performance in the Past

The Company operates in the business of producing and distributing electrical transformers, a business related and involved with the production and demand for power, because electrical transformers are used to adjust voltage from the source to reach levels matching power user needs such as industrial factories, residential homes and skyscrapers, etc. Therefore, the Company's growth trends are in the same direction as continually rising power demands. Hence, EGAT which is responsible for Thailand's entire power production and transmission system, including the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA), which are responsible for distributing power to power users, will have to modify and expand the power transmission system for concurrence with the Thailand Power Development Plan, thereby increasing the demand for electrical transformers.

In 2016, the company increased investment in the energy business and formed a subsidiary, namely, QTC Global Power Co., Ltd., and a joint company, namely PPWE Co., Ltd., to invest in alternative energy projects for the year 2016. At the present, both companies are conducting studies for investment projects.

In 2014 and 2015, the Company's sales total of electrical transformers were 736.66 million baht and 1,198.99 million baht, respectively, an increase resulting from expansion of investment in alternative energy projects, particularly, sunlight energy. In 2016, the Company's sales of electrical transformers decreased to 513.09 million baht, a decrease by 57.21 percent from 2015 because in 2016 economic and investment conditions slowed and caused increased market competitions as well as a slowing down of growth in alternative energy business investments. In the past, the prices of vital raw materials such as silicon steel, copper foil and copper wire used to insulate low voltage coils had significant fluctuations. However, with the management team's experience of over 20 years in the transformer industry in addition to the use of modern machinery and efficient production technology, the Company has always profited in the past. Furthermore, the Company is aware of the importance of implementing Enterprise Resource Planning (ERP) in the management of every sector of the Company such as production, procurement, sales, accounting and finance including warehouse management as an interrelated system capable of real-time data connections, which boosts the Company's overall performance.

Due to the great importance placed on transformer quality by the Company, the Company's electrical transformer products can be seen to have received certification of standards by various institutes whether if it was the Thai Industrial Standards Institute TISI 384-2543 from the Thai Industrial Standards Institute Office, Ministry of Industry, ISO 9001:2000 for distribution transformer design, production and maintenance in addition to receiving a certificate for laboratory capacity meeting TISI 17025-2548 standards (ISO/IEC 17025:2005). Furthermore, the Company is capable of producing electrical transformers with quality meeting various international standards. This proves our world-class quality and customer acceptance.

(a) Income

The Company had total income of 802.84 million baht in 2013, 772.88 million baht in 2014 and 1,234.79 million baht in 2015. Sale and services income details including other income can be summarized as follows:

Income from Sales

Customer Type	2014			2015			2016		
	Million Baht	Ratio (%)	Growth Rate (%)	Million Baht	Ratio (%)	Growth Rate (%)	Million Baht	Ratio (%)	Growth Rate (%)
State Agencies and Enterprises	189.58	25.74	(29.90)	336.54	28.07	77.51	90.03	17.55	(73.25)
Sales Representatives	95.57	12.97	(33.91)	83.24	6.94	(12.90)	96.83	18.87	16.33
Private	451.51	61.29	25.63	779.21	64.99	72.58	326.23	63.58	(58.13)
Total Income from Sales	736.66	100.00	(4.88)	1,198.99	100.00	62.76	513.09	100.00	(57.21)

In 2014, the Company had sales income of 736.66 million baht, a reduction from 2013 by 4.88 percent. Income from electrical transformer sales to private sector customers rose from 359.41 million baht in 2013 to 451.51 million baht in 2014, a growth of 25.63 percent as a result of alternative energy power plant project expansions in 2014. Income from the public sector and state enterprises dropped from 270.46 million baht in 2013 to 189.58 million baht in 2014 or a reduction of 29.90 percent as a result of domestic economic slowdown and political uncertainty.

In 2015, the Company had sales income of 1,198.99 million baht, an increase from 2014 by 62.76 percent. Income from electrical transformer sales to state agencies, state enterprises and private sector customers rose from 189.58 million baht and 451.51 million baht in 2014 to 336.54 million baht and 779.21 million baht in 2015, a growth of 77.51 percent and 72.58 percent from alternative energy power plant project expansions in 2015. Income from sale representatives dropped from 95.57 million baht in 2014 to 83.24 million baht in 2015 or a reduction by 12.90 percent as a result of lower sales by sale representatives overseas in line with the regional economic slowdown of the sale representatives' country.

In 2016, the Company had sales income of 513.09 million baht, a decrease from 2015 by 57.21 percent. Income from electrical sales to state agencies, state enterprises and private sector decreased from 779.21 million baht in 2015 to 326.23 million baht in 2016, a decrease of 58.13 percent because of increased market competitions and slowing down of investment in alternative energy projects. Income from sales representatives increased from 83.24 million baht in 2015 to 96.83 million baht in 2016, an increase of 16.33 percent as a result of higher sales by same representatives overseas in line with the regional economic growth of the sale representatives' country.

Income from Services

The Company's income from services in 2014-2016 amounted to 16.68 million baht, 19.63 million baht and 12.89 million baht, respectively. Income from services can be divided into (1) income from transformer repairs; (2) income from providing transformer inspection and maintenance services; (3) income from steel cutting services (4) income from allowing the lease of transformers and others. When income from services in 2016 was considered, income from services in 2016 was found to be composed of 6.39 million baht from transformer repairs or 49.65 percent of income from services, 3.99 million baht from transformer inspection and maintenance services or 30.98 percent of income from services, 1.48 million baht from testing services or 11.52 percent of income from services and 0.24 million baht from lease of transformers or 1.85 percent of income from services.

Other Income

Other income for the Company consists of income from selling scrap, profits from exchange rates, received interests, remunerations from short-term investments, etc. In 2014 – 2016, the Company had other income amounting to 12.38 million baht, 5.59 million baht and 8.32 million baht, respectively. In 2016, other income was composed of 2.00 million baht from selling scrap, 2.62 million baht from remunerations from short-term investments, 1.72 million baht in profits from foreign currency exchange rates and 1.98 million baht from other income.

(b) Costs and Expenses

The Company's main expenses consisted of sale and service costs, sale and management costs and paid interest. In 2014 – 2016, the Company had total expenses of 703.04 million baht, 1,085.09 million baht and 639.26 million baht, respectively, as follows:

Sale and Service Costs and Gross Profit

Sale and service costs are considered the Company's main expenses. The Company had sale and service costs amounting to 580.15 million baht in 2014, 936.41 million baht in 2015 and 503.55 million baht in 2016 or 82.52 percent, 85.2, 86.30 percent and 78.77 percent of total expenses, respectively.

When sale and service costs are compared to income from sales and services, the Company has the aforementioned ratios at 76.29 percent, 76.18 percent, and 94.79 percent of income from sales and services, respectively, or the gross profit of 23.71 percent, 23.82 percent and 5.21 percent, respectively. Factors impacting gross profits of the Company are as follows:

1. Product sale ratios to each customer mix in each year due to the fact that the Company's customers can be divided into the following three main types: (1) state agencies and enterprises; (2) sales representatives and (3) private sector customers, all of which had different gross profits. In 2014 and 2015, State agencies and enterprises are the group with the highest gross profits from large orders, making costs per unit lower than transformer production for other types of customers, followed by foreign sales representatives.

In 2016, the sale ratios of transformers to state agencies and enterprises decreased from 28.07 in 2015 to 17.55 in 2016. Furthermore, the decrease in the growth of the economy and investments increased domestic competitions by a rather significant factor and decreased sales prices, especially in domestic customers consisting of state agencies and enterprises and private sector customers in the country, thereby leading to a large decrease in gross profit from 23.82 percent in 2015 to 5.21 percent in 2016.

2. Raw material costs, especially main raw materials such as silicon, coated round wires and copper foil are raw materials with few producers and prices adjusted based on the supply and demand of the global market. This has resulted in a high degree of fluctuation. In 2015, the price of silicon rose and then decreased continually in 2016, a rate of decrease of 20-30 percent.

Sales and Management Expenses

The Company had sales and management expenses of 115.35 million baht in 2014, 139.92 million baht in 2015 and 127.44 in 2016 or ratios of 14.92 percent, 11.33 percent and 23.53 percent of total income, respectively.

In 2014, the Company had sales and management expenses of 115.35 million baht, an increase by 6.75 percent from 2013 because the Company had higher expenses related to executives and employees

from increases to salaries, continual investments in fixed assets and higher marketing costs from 2013 at 23.92 percent to build more brand knowledge and increase competitive opportunities. Significant sale and management expenses in 2014 consisted of expenses related to executives and employees at 21.37 percent, depreciation at 12.73 percent and marketing expenses at 10.31 percent of sales and management expenses.

In 2015, the Company had sale and management expenses of 139.92 million baht, an increase by 21.30 percent from 2014 because the Company had higher expenses related to executives and employees from increases to salaries and Sales Department expenses such as transformer transportation costs and packaging costs, etc. Significant sale and management expenses in 2015 consisted of expenses related to executives and employees at 24.73 percent and depreciation at 10.28 percent of sale and management expenses.

In 2016, the Company had sale and management expenses of 127.44 million baht, a decrease from 2015 by 8.56 percent, because the Company's sale expenses decreased such as transformer delivery fees, packaging fees and testing fees. The Company's significant management expenses consisted of expenses related to executives and employees at 18.47 percent, depreciation at 11.47 percent and marketing expenses at 7.68 percent of sale and management expenses.

Interest Burden

In 2013 – 2015, the Company had interest burdens of 6.94 million baht, 7.54 million baht and 8.77 million baht, respectively. Most of the Company's interest burdens were incurred by the use of B/E, P/N and LC/TR balances which are current loan balances for ordering the purchase of domestic and foreign raw materials. Furthermore, the Company has a long-term loan from a commercial bank to invest in machinery to increase production efficiency, resulting in paid interest burdens from the aforementioned long term loan.

(c) Net Profit

Based on the aforementioned performance, the Company had net profit in 2014-2016 at 55.30 million baht, 118.55 million baht and net loss of 80.59 million baht, respectively, or net profit rates of 7.15 percent, 9.60 percent and 14.94 percent, respectively.

If net profit during the past year is considered, the Company's net profit had upward and downward trends based on the Company's income, including the ratio of income from sales to customers with high gross profits at higher ratios because approximately 37 – 40 percent of the Company's sales and management expenses did not fluctuate according to income such as expenses related to executives and employees, and depreciation, etc. In 2015, net profit increased by 9.60 percent as a result of increase in the sale revenue of the Company by 61.63 percent from 2014 and increased ratio of produce sales to state and state enterprises and private customers.

In 2016, the Company's net loss was 80.59 million baht or a decrease of 15.17 percent due to decreased income from the sale of Company products by 56.78 percent due to the slowing economic conditions and decreased investment in alternative energy projects, decreased state enterprise work auctions and market competition. Furthermore, decreased sales resulted in increased production capital per unit because expenses did not fluctuate along with production and sales. The aforementioned expenses of the Company amounted to 30-40 percent of total expenses.

Return on Equity

When return on equity is considered, an adjustment in the same direction as increases in net profit is visible. The Company had return on equity of 11.18 percent in 2014, 20.72 percent in 2015 and 12.11 percent in 2016. Return on equity decreased when compared to 2015 because performance in 2016 suffered

a net loss, and the shares of shareholders of the Company increased as a result of capital increase and share premium by 329 million baht from the Company's performance at 32.17 percent. Furthermore, in 2014-2016, the company continually paid dividends to shareholders at the return on equity of 75.96 percent, 30.37 percent and 79.41 percent, respectively.

2 Financial Position

(a) Assets

At the end of 2013 – 2015, the Company had total assets of 712.78 million baht, 1,068.95 million baht and 1,220.80 million baht, respectively. The Company's significant assets are property, plant and equipment, trade accounts receivable, inventories and temporary investments. In 2015, the ratio of the aforementioned assets to total assets was 25.16 percent, 19.21 percent and 17.00 percent and 18.17 percent, respectively. The details of the Company's significant assets can be summarized as follows:

Trade Accounts Receivable

The Company has trade accounts receivable before deducting provision for doubtful accounts at 157.82 million baht at the end of 2014, 481.60 million baht at the end of 2015 and 254.35 million baht, which were 20.93 percent, 44.01 percent and 20.93 percent of total assets, respectively. At the end of 2016, trade accounts receivable before deducting provision for doubtful accounts decreased by 47.19 percent compared to 2015 because in 2016 total product sales decreased by a rather large margin and causing a decrease in the total final installment receivable. The Company has policy to provide a credit term of approximately 30 – 60 days to customers. For new customers, however, the Company may stipulate that customers pay for goods in cash before delivery or pay a deposit in advance. In the case of foreign customers, the customer may be required to transfer funds into accounts or pay in L/C at Sight, depending on customer analysis by the Sales Department by giving primary consideration to customer capacity to repay debt. In the past, the Company had a mean collection time of 68.72 days in 2014 and 94.37 days in 2015 and 252.32 days in 2016. The mean collection time in 2016 significantly rose due to decreased sales by 58.13 percent and a large number of remaining receivables relative to sales ratios due to a rather large sales total at the end of the year.

Outstanding Payment Period	At 31 DEC 2014		At 31 DEC 2015		At 31 DEC 2016	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
Not Due	79.47	50.35	328.37	68.18	111.85	43.98
Overdue for Payment:						
No More than 3 Months	60.59	38.39	128.10	26.60	111.07	43.67
3-6 Months	3.40	2.15	9.30	1.93	9.11	3.58
6-12 Months	4.55	2.89	4.65	0.97	3.20	1.25
More than 12 Months	9.82	6.22	11.18	2.32	19.12	7.52
Trade Accounts Receivable Before Deducting Provision for Doubtful Accounts	157.82	100	481.60	100	254.35	100
Deduction: Provision for Doubtful Accounts	(8.67)		(11.16)		(19.12)	
Trade Accounts Receivable-Net	149.16		470.44		235.23	

According to the aforementioned table, the Company's trade accounts receivable not due for payment at the end of 2014 – 2016 had ratios of 50.13 percent, 68.18 percent and 43.98 percent of trade accounts receivable before deducting provision for doubtful accounts, respectively, while customers overdue for payment of the Company had ratios of 49.65 percent, 31.82 percent and 56.02 percent of trade accounts receivable before deducting provision for doubtful accounts, respectively. Most of the customers were overdue for no more than three months. This is because the Company was unable to collect from waiting for bill placement and customer payments along with the fact that most of the Company's private sector customers are power system contractors who purchased transformers from the Company for installation at various projects. Therefore, payments to the Company are dependent on customers' ability to collect from project owners, which may require a long period of time. Nevertheless, the Company was able to collect all debts from the aforementioned trade accounts receivable.

At the end of 2014 – 2016, the Company had ratios of trade accounts receivable overdue for payment by more than one year at 6.22 percent, 2.32 percent and 7.52 percent of trade accounts receivable before deducting provision for doubtful accounts, respectively. In 2016, trade accounts receivable overdue for payment by more than one year increased from 2015 by 71.28 percent. The Company considered various options to follow-up on the aforementioned debts including legal actions or negotiations for trade accounts receivable to gradually pay off liabilities to the Company in cases where trade accounts receivable can be contacted by considering the suitability and needs of each trade account receivable. The management gave proper attention to and closely followed up on the progress and actions of related parties at monthly meetings. Thus, the Company received payments from trade accounts receivable with provision for doubtful accounts at 2.11 million baht in 2014, 1.24 million baht in 2015 and 0.80 million baht in 2016. With regard to policy in setting provision for doubtful accounts in 2015 and 2016, the Company considered setting provision for doubtful accounts from trade accounts receivable overdue for more than one year at the full amount. At the end of 2016, the Company set provision for doubtful accounts at 19.12 million baht.

Inventories

At the end of 2014 – 2016, the Company had lower inventories before deducting allowance for obsolete and decline value of inventories by 139.72 million baht, 159.75 million baht and 217.36 million baht, respectively. The largest amount of inventories was in raw materials at the ratio to total inventories of 42.70 percent, 50.47 percent and 49.70 percent, respectively. This was due to the following:

- Raw materials used in transformer production such as silicon and copper foil are goods with few producers requiring reservations from producers or suppliers in advance in order to have sufficient amounts for production and reduction of risks from raw material price fluctuations.
- Generally, the production of a set of transformers requires different raw material sizes and the amount of raw materials used for each size is different while raw material purchase orders require minimum orders, leaving an amount of remaining raw materials.
- Because some types of raw materials such as copper foil and coated round wires, etc., are rolled, there are scraps of copper or wire left at the ends of rolls. The Company considers the sales of the aforementioned raw material scrap as fitting. While unamortized, the Company continues to record the aforementioned copper or wire scrap as outstanding raw materials.

	31 DEC 2014		At 31 DEC 2015		31 DEC 2016	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
Raw Materials	59.66	42.70	80.63	50.47	108.04	49.70
Work in Process	11.27	8.07	7.50	4.70	10.52	4.84
Finished Goods	60.75	43.47	61.11	38.25	72.73	33.46
Goods in Transit	8.04	5.76	10.51	6.58	26.07	11.99
Total Inventories	139.72	100	159.75	100	217.36	100
Deduction Allowance for Obsolete and Decline Values	(3.44)		(4.47)		(9.82)	
Inventories – Net	136.28		155.28		207.54	

When the ratio of finished goods to inventories is considered at 43.47 percent at the end of 2014, 38.25 percent at the end of 2015 and 33.46 percent at the end of 2016, sales time equaled 95.14 days, 59.10 days and 139.45 days, respectively. Finished goods are composed of the following: (1) completed transformers awaiting delivery to customers. Because the Company delivers the goods to the customer at the sites specified by the customer in most transformer sales, customers are required to prepare facilities for the receipt of transformers from the Company. In some cases, customers will notify the Company to reschedule deliveries. Consequently, the Company will continue recording the aforementioned transformers as finished goods because the Company may only record as income when transformers have been delivered to customers in compliance with the Company's accounting policy; (2) transformers reserved for sale. Because the Company's sales grew by leaps and bounds in 2011 and 2012, the Company has given importance to producing finished transformers to reserve for sale since 2013. These are standard-sized transformers with regular purchase orders allowing the Company to plan for more effective production. This is why the Company has a number of finished transformers remaining.

In 2016, the Company had inventories before deducting allowance for obsolete and decline value at 217.36 million baht, an increase from the end of 2015 by 36.07 percent. The aforementioned inventories before deducting allowance consisted of raw materials at 108.04 million baht, an increase from the end of 2015 by 33.99 percent, works in process at 10.52 million baht, an increase from the end of 2015 by 40.26 percent, and finished goods at 72.73 million baht, an increase from the end of 2015 by 19.02 percent, due to acceleration in electrical transformer production to keep up with the product delivery schedules of customers, most of which were due for delivery in early 2017.

At the end of 2015 and 2016, the Company set allowances for obsolete value at 4.47 million baht and 9.82 million baht, respectively, as an allowance for all types of inventory. The Production Department will consider using each inventory. If any inventory cannot be used, the Company will consider selling the aforementioned inventory as scrap and setting an allowance for obsolete value equal to the difference between net costs and value expected to be gained from selling finished goods. The Company set lower allowance for decline value at 3.92 million baht at the end of 2015 and 8.87 million baht at the end of 2016.

Property, Plant and Equipment

The Company has net property, plant and equipment at 323.42 million baht at the end of 2014, 308.63 million baht at the end of 2015 and 307.20 million baht at the end of 2016 or the ratio to total assets of 45.37 percent, 28.87 percent and 25.16 percent, respectively. In 2014, the Company had higher factory machinery and equipment from 2013 at 43.38 million baht from investment in factory machinery and equipment purchases to improve production efficiency with machines such as steel cutting machines and steel folding machines.

In 2015 and 2016, the company had lower net property, plant and equipment by 14.79 million baht and 1.43 million baht as a result from considering normal property depreciation and investments in machinery efficiency improvements in certain parts. The Company continually invested in machinery and equipment to improve efficiency and production capacity since 2012 to the present.

(b) Liquidity

Cash Flows

In 2014, the Company had net cash flow gain from operating activities at 59.54 million baht, a reduction from 2013 because the Company had profit before tax deductions at 69.84 million baht and used the aforementioned cash flow as current funds. Trade accounts receivable increased by 24.23 million baht and the Company increased investment in fixed assets by 45.73 million baht. Significant assets invested in consisted of factory machinery and equipment at 29.20 million baht, office supplies and office decorations at 6.57 million baht and vehicles at 3.15 million baht. In addition, the Company had net cash flow from financing activities at 58.98 million baht. The Company paid long-term loans from banks at 25.22 million baht with more long term loans by 15.40 million baht and paid dividends to shareholders at 42.00 million baht. From the aforementioned causes, the Company had lower cash and cash equivalents by 31.12 million baht in 2014.

In 2015, the Company had net cash flow from operating activities at 39.77 million baht, a reduction from 2014 because the Company had profit before tax deductions at 149.69 million baht and used the aforementioned cash flow as current funds. Trade accounts receivable increased by 321.28 million baht and the Company increased investment in various foundations by 19.89 million baht along with investing in vehicle fixed assets at 5.65 million baht. In addition, the Company had net cash flow from financing activities at 86.71 million baht. The Company made more short term loans at 148.44 million baht and paid more long term loans from banks at 25.37 million baht and paid dividends to shareholders at 36.00 million baht. For the aforementioned reasons, the Company had higher cash and cash equivalents by 7.32 million baht in 2015.

In 2016, the Company had a net cash flow gained from business operations in the amount of 11.53 million baht, which is an increase from 2015. Although the Company's performance shows that it operated at a loss of as much as 99.71 million baht in 2016, the Company had net decrease in trade debtors from 336.60 million baht in 2015 to 227.33 million baht in 2016. The Company also spent a significantly higher amount of cash in activities through increased financial investments in funds by 200.00 million baht and investments in permanent assets, machinery and factory equipment by 43 million baht in addition to a deposit of 81 million baht in energy investment project studies. Furthermore, the Company's net amount of cash obtained from financing activities was 336.31 million baht. The Company has increased short-term loans by 75.83 million baht and cash received from capital increase by 329.00 million baht. In addition, the Company paid 64.00 million baht of dividends to shareholders. Hence, the Company's cash and cash equivalent transactions in 2016 increased by 5.09 million baht.

(Unit: Million Baht)	2014	2015	2016
Net Cash Gained (Used) from Operating Activities	59.54	(39.77)	11.53
Net Cash (Used) from Investing Activities	(31.69)	(40.06)	(342.74)
Net Cash Gained (Used) from Financing Activities	(58.98)	86.71	336.31
Net Increased (Decreased) Cash and Cash Equivalents	(31.12)	7.32	5.09

Liquidity Ratio

At the end of 2014-2016, the Company had liquidity ratios of 1.92 times, 1.55 times and 1.72 times, respectively, and had quick ratios of 1.18 times, 1.20 times and 1.22 times, respectively. Significant difference of quick ratios from the Company's liquidity ratios occurred from high inventories to current assets ratios at 35.59 percent, 20.67 percent and 26.51 percent, respectively.

When the Company's cash cycle was considered, the Company obviously had a cash cycle of 109.20 days in 2014, 99.45 days in 2015 and 275.54 days in 2016. The Company's mean collection periods in 2014 – 2016 were 68.72 days, 94.37 days and 252.32 days, respectively. In 2016, the Company's collection period was 252.32 days, an increase from the previous year because of income from the sales of goods in 2016 that significantly decreased when compared to 2015 and goods sales to large projects with delivery at the end of the year, resulting in higher outstanding trade accounts receivable. The Company has monitored the situation closely to ensure more effective monitoring of debts.

		2014	2015	2016
Liquidity Ratio	(Times)	1.92	1.55	1.72
Quick Ratio	(Times)	1.18	1.20	1.22
Mean Collection Period	(Days)	68.72	94.37	252.32
Mean Sales Period	(Days)	95.14	59.10	139.45
Payment Period	(Days)	54.65	54.02	116.22
Cash Cycle	(Days)	109.20	99.45	275.54

(c) Source of Capital

Liabilities

At the end of 2014 – 2016, the Company had total liabilities of 224.66 million baht, 495.69 million baht and 463.14 million baht, respectively. Total liabilities had noticeable upward or downward trends concurrent with increased or decreased sales because the Company needs to purchase sufficient raw materials for production. When the liability structure of the Company is considered, most of the liabilities are found to be current liabilities used in the Company's normal business operations. When calculated in ratios, the ratio to total liabilities was equal to 88.59 percent at the end of 2014, 97.88 percent and 98.52 percent at the end of 2016. Significant current liabilities consist of short-term loans from banks at 67.16 percent of total liabilities at the end of 2016, most of which were in bills of exchange, promissory notes (P/N and LC/TR used to order the purchase of raw materials from in the country and overseas. Furthermore, current liabilities also include trade accounts payable at 23.40 percent of total liabilities at the end of 2016.

Shareholders' Equity

At the end of 2014, the Company had shareholders' equity at 488.12 million baht, an increase from the end of 2013 by 12.70 million baht and an increase from profits for the year at 55.29 million baht. The Company paid dividends to shareholders at 42.00 million baht.

At the end of 2015, the Company had shareholders' equity at 571.30 million baht, an increase from the end of 2014 by 83.17 million baht and an increase from profits for the year at 119.17 million baht. The Company paid dividends to shareholders at 35.99 million baht.

At the end of 2016, the Company had shareholders' equity at 757.67 million baht, an increase from the

end of 2015 by 184.41 million baht and an increase from capital increase during the year at 329 million baht, a decrease from operating performance loss of 80.60 million baht. The Company paid dividends to share holders at 64.00 million baht.

Investment Structure Suitability

The Company had a liability to shareholders' equity ratio of 0.86 times at the end of 2014, 0.46 times in 2015 and 0.61 times in 2016. In 2016, the liabilities to shareholders' equity ratio was higher compared to the previous year primarily because the Company ordered the purchase of large amounts of raw materials in the final quarter of the year to have sufficient raw materials for production during the fourth quarter of 2016 and the first quarter of 2017, increasing short-term loans to 311.06 million baht in 2016 from 215.12 million baht in 2015.

3 Main Factors and Influences with Potential Impact on Future Performance and Financial Position

There are impacts due to the uncertainty of bidding results because customers who produce and distribute power in the public sector and state enterprises such as the Metropolitan Electricity Authority and the Provincial Electricity Authority will have transformer purchase processes by bidding, thereby resulting in the potential for increased uncertainty of income from sales for the Company dependent on bidding capabilities. Furthermore, bidding results are primarily dependent on economic conditions and budgets of each agency with impacts on the time when the aforementioned agencies will open biddings. In the past, the Company had income from transformer sales to this group of customers at approximately 32 – 45 percent of total income from sales, which are high ratios. Nevertheless, the Company and the Company's executives have conducted business for a long time. This has resulted in good relationships with both the MEA and PEA coupled with reliability in terms of transformer quality. Furthermore, the Company is one of only a few manufacturers of high quality transformers matching the needs of both agencies. Hence, the executives believe the Company has sufficient capacity to continually sell transformers to both the MEA and the PEA in the long run. Furthermore, the Company aims expand its market by reaching more foreign customers and continually establishing representatives abroad every year.

4 Audit Fees

At the end of the 2016 accounting year on 31 December 2016, the Company paid audit fees to the Company's auditor, Grant Thornton Co., Ltd., in the amount of 1,100,000 baht. Other than the aforementioned fees, the Company has no other service fees to be paid to the auditor, the auditing office of the auditor and persons or businesses related to the auditor or the auditor's office.

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Financial Position

(Unit : Baht)

		Consolidated F/S		Separate F/S	
	Notes	31 December 2016	31 December 2015	31 December 2016	31 December 2015
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	5	98,651,779	93,559,103	24,311,507	75,244,323
Temporary investment	6	221,867,629	20,000,378	221,867,629	20,000,378
Trade accounts receivable - general customers - net	7	234,551,905	469,621,681	234,551,905	469,621,681
- related companies	7, 8	682,018	815,661	682,018	815,661
Amount due from subsidiary	8	404,723	-	404,723	731,280
Inventories - net	9	207,542,111	155,277,892	207,542,111	155,277,892
Refundable value added tax		7,701,859	-	7,701,859	-
Prepaid expenses		4,677,032	6,948,566	4,667,781	6,948,566
Other current assets		6,863,300	5,107,156	6,754,132	5,064,905
Total current assets		782,942,356	751,330,437	708,483,665	733,704,686
NON - CURRENT ASSETS					
Investment in					
- Subsidiary companies - net	10	-	-	156,655,090	18,655,120
- Associated company	11	-	-	499,800	-
Loan to associated company	8	17,000,000	-	17,000,000	-
Other investment		50,000	50,000	50,000	50,000
Refundable deposit for feasibility					
of investment project	13	81,112,500	-	-	-
Property, plant and equipment - net	14	307,204,702	308,632,932.00	303,836,062.00	305,264,292.00
Computer software - net	15	6,535,960	4,134,636.00	6,535,960.00	4,134,636.00
Deferred income tax asset - net	18	23,920,340	4,805,557.00	24,408,910.00	4,894,965.00
Other non current assets		2,039,140	-	2,039,140.00	-
Total non - current assets		437,862,642	317,623,125.00	511,024,962.00	332,999,013.00
TOTAL ASSETS		1,220,804,998	1,068,953,562	1,219,508,627	1,066,703,699

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Financial Position (Continued)

(Unit : Baht)

		Consolidated F/S		Separate F/S	
	Notes	31 December 2016	31 December 2015	31 December 2016	31 December 2015
<u>LIABILITIES AND SHAREHOLDERS' EQUITY</u>					
CURRENT LIABILITIES					
Short - term loans from banks	16	311,060,793	215,117,086	311,060,793	215,117,086
Trade accounts payable	17	108,381,418	164,556,624	108,381,418	164,556,624
Other account payable - general suppliers		6,271,652	5,215,151	6,271,652	5,215,151
- related companies	8	48,150	-	48,150	294,663
Current portion of					
- Long - term loans from banks	16	-	18,075,400	-	18,075,400
- Liabilities under financial lease agreements	16	2,708,862	4,060,303	2,708,862	4,060,303
Accrued income tax	18	-	29,228,315	-	29,228,315
Accrued expenses	19	15,341,138	24,953,567	14,773,037	24,627,089
Advance from customers		7,248,895	3,763,700	7,248,895	3,763,700
Value added tax payable		-	11,211,996	-	11,211,996
Other current liabilities		5,217,139	8,992,519	5,187,088	8,741,581
Total current liabilities		456,278,047	485,174,661	455,679,895	484,891,908
NON - CURRENT LIABILITIES					
Long - term loans from banks - net	16	-	750,000	-	750,000
Liabilities under financial lease agreements - net	16	2,752,324	5,487,634	2,752,324	5,487,634
Liabilities under employee benefits obligation	20	4,106,727	4,276,567	4,106,727	4,276,567
Total non - current liabilities		6,859,051	10,514,201	6,859,051	10,514,201
TOTAL LIABILITIES		463,137,098	495,688,862	462,538,946	495,406,109

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Financial Position (Continued)

(Unit : Baht)

		Consolidated F/S		Separate F/S	
	Note	31 December 2016	31 December 2015	31 December 2016	31 December 2015
<u>LIABILITIES AND SHAREHOLDERS' EQUITY</u> (Continued)					
SHAREHOLDERS' EQUITY					
Share capital : common share, Baht 1 par value					
Registered 270,000,000 shares					
(2015 : 200,000,000 shares)	21	270,000,000	200,000,000	270,000,000	200,000,000
Issued and fully paid - up 270,000,000 shares					
(2015 : 200,000,000 shares)		270,000,000	200,000,000	270,000,000	200,000,000
Premium on common shares	21	304,939,064	45,939,064	304,939,064	45,939,064
Retained earnings					
- Appropriated for legal reserve	22	20,000,000	20,000,000	20,000,000	20,000,000
- Unappropriated		159,400,837	303,928,316	162,030,617	305,358,526
Other components of equity		354,281	357,630	-	-
Total equity of the Company's shareholders		754,694,182	570,225,010	756,969,681	571,297,590
Non - controlling interests in subsidiary	12	2,973,718	3,039,690	-	-
Total shareholders' equity		757,667,900	573,264,700	756,969,681	571,297,590
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		1,220,804,998	1,068,953,562	1,219,508,627	1,066,703,699

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Profit or Loss and Other Comprehensive Income

FOR THE YEARS ENDED 31 DECEMBER

		(Unit : Baht)			
	Notes	Consolidated F/S		Separate F/S	
		2016	2015	2016	2015
Income from sales and services					
Sales	27	518,341,844	1,209,566,283	518,341,844	1,209,566,283
Service income	27	12,887,371	19,630,065	12,887,371	19,630,065
Total income from sales and services		531,229,215	1,229,196,348	531,229,215	1,229,196,348
Cost of sales and services					
Cost of sales	9, 25, 27	(493,533,380)	(924,766,261)	(493,533,380)	(924,766,261)
Cost of services	25, 27	(10,022,904)	(11,642,183)	(10,022,904)	(11,642,183)
Total cost of sales and services		(503,556,284)	(936,408,444)	(503,556,284)	(936,408,444)
Gross profit		27,672,931	292,787,904	27,672,931	292,787,904
Gain (loss) on exchange rate		1,721,653	(654,092)	1,720,902	(661,949)
Other income		6,599,899	6,246,341	6,580,363	6,246,341
Income before expenses		35,994,483	298,380,153	35,974,196	298,372,296
Selling expenses	25	(36,305,856)	(53,218,512)	(36,305,857)	(53,218,512)
Administrative expenses	25	(91,135,620)	(86,700,634)	(90,749,560)	(85,010,177)
Total expenses		(127,441,476)	(139,919,146)	(127,055,417)	(138,228,689)
Income (loss) from operation		(91,446,993)	158,461,007	(91,081,221)	160,143,607
Equity in net loss of associated company	11	(499,800)	-	-	-
Income before financial cost and income tax		(91,946,793)	158,461,007	(91,081,221)	160,143,607
Financial cost		(7,760,633)	(8,767,597)	(7,760,633)	(8,767,597)
Income (loss) before income tax		(99,707,426)	149,693,410	(98,841,854)	151,376,010
Income tax benefit (income tax)	18	19,113,945	(31,142,965)	19,513,945	(31,142,965)
Income (loss) for the year		(80,593,481)	118,550,445	(79,327,909)	120,233,045
Other comprehensive income (loss)					
Items not subsequently reclassifiable to profit or loss					
Actuarial loss - net of tax		-	(1,060,571)	-	(1,060,571)
Items subsequently reclassifiable to profit or loss					
Exchange differences from foreign currency					
financial statement translation - net of tax		(3,349)	357,630	-	-
Other comprehensive loss for the year - net of tax		(3,349)	(702,941)	-	(1,060,571)
Total comprehensive income (loss) for the year		(80,596,830)	117,847,504	(79,327,909)	119,172,474

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Profit or Loss and Other Comprehensive Income (Continued)

FOR THE YEARS ENDED 31 DECEMBER

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Income (loss) attributable to:				
Portion of the Company's shareholders	(80,527,981)	118,802,835	(79,327,909)	120,233,045
Portion of non-controlling interests	(65,500)	(252,390)	-	-
	<u>(80,593,481)</u>	<u>118,550,445</u>	<u>(79,327,909)</u>	<u>120,233,045</u>
Comprehensive income (loss) attributable to:				
Portion of the Company's shareholders	(80,530,828)	118,099,894	(79,327,909)	119,172,474
Portion of non-controlling interests	(66,002)	(252,390)	-	-
	<u>(80,596,830)</u>	<u>117,847,504</u>	<u>(79,327,909)</u>	<u>119,172,474</u>
Basic earnings per share				
Income (loss) (Baht per share)	(0.34)	0.59	(0.33)	0.60
Weighted average number of common shares (share)	<u>238,251,366</u>	<u>200,000,000</u>	<u>238,251,366</u>	<u>200,000,000</u>

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements Of Changes In Shareholders' Equity

FOR THE YEARS ENDED 31 DECEMBER

Shareholders' equity of the Company.☐										(Unit : Baht)	
	Note	Retained earnings					Other components of equity		Total	Non-controlling interests' equity	Total shareholders' equity
		Issued and fully paid - up share capital	Premium on common shares	Legal reserve	Unappropriated	Other comprehensive income (loss)	Exchange differences on translating financial statement				
Consolidated F/S											
Balance as at 1 January 2015		200,000,000	45,939,064	20,000,000	222,185,386	-			488,124,450	-	488,124,450
Proceeds from paid up share capital from non-controlling interest		-	-	-	-	-	-		-	3,292,080	3,292,080
Comprehensive income (loss) for the year		-	-	-	117,742,264		357,630		118,099,894	(252,390)	117,847,504
Dividend payment	23	-	-	-	(35,999,334)		-		(35,999,334)	-	(35,999,334)
Balance as at 31 December 2015		200,000,000	45,939,064	20,000,000	303,928,316		357,630		570,225,010	3,039,690	573,264,700
Balance as at 1 January 2016		200,000,000	45,939,064	20,000,000	303,928,316		357,630		570,225,010	3,039,690	573,264,700
Proceeds from paid up share capital from non-controlling interest		-	-	-	-		-		-	30	30
Share capital increment	21	70,000,000	259,000,000	-	-		-		329,000,000	-	329,000,000
Comprehensive loss for the year		-	-	-	(80,527,479)		(3,349)		(80,530,828)	(66,002)	(80,596,830)
Dividend payment	23	-	-	-	(64,000,000)		-		(64,000,000)	-	(64,000,000)
Balance as at 31 December 2016		270,000,000	304,939,064	20,000,000	159,400,837		354,281		754,694,182	2,973,718	757,667,900

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements Of Changes In Shareholders' Equity (Continued)

FOR THE YEARS ENDED 31 DECEMBER

	Note	Issued and fully paid - up share capital	Premium on common shares	Retained earnings		Total
				Legal reserve	Unappropriated	
Separate F/S						
Balance as at 1 January 2015		200,000,000	45,939,064	20,000,000	222,185,386	488,124,450
Comprehensive income for the year		-	-	-	119,172,474	119,172,474
Dividend payment	23	-	-	-	(35,999,334)	(35,999,334)
Balance as at 31 December 2015		200,000,000	45,939,064	20,000,000	305,358,526	571,297,590
Balance as at 1 January 2016		200,000,000	45,939,064	20,000,000	305,358,526	571,297,590
Share capital increment	21	70,000,000	259,000,000	-	-	329,000,000
Comprehensive loss for the year		-	-	-	(79,327,909)	(79,327,909)
Dividend payment	23	-	-	-	(64,000,000)	(64,000,000)
Balance as at 31 December 2016		270,000,000	304,939,064	20,000,000	162,030,617	756,969,681

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Cash Flows

FOR THE YEARS ENDED 31 DECEMBER

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Cash flows from operating activities				
Income (loss) before income tax	(99,707,426)	149,693,410	(98,841,854)	151,376,010
Adjustments to reconcile income (loss) before income tax to net cash provided from operating activities				
Depreciation and amortization	42,812,412	40,023,514	42,812,412	40,023,514
Allowance for doubtful accounts	7,955,385	2,495,765	7,955,385	2,495,765
Allowance for obsolete and decline value of inventories	5,349,427	1,026,680	5,349,427	1,026,680
Loss (gain) on disposal of assets	28,392	(713,137)	28,392	(713,137)
Unrealized loss on exchange rate	1,263,107	485,172	1,263,107	485,172
Unrealized gain on revaluation of investment	(1,867,629)	(378)	(1,867,629)	(378)
Equity loss on investment in associate company	499,800	-	-	-
Provision for employee benefits obligation	1,246,425	269,095	1,246,425	269,095
Allowance for impairment of investment in subsidiary	-	-	2,000,000	-
Interest expense	7,760,633	8,767,597	7,760,633	8,767,597
Cash provided from (used in) operations before changes in operating assets and liabilities	(34,659,474)	202,047,718	(32,293,702)	203,730,318
Decrease (increase) in operating assets				
Trade accounts receivable - general customers	227,327,779	(326,596,688)	227,327,779	(326,596,688)
Trade accounts receivable - related company	133,643	2,169,896	133,643	2,169,896
Amount due from related companies	(404,723)	-	326,557	(731,280)
Inventories	(57,613,646)	(20,018,410)	(57,613,646)	(20,018,410)
Refundable value added tax	(18,913,855)	13,145,399	(18,913,855)	13,145,399
Prepaid expenses	2,271,534	(2,207,907)	2,280,785	(2,207,907)
Other current assets	(108,298)	(588,131)	(41,381)	(545,880)
Other non-current assets	(2,039,140)	-	(2,039,140)	-
Increase (decrease) in operating liabilities				
Trade accounts payable	(56,364,913)	98,557,244	(56,364,913)	98,557,244
Other payable - general suppliers	1,056,501	2,169,847	1,056,501	2,169,847
Other payable - related companies	48,150	-	(246,513)	-
Accrued expenses	(9,612,429)	12,578,952	(9,854,052)	12,547,136
Advances from customers	3,485,195	6,002	3,485,195	6,002
Other current liabilities	(3,775,382)	3,241,062	(3,554,495)	2,990,125
Payment for employee benefits obligation	(1,600,000)	-	(1,600,000)	-
Cash provided from (used in) operations	49,230,942	(15,495,016)	52,088,763	(14,784,198)
Interest payment	(7,142,753)	(8,249,800)	(7,142,753)	(8,249,800)
Income tax payment	(30,562,189)	(16,027,935)	(30,562,189)	(16,027,935)
Net cash provided from (used in) operating activities	11,526,000	(39,772,751)	14,383,821	(39,061,933)

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Statements of Cash Flows (Continued)

FOR THE YEARS ENDED 31 DECEMBER

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Cash flows from investing activities				
Decrease in restricted cash deposits	-	773,995	-	773,995
Increase in temporary investment	(199,999,622)	(19,891,595)	(199,999,622)	(19,891,595)
Increase in short-term loan to associated company	(17,000,000)	-	(17,000,000)	-
Increase in investment in subsidiary companies	-	-	(139,999,970)	(18,655,120)
Increase in investment in associated company	(499,800)	-	(499,800)	-
Refundable deposit for feasibility of investment project	(81,112,500)	-	-	-
Proceeds from sales of assets	6,000	1,266,552	6,000	1,266,552
Purchases of assets	(40,873,068)	(19,322,681)	(40,873,068)	(15,954,041)
Purchases of computer software	(3,260,800)	(2,889,949)	(3,260,800)	(2,889,949)
Net cash used in investing activities	(342,739,790)	(40,063,678)	(401,627,260)	(55,350,158)
Cash flows from financing activities				
Increase in short-term loan from banks	94,656,919	148,441,363	94,656,919	148,441,363
Repayment of long-term loans from banks	(18,825,400)	(25,369,459)	(18,825,400)	(25,369,459)
Payment of liabilities under financial lease agreement	(4,520,896)	(3,651,782)	(4,520,896)	(3,651,782)
Proceeds from paid-up share capital	329,000,000	-	329,000,000	-
Proceeds from paid-up share capital from non-controlling interest	30	3,292,080	-	-
Dividend payment	(64,000,000)	(35,999,334)	(64,000,000)	(35,999,334)
Net cash provided from financing activities	336,310,653	86,712,868	336,310,623	83,420,788
Exchange differences from translation of subsidiary's foreign currency				
financial statements	(4,187)	447,038	-	-
Net increase (decrease) in cash and cash equivalents	5,092,676	7,323,477	(50,932,816)	(10,991,303)
Cash and cash equivalents at beginning of year	93,559,103	86,235,626	75,244,323	86,235,626
Cash and cash equivalents at end of year	98,651,779	93,559,103	24,311,507	75,244,323
Supplemental cash flows information				
Non cash transactions :				
Purchase assets under finance lease agreements	-	5,596,112	-	5,596,112

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

QTC ENERGY PUBLIC COMPANY LIMITED AND SUBSIDIARY

Note to Financial Statements

AS AT 31 DECEMBER 2016 AND 2015

1. GENERAL INFORMATION

QTC Energy Public Company Limited, the “Company”, is incorporated in Thailand and has its registered office at 2/2 Krungthep Kritha Soi 8 Yak 5, Krungthep Kritha Road, Huamark, Bangkok, with a branch at 149 Moo 2 Mapyangporn Sub District, Ploukdaeng District, Rayong.

The Company was listed on “MAI” of the Stock Exchange of Thailand (SET) on 28 July 2011.

As at 31 December 2016, the Company’s major shareholders are Mr. Sathit Limpongpan (31.48% shareholding), Mr. Thatnakhone Thammavong (15.74% shareholding) and Mr. Chanthanome Phommany (15.74% shareholding).

The Company is engaged principally in the manufacturing of electric transformers for sales and made to orders of domestic and foreign customers under the “QTC” Trademark and customer specific brands. At present, the Company’s transformer products are categorized as follows:

- For Distribution Transformers: 10-5000 KVA
- Power Transformers: 5000-30000 KVA
- Special Transformers: designed and manufactured in accordance with customers’ usage and features, such as Earthling Transformer, Dry-Type Class F&H, Unit Substation, Pad mounted.

Furthermore, the Company also provides various types of services for customers, such as scheduled checks and maintenance, transformer repairs and maintenance, transformer oil fill services, transformer rental services, etc., in order to support customer needs and facilitate both customers who have purchased the Company’s transformers and general customers.

Details of the Company’s subsidiaries as at 31 December 2016 are given in Note 10.

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

2. BASIS OF PREPARATION OF THE FINANCIAL STATEMENTS

(a) Statement of compliance

The accompanying financial statements have been officially prepared in accordance with the Accounting Act B.E. 2543 and Thai Financial Reporting Standards issued under the Accounting Professions Act B.E. 2547 and the financial reporting requirements promulgated by the Securities and Exchange Commission under the Securities and Exchange Act B.E. 2535. These are officially prepared in Thai language. The translation of these financial statements to other language must be in compliance with the official report in Thai.

The financial statements have been prepared on a historical cost basis, except as otherwise disclosed specifically.

The Federation of Accounting Professions has issued new and revised TFRS effective for annual accounting periods beginning on or after 1 January 2016. The initial application of these new and revised TFRS has resulted in changes in certain Company's accounting policies. These changes are insignificantly impacted to the financial statements.

A number of new and revised TFRS have been issued but are not yet effective and have not been applied in the preparation of these financial statements. Those new and revised TFRS that may be relevant to the Company's operations, which become effective for annual financial periods beginning on or after 1 January 2017, are set out below. The Group company does not plan to adopt these TFRS early.

TFRS	Topic
TAS 1 (revised 2016)	Presentation of Financial Statements
TAS 2 (revised 2016)	Inventories
TAS 7 (revised 2016)	Statement of Cash Flows
TAS 8 (revised 2016)	Accounting Policies, Changes in Accounting Estimates and Errors
TAS 10 (revised 2016)	Events After the Reporting Period
TAS 11 (revised 2016)	Construction Contracts
TAS 12 (revised 2016)	Income Taxes
TAS 16 (revised 2016)	Property, Plant and Equipment
TAS 17 (revised 2016)	Leases
TAS 18 (revised 2016)	Revenue
TAS 19 (revised 2016)	Employee Benefits
TAS 20 (revised 2016)	Accounting for Government Grants and Disclosure of Government Assistance
TAS 21 (revised 2016)	The Effects of Changes in Foreign Exchange Rates
TAS 23 (revised 2016)	Borrowing Costs
TAS 24 (revised 2016)	Related Party Disclosures
TAS 26 (revised 2016)	Accounting and Reporting by Retirement Benefit Plans
TAS 27 (revised 2016)	Separate Financial Statements
TAS 28 (revised 2016)	Investments in Associates and Joint Ventures
TAS 29 (revised 2016)	Financial Reporting in Hyperinflationary Economics

TFRS	Topic
TAS 33 (revised 2016)	Earnings Per Share
TAS 34 (revised 2016)	Interim Financial Reporting
TAS 36 (revised 2016)	Impairment of Assets
TAS 37 (revised 2016)	Provisions, Contingent Liabilities and Contingent Assets
TAS 38 (revised 2016)	Intangible Assets
TAS 40 (revised 2016)	Investment Property
TAS 41 (revised 2016)	Agriculture
TAS 104 (revised 2016)	Accounting for trouble Debt Restructuring.
TAS 105 (revised 2016)	Accounting for investments in Debt and Equity Securities.
TAS 106 (revised 2016)	Accounting for investment Entities.
TAS 107 (revised 2016)	Financial Instruments Disclosure and Presentation.
TFRS 2 (revised 2016)	Share-based Payment
TFRS 3 (revised 2016)	Business Combinations
TFRS 4 (revised 2016)	Insurance Contracts
TFRS 5 (revised 2016)	Non-current Assets Held for Sale and Discontinued Operations
TFRS 6 (revised 2016)	Exploration for and Evaluation of Mineral Resource
TFRS 8 (revised 2016)	Operating Segments
TFRS 10 (revised 2016)	Consolidated Financial Statements
TFRS 11 (revised 2016)	Joint Arrangements
TFRS 12 (revised 2016)	Disclosure of Interests in Other Entities
TFRS 13 (revised 2016)	Fair Value Measurement
TSIC 10 (revised 2016)	Government Assistance – No Specific Relation to Operating Activities
TSIC 15 (revised 2016)	Operating Leases – Incentives
TSIC 25 (revised 2016)	Income Taxes – Changes in the Tax Status of an Enterprise or its Shareholders
TSIC 27 (revised 2016)	Evaluating the Substance of Transactions in the Legal Form of a Lease
TSIC 29 (revised 2016)	Disclosures
TSIC 31 (revised 2016)	Revenues – Barter Transactions Involving Advertising Services
TSIC 32 (revised 2016)	Intangible Assets – Web Site Costs
TFRIC 1 (revised 2016)	Changes in Existing Decommissioning, Restoration and Similar Liabilities
TFRIC 4 (revised 2016)	Determining Whether an Arrangement Contains a Lease
TFRIC 5 (revised 2016)	Rights to Interests Arising from Decommissioning, Restoration and Environmental Rehabilitation Funds
TFRIC 7 (revised 2016)	Applying the Restatement Approach under TAS 29 Financial Reporting in Hyperinflationary Economics
TFRIC 10 (revised 2016)	Interim Financial Reporting and Impairment
TFRIC 12 (revised 2016)	Service Concession Arrangements
TFRIC 13 (revised 2016)	Customer Loyalty Programmes
TFRIC 14 (revised 2016)	TAS 19 (revised 2015) <i>Employee Benefits</i> – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction

TFRS	Topic
TFRIC 15 (revised 2016)	Agreements for the Construction of Real Estate
TFRIC 17 (revised 2015)	Distributions of Non-cash Assets to Owners
TFRIC 18 (revised 2015)	Transfers of Assets from Customers
TFRIC 20 (revised 2015)	Stripping Costs in the Production Phase of a Surface Mine
TFRIC 21 (revised 2015)	Levies
Announcement from Federation of Accounting Professions No.5/2016	Accounting practice for Elimination of financial assets and financial liabilities.

The Company and subsidiaries have made a preliminary assessment of the potential initial impact on the consolidated and separate financial statements of these new and revised TFRS and expects that there will be no material impact on the financial statements in the period of initial application.

(b) Basis of measurement

The financial statements have been prepared on the historical cost basis except for the following items, which are measured on an alternative basis on each reporting date.

<i>Items</i>	<i>Measurement bases</i>
Non-derivative financial instruments at fair value through profit or loss	Fair value
Net defined benefit liability	Present value of the defined benefit obligation, limited as explained in Note 20

(c) Use of judgements and estimates

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

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

Assumptions and estimation uncertainties

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

Note 18	Current and deferred taxation
Note 20	Measurement of defined benefit obligations
Note 29	Valuation of financial instruments

Measurement of fair values

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

The Group company has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the CFO.

The Group company regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the Company assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of TFRS, including the level in the fair value hierarchy in which such valuations should be classified.

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

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

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

(d) Basis of consolidation

The consolidated financial statements include the financial statements of QTC Energy Public Company Limited and its subsidiaries, QTC – Panco Co., Ltd. and QTC Global Power Co., Ltd., at 85.00% and 99.99% shareholdings, respectively.

The percentage of subsidiaries' s total assets as at 31 December 2016 and 2015 and total revenues for the years ended 31 December 2016 and 2015 as included in the consolidated financial statements are as follows:

Subsidiary company	Nature of business	Percentage of subsidiaries's total assets to consolidated total assets		Percentage of subsidiaries's total revenues to consolidated total revenues	
		As at 31 December		for the years ended 31 December	
		2016	2015	2016	2015
QTC – Panco Co., Ltd.	Distributing of electric transformer	1.71	2.06	-	-
QTC Global Power Co., Ltd.	Renewable energy power plants	11.38	-	-	-

Significant intercompany balances and transactions and investment in subsidiary companies have been eliminated from the consolidated financial statements.

The consolidated financial statements have been prepared with the same accounting policy for the same accounting transactions or accounting events as used for the preparation of separate financial statements.

The financial statements of QTC – Panco Co., Ltd., for the year ended 31 December 2016 that included in the consolidated financial statements for the year ended 31 December 2016 have been audited by the subsidiary's auditor.

On 28 September 2016, the Company has established “QTC Global Power Co., Ltd” with the Department of Business Development for investment in renewable energy power plants in domestic and overseas with registered share capital of Baht 10,000,000 (1,000,000 shares at par value of Baht 10 each), at 99.99% of shareholding.

At the Board of directors' Meeting No. 10/2016 held on 30 November 2016, the board of director passed a resolution to additionally invest in QTC Global Power Co., Ltd. by Baht 130,000,000 from Baht 10,000,000 to Baht 140,000,000 (the subsidiary issued newly 13,000,000 common shares at the Baht 10 par value) using for the investment in solar farm project in Myanmar. The subsidiary registered the share capital increment with the Department of Business Development on 23 December 2016.

Subsidiary

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

3. SIGNIFICANT ACCOUNTING POLICIES

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

Foreign currencies

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

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

Foreign currency differences are recognized in profit or loss as incurred.

Foreign subsidiary

The assets and liabilities of foreign subsidiary are translated into Thai Baht at the exchange rates at the reporting date.

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

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

Cash and cash equivalents

Cash and cash equivalents include cash on hand and highly liquid cash in banks (which do not have restriction of usage) that are readily convertible to cash on maturity date with insignificant risk of change in value.

Related parties

Related parties comprise enterprises and individuals that control, or are controlled by the Company, whether directly or indirectly, or which are under common control with the Company.

They also include associated companies and individuals which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors and officers with authority in the planning and directing the Company's operations.

Trade accounts receivable and allowance for doubtful accounts

Trade accounts receivable are stated at the net realizable value. The Company provides allowance for doubtful accounts equal to the estimated collection losses that may incur in the collection process. The estimated losses are based on historical collection experiences coupled with a review of the current status of receivables.

Inventories

Inventories are valued at the lower of cost (specific method) and net realizable value. Net realizable value is the estimated selling price in the ordinary course of the business less the marginal cost to complete (for work in process) and other estimated costs necessary to make the sale.

Cost consists of purchasing price and other related direct cost, net of discounts and allowances (if any).

Costs of finished goods and work in process consist of raw materials, direct labor, other direct expenses, and overhead which are allocated based on the production process.

The Company sets up allowance for decline value of inventories (if any), based on their status, slow – moving and defectiveness.

Investment in subsidiary companies

Investment in subsidiaries in the separate statement of financial position is accounted for by the cost method. The Company recognizes gain or loss on sale of investment in the statement of profit or loss and other comprehensive income in the year the investment is sold. In the case of impairment, the Company will recognize loss from impairment as expense in the statement of profit or loss and other comprehensive income. The Company recognizes dividend income upon the subsidiary's declaration of the payment.

Investment in associated company

Investment in associated company in consolidated statement of financial position is accounted for by the equity method, and investment in associated company in the separate statement of financial position is accounted for by the cost method.

The Company makes the adjustments to devalue this investment when there is an indication of impairment.

Investments in other debt and equity securities

Debt securities and marketable equity securities held for trading are classified as current assets and are stated at fair value, with any resultant gain or loss recognized in profit or loss.

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

Disposal of investments

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

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

Property, plant and equipment*Recognition and measurement**Owned assets*

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses.

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

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

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised net within other income in profit or loss.

Leased assets

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

Subsequent costs

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

Depreciation

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

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

Building	20 years
Furniture, fixtures and office equipment	5 years
Machine and factory equipment	5 and 10 years
Vehicles	5 years

No depreciation is provided on freehold land or assets under construction.

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

Impairment

The carrying amounts of the Company's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated.

An impairment loss is recognised if the carrying amount of an asset exceeds its recoverable amount. The impairment loss is recognised in profit or loss.

Computer software

Computer software is presented at cost less accumulated amortization. Amortization is calculated by a straight-line basis over the estimated useful lives of 5 years.

Interest-bearing liabilities

Interest-bearing liabilities are recognised initially at fair value less attributable transaction charges. Subsequent to initial recognition, interest-bearing liabilities are stated at amortised cost with any difference between cost and redemption value being recognised in profit or loss over the period of the borrowings on an effective interest basis.

Trade and other accounts payable

Trade and other accounts payable are stated at cost.

Revenue

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

Sales of goods and services rendered

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

Interest income

Interest income is recognized in profit or loss on an accrual basis.

Finance costs

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions and contingent consideration, losses on disposal of available-for-sale financial assets that are recognized in profit or loss.

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognized in profit or loss using the effective interest method.

Income tax

The income tax expense for the year comprises current and deferred income taxes. Current and deferred income taxes are recognized in profit or loss, except to the extent that they relate to items recognized directly in equity or other comprehensive income.

Current income tax

Current income tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the end of the reporting period, and any adjustment to tax payable in respect of earlier years.

Deferred income tax

Deferred income tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities and the amounts of corresponding items used for income tax computation purpose. Deferred income tax is measured by applying the tax rate to the temporary differences which are expected to be reversed, using tax rate enacted or substantively enacted at the end of the reporting period.

Deferred income tax assets are 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 the end of each reporting period and reduced to the extent that the related tax benefit will be realized.

Employee benefits

Short-term employment benefits

Salaries, wages, bonuses, contribution to the social security and provident fund, are recognised as expenses when incurred on the accrual basis.

Post-employment benefits (Defined contribution plan)

The Company and its employees have jointly established a provident fund plan whereby monthly contributions are made by employees and by the Company. The fund's assets are held in a separate trusted fund from the Company's assets. The Company's contribution to the fund is recognised as expenses when incurred.

Post-employment benefits (Defined benefit plan)

The Company has obligations in respect of the severance payments they must make to employees upon retirement under the labour law. The Company accounts for this obligation in its accounts for each accounting period.

The obligations under the defined benefit plan are determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains or losses for the computation of post-employee benefits is recognized in other comprehensive income.

Long – term leases – where the Company is the lessee

Leases of equipment where the Company assumes substantially all the benefits and risks of ownership are classified as finance leases. Assets under finance leases are capitalized at the fair value or estimated present value of the underlying lease payments, whichever is lower. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the outstanding finance balance. Future lease payments, net of financial charges, are recognized as liabilities under finance lease agreements. The financial charge is recognized in the statement of profit or loss over the lease period. Assets acquired under finance lease agreements are depreciated over their useful lives.

Leases of assets under which all the risks and benefits of ownership are effectively retained by the lessor are classified as operating leases. Payments made under operating leases are recognized in the statement of profit or loss on a straight – line basis over the lease period. When an operating lease is terminated before the expiry date of the lease period, any payment required to be made to the lessor by way of penalty is recognized as an expense in the period in which termination takes place.

Determining whether an arrangement contains a lease

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

Segment reporting

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

Basic earnings per share

The Company presents basic earnings (loss) per share for its common shares. Basic earnings (loss) per share is calculated by dividing the profit or loss attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period.

Dividend payment

Dividend payment is recorded in the financial statements in the period in which they are approved by the Shareholders or Board of Directors of the Company.

Use of accounting estimates

When preparing the financial statements, management undertake judgments, estimates and assumptions about recognition and measurement of assets, liabilities, income and expenses. The actual results may differ from the judgments, estimates and assumptions made by management.

4. CRITICAL ACCOUNTING ESTIMATES, ASSUMPTION AND JUDGMENT AND CAPITAL RISK MANAGEMENT

4.1 Critical accounting estimates, assumption and judgments

4.1.1 Impairment of trade accounts receivables

The Company sets an allowance for doubtful accounts to reflect impairment of trade accounts receivable resulting from possible non collection of receivable. The allowance is based on a review of aging status of outstanding receivables at reporting date with the status of each customer.

4.1.2 Allowance for obsolete and decline value of inventories

The Company provides an allowance for obsolete and decline value of inventories (if any) to reflect impairment of inventories. The allowance is based on the consideration of inventory turnovers, the period of outstanding and the comparison with market value.

4.1.3 Plant, equipment and computer program

Management determines the estimated useful lives and residual values of the Company's plant, equipment and computer software and will revise the depreciation charge where useful lives and residual values previously estimated have changed or subject to be written down for their technical obsolescence or if they are no longer in used.

4.1.4 Post – employment benefits

The employee benefits obligation for employee retirement in compliance the Thai labour law is measured, using the projected unit credit method in accordance with Actuarial Technique for the present value of the estimated future cash outflows based on the interest rates of government securities, which terms to maturity approximate the terms of the related obligations and consider based on salary, turnover rate, mortality rate, length of service and others.

4.1.5 Deferred tax assets

The extent to which deferred tax assets can be recognized is based on an assessment of the probability of the Company future taxable income against which the deductible temporary differences can be utilized. In addition, management judgment is required in assessing the impact of any legal or economic limits or uncertainties in various tax jurisdictions.

4.1.6 Provision for warranty expense

A provision for warranties is recognised when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

4.2 Capital risk management

The Company's objectives in the management of capital is to safeguard its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Company may adjust the amount of dividends payment for shareholders, return capital, issue new shares, or sell assets to reduce debts.

5. CASH AND CASH EQUIVALENTS

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Cash on hand	92,809	107,106	78,440	100,000
Cash at banks - Current accounts	25,190,723	23,757,398	8,667,666	5,449,724
Cash at banks - Savings accounts	73,368,247	69,694,599	15,565,401	69,694,599
Total	98,651,779	93,559,103	24,311,507	75,244,323

The currency denomination of cash and cash equivalents as at 31 December 2016 and 2015 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
THB	81,207,318	75,155,558	24,222,329	75,155,558
AUD	89,178	88,765	89,178	88,765
LAK	17,355,283	18,314,780	-	-
Total	98,651,779	93,559,103	24,311,507	75,244,323

6. TEMPORARY INVESTMENT

Movements during the years ended 31 December 2016 and 2015 are as follow:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Balance as at 1 January	20,000,378	108,405	20,000,378	108,405
<u>Add</u> Addition	700,247,322	228,000,000	700,247,322	228,000,000
<u>Less</u> Disposition	(500,247,700)	(208,108,405)	(500,247,700)	(208,108,405)
Unrealized gain from change in value	1,867,629	378	1,867,629	378
Balance as at 31 December	221,867,629	20,000,378	221,867,629	20,000,378

The Company has temporary investment in open-end mutual fund which yields more return than general saving deposits. The said investments doesn't have any restriction for redemption.

7. TRADE ACCOUNTS RECEIVABLE – NET

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Other parties	253,668,099	480,782,490	253,668,099	480,782,490
Related parties	682,018	815,661	682,018	815,661
Total	254,350,117	481,598,151	254,350,117	481,598,151
<u>Less</u> allowance for doubtful accounts	(19,116,194)	(11,160,809)	(19,116,194)	(11,160,809)
Net	235,233,923	470,437,342	235,233,923	470,437,342

The outstanding balance of trade accounts receivable as at 31 December 2016 and 2015 are classified by ages as follows:

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
<u>Trade accounts receivable – general customers - net</u>				
Not yet due	111,535,978	327,561,193	111,535,978	327,561,193
Past due :				
Less than 3 months	110,702,344	128,095,466	110,702,344	128,095,466
3 – 6 months	9,112,336	9,298,178	9,112,336	9,298,178
6 – 12 months	3,201,247	4,645,444	3,201,247	4,645,444
Over 12 months	19,116,194	11,182,209	19,116,194	11,182,209
Total	253,668,099	480,782,490	253,668,099	480,782,490
<u>Less</u> Allowance for doubtful accounts	(19,116,194)	(11,160,809)	(19,116,194)	(11,160,809)
Net	234,551,905	469,621,681	234,551,905	469,621,681
<u>Trade accounts receivable – related companies</u>				
Not yet due	316,292	815,661	316,292	815,661
Past due :				
Less than 3 months	365,726	-	365,726	-
Total	682,018	815,661	682,018	815,661

The normal credit term granted by the Company ranges from 30 days to 90 days.

The currency denomination of trade accounts receivable as at 31 December 2016 and 2015 are as follows:

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
THB	241,763,628	457,823,508	241,763,628	457,823,508
USD	5,719,671	11,793,619	5,719,671	11,793,619
AUD	6,866,818	11,981,024	6,866,818	11,981,024
Total	254,350,117	481,598,151	254,350,117	481,598,151

The Company has movements in allowance for doubtful accounts of trade accounts receivable for the year ended 31 December 2016 and 2015 are as follow:

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Balance as at 1 January	11,160,809	8,665,044	11,160,809	8,665,044
Additional allowance during the year	8,753,395	3,733,928	8,753,395	3,733,928
Reversal during the year	(798,010)	(1,238,163)	(798,010)	(1,238,163)
Balance as at 31 December	19,116,194	11,160,809	19,116,194	11,160,809

8. RELATED PARTY TRANSACTIONS

The Company has certain business transactions with its related companies which are related through common shareholding and/or management. Such transactions are made under the conditions and terms of general trade practice with prices approximate the market.

The significant business transactions with related parties for the years ended 31 December 2016 and 2015 are as follow:

		(Unit : Baht)			
		Consolidated F/S		Separate F/S	
		For the years ended 31 December			
	Pricing Policy	2016	2015	2016	2015
Sales of goods					
- Related company	Market prices	5,280,090	3,700,700	5,280,090	3,700,700
Interest income					
- Associated company	Contracted rate	656,685	-	656,685	-
Administrative expense					
- Related company	Agreed price	188,000	42,000	188,000	336,663
<u>Key management personnel compensation</u>					
Current employment benefits		13,845,452	19,017,563	13,845,452	19,017,563
Post – employment benefits		1,684,483	152,585	1,684,483	152,585
Total		15,529,935	19,170,148	15,529,935	19,170,148

Significant balances with related parties as at 31 December 2016 and 2015, are as follows:

		(Unit : Baht)			
		Consolidated F/S		Separate F/S	
	Relationship	2016	2015	2016	2015
<u>Trade accounts receivable - related company</u>					
Q.T.C. Services Chiang Mai Co., Ltd.	Family member of a director	682,018	815,661	682,018	815,661
<u>Amount due from related companies</u>					
QTC – PANCO Co., Ltd.	Subsidiary	-	-	-	731,280
PPWE Co., Ltd.	Associated	404,723	-	404,723	-
Total		404,723	-	404,723	731,280
<u>Loan to associated company</u>					
PPWE Co., Ltd.	Associated	17,000,000	-	17,000,000	-
<u>Accrued expenses – related companies</u>					
Q.T.C. Services Chiang Mai Co., Ltd.	Family member of a director	48,150	-	48,150	-
QTC – PANCO Co., Ltd.	Subsidiary	-	-	-	294,663
Total		48,150	-	48,150	294,663
<u>Liabilities under employee benefits obligation</u>					
Post - employment benefits - key management		647,254	1,448,760	647,254	1,448,760

As at 31 December 2016, the Company has loan to associated company (due on 24 January 2017) of Baht 17 million, bearing interest at 5.50% per annum and no collateral. However, the Company has no any intention to call for repayment this loan for a period of at least 1 year in order to support working capital of said associated company.

9. INVENTORIES – NET

		(Unit : Baht)			
		Consolidated F/S		Separate F/S	
		2016	2015	2016	2015
Raw materials		108,038,463	80,629,361	108,038,463	80,629,361
Work in process		10,522,042	7,501,596	10,522,042	7,501,596
Finished goods		72,730,627	61,108,350	72,730,627	61,108,350
Goods in transit		26,068,761	10,506,940	26,068,761	10,506,940
Total		217,359,893	159,746,247	217,359,893	159,746,247
<u>Less</u> Allowance for obsolete and decline value of inventories					
		(9,817,782)	(4,468,355)	(9,817,782)	(4,468,355)
Inventories – net		207,542,111	155,277,892	207,542,111	155,277,892

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Inventories recognized as an expense in cost of sales of goods :				
- Cost of goods sold	488,183,953	923,739,581	488,183,953	923,739,581
- Write-down to net realizable value	9,641,348	4,147,223	9,641,348	4,147,223
- Reversal of write-down	(4,291,921)	(3,120,543)	(4,291,921)	(3,120,543)
Net	493,533,380	924,766,261	493,533,380	924,766,261

The Company has movements in allowance for obsolete and decline value of inventories for the years ended 31 December 2016 and 2015 as follows :

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Balance as at 1 January	4,468,355	3,441,675	4,468,355	3,441,675
Write-down to net realizable value	9,641,348	4,147,223	9,641,348	4,147,223
Reversal of write-down	(4,291,921)	(3,120,543)	(4,291,921)	(3,120,543)
Balance as at 31 December	9,817,782	4,468,355	9,817,782	4,468,355

10. INVESTMENT IN SUBSIDIARIES - NET

Name of entities	Type of business	(Unit : thousand Baht)					
		Paid-up share capital		Percentage of shareholding		Separate F/S (Cost method)	
		2016	2015	2016	2015	2016	2015
QTC – Panco Co., Ltd.	Distributing electric transformer	21,947	21,947	85.00	85.00	18,655	18,655
QTC Global Power Co., Ltd.	Renewable energy power plants	140,000	-	99.99	-	140,000	-
Total						158,655	18,655
Less Allowance of impairment on investment						(2,000)	-
Net						156,655	18,655

The subsidiary, QTC – Panco Co., Ltd., does not have any revenue from sales since year 2015, because the subsidiary was in process for expansion market in Laos. As at 31 December 2016, the subsidiary has net asset value at 85% shareholding by the Company equivalent to Baht 16.66 million, mainly consists of deposit at bank which the subsidiary received from paid-up share capital, less than book value of investment – cost method by Baht 1.80 million. The Company therefore, recorded provision for impairment on investment amounted Baht 2.00 million.

11. INVESTMENT IN ASSOCIATED COMPANY

Name of entity	Type of business	(Unit : thousand Baht)							
		Paid – up Capital		Percent of shareholding		Separate F/S (cost method)		Consolidated F/S (equity method)	
		2016	2015	2016	2015	2016	2015	2016	2015
PPWE Co., Ltd.	Production and distribution of electric power by alternative energy.	1,000	-	49.98	-	500	-	-	-

On 12 January 2016, the Company has entered into a shareholders' agreement with UAC Global Public Company Limited to jointly established "PPWE Co., Ltd" with registered share capital of Baht 1,000,000 (10,000 shares at par value of Baht 100 each), each company owned at 49.98% of shareholding. The Company considered the facts based on the voting right and other mutual agreements in accordance with the joint venture agreement, and conclude that the Company has significant influence for participating in the financial and operating policy decisions but not control of those policies. The Company therefore, considered that PPWE Co., Ltd. is associated company and account for by equity method in consolidated financial statements.

Movements in investment in associated company during the year ended 31 December 2016 are as follows :

	(Unit : Baht)	
	Consolidated F/S (equity method)	Separated F/S (cost method)
Balance as at 1 January 2016	-	-
Investment during the year – cost	499,800	499,800
<u>Less</u> Equity in net loss of associated company	(499,800)	-
Balance as at 31 December 2016	-	499,800

12. NON – CONTROLLING INTEREST

The information relating to significant non-controlling interest in subsidiary as at 31 December 2016 and 2015 are as follows:

	(Unit : Baht)	
	Consolidated F/S	
	2016	2015
Non-controlling interest percentage	15%	15%
Current assets	17,364,534	18,652,248
Non-current assets	3,368,640	3,368,640
Current liabilities	462,391	1,308,698
Net assets	20,270,783	20,712,190
Carrying amount of non-controlling interest	2,973,718	3,039,690
Other income	751	7,856
Administrative expenses	(437,419)	(1,690,457)
Loss for the years	(436,668)	(1,682,601)
Loss allocated to non-controlling interest	(65,500)	(252,390)
Net cash used in operating activities	(959,497)	(263,780)
Net cash used in investing activities	-	(3,368,640)
Net cash provided from financing activities	-	21,947,220
Net increase (decrease) in cash and cash equivalents	(959,497)	18,314,800

As at 31 December 2016, non – controlling interest of QTC Global Power Co., Ltd. is insignificant to the consolidated financial statements.

13. REFUNDABLE DEPOSIT FOR FEASIBILITY OF INVESTMENT PROJECT

On 9 December 2016, QTC Global Power Co., Ltd., a subsidiary, entered into a memorandum of share purchase agreement with 2 companies which are incorporated in Singapore. Those companies have investment in a renewable energy company incorporated in Myanmar. The subsidiary will purchase 15% of the shareholding in said company with totally amount of USD 12.00 million, the subsidiary has paid a refundable deposit of USD 2.25 million (equivalent to Baht 81.11 million) for participating in feasibility process of the renewable energy project. Under the term of memorandum, the subsidiary is required to finalize the feasibility of investment project within 28 February 2017. If the expected return of project from feasibility is unsatisfactory, the subsidiary is able to refund this deposit full amount.

14. PROPERTY, PLANT AND EQUIPMENT – NET

(Unit : Baht)

	Consolidated F/S						Total
	Land	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	
<u>Cost</u>							
1 January 2015	33,216,054	158,663,412	231,972,392	40,007,718	30,604,532	1,120,978	495,585,086
Acquisitions	252,000	2,611,744	10,908,390	1,475,585	5,650,996	3,860,110	24,758,825
Disposals	-	(38,875)	(1,593,050)	(835,642)	(2,650,953)	-	(5,118,520)
Transfer in / (out)	108,000	1,121,495	2,965,566	37,450	59,596	(4,292,107)	-
Translation adjustment	-	-	121,220	-	-	-	121,220
31 December 2015	33,576,054	162,357,776	244,374,518	40,685,111	33,664,171	688,981	515,346,611
Acquisitions	-	4,824,651	10,360,215	3,964,451	-	21,723,751	40,873,068
Disposals	-	(358,480)	(312,336)	(275,412)	-	-	(946,228)
Transfer in / (out)	-	2,028,638	3,824,102	78,200	-	(5,930,940)	-
31 December 2016	33,576,054	168,852,585	258,246,499	44,452,350	33,664,171	16,481,792	555,273,451
<u>Accumulated depreciation</u>							
1 January 2015	-	38,668,530	90,371,243	24,164,961	18,956,345	-	172,161,079
Depreciation for the year	-	9,203,843	20,118,047	5,478,147	4,356,410	-	39,156,447
Depreciation for disposals	-	(5,854)	(1,213,299)	(733,745)	(2,650,949)	-	(4,603,847)
31 December 2015	-	47,866,519	109,275,991	28,909,363	20,661,806	-	206,713,679
Depreciation for the year	-	9,886,686	21,585,245	5,486,915	4,994,090	-	41,952,936
Depreciation for disposals	-	(97,215)	(271,344)	(229,307)	-	-	(597,866)
31 December 2016	-	57,655,990	130,589,892	34,166,971	25,655,896	-	248,068,749
<u>Net book value</u>							
31 December 2015	33,576,054	114,491,257	135,098,527	11,775,748	13,002,365	688,981	308,632,932
31 December 2016	33,576,054	111,196,595	127,656,607	10,285,379	8,008,275	16,481,792	307,204,702
<u>Depreciation for the year 2015</u>							
Cost of sales							25,032,096
Administrative expense							14,124,351
Total							39,156,447
<u>Depreciation for the year 2016</u>							
Cost of sales							27,400,051
Administrative expense							14,552,885
Total							41,952,936

(Unit : Baht)

	Separate F/S						
	Land	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	Total
Cost							
1 January 2015	33,216,054	158,663,412	231,972,392	40,007,718	30,604,532	1,120,978	495,585,086
Acquisitions	252,000	2,611,744	7,660,970	1,475,585	5,650,996	3,860,110	21,511,405
Disposals	-	(38,875)	(1,593,050)	(835,642)	(2,650,953)	-	(5,118,520)
Transfer in / (out)	108,000	1,121,495	2,965,566	37,450	59,596	(4,292,107)	-
31 December 2015	33,576,054	162,357,776	241,005,878	40,685,111	33,664,171	688,981	511,977,971
Acquisitions	-	4,824,651	10,360,215	3,964,451	-	21,723,751	40,873,068
Disposals	-	(358,480)	(312,336)	(275,412)	-	-	(946,228)
Transfer in / (out)	-	2,028,638	3,824,102	78,200	-	(5,930,940)	-
31 December 2016	33,576,054	168,852,585	254,877,859	44,452,350	33,664,171	16,481,792	551,904,811
Accumulated depreciation							
1 January 2015	-	38,668,530	90,371,243	24,164,961	18,956,345	-	172,161,079
Depreciation for the year	-	9,203,843	20,118,047	5,478,147	4,356,410	-	39,156,447
Depreciation for disposals	-	(5,854)	(1,213,299)	(733,745)	(2,650,949)	-	(4,603,847)
31 December 2015	-	47,866,519	109,275,991	28,909,363	20,661,806	-	206,713,679
Depreciation for the year	-	9,886,686	21,585,245	5,486,915	4,994,090	-	41,952,936
Depreciation for disposals	-	(97,215)	(271,344)	(229,307)	-	-	(597,866)
31 December 2016	-	57,655,990	130,589,892	34,166,971	25,655,896	-	248,068,749
Net book value							
31 December 2015	33,576,054	114,491,257	131,729,887	11,775,748	13,002,365	688,981	305,264,292
31 December 2016	33,576,054	111,196,595	124,287,967	10,285,379	8,008,275	16,481,792	303,836,062
Depreciation for the year 2015							
Cost of sales							25,032,096
Administrative expense							14,124,351
Total							39,156,447
Depreciation for the year 2016							
Cost of sales							27,400,051
Administrative expense							14,552,885
Total							41,952,936

The gross amount of the Company's fully depreciated property, plant and equipment that are still in use as at 31 December 2016, amounted to Baht 127.67 million (2015 : Baht 82.53 million).

As at 31 December 2015, the Company's land and buildings and a partial of machinery are mortgaged as collaterals for credit facilities with a financial institution as mentioned in Notes 16. On 22 April 2016, the Company redeemed the said land and buildings and a partial of machinery.

15. COMPUTER SOFTWARE – NET

	(Unit : Baht) Consolidated and Separate F/S
Cost	
At 1 January 2015	11,686,920
Acquisitions	2,889,949
Disposals	(29,729)
At 31 December 2015	14,547,140
Acquisitions	3,260,800
At 31 December 2016	17,807,940
Amortisation and impairment losses	
At 1 January 2015	(9,575,160)
Amortisation for the year (administrative expenses)	(867,067)
Amortisation for disposals	29,723
At 31 December 2015	(10,412,504)
Amortisation for the year (administrative expenses)	(859,476)
At 31 December 2016	(11,271,980)
Net book value	
At 31 December 2015	4,134,636
At 31 December 2016	6,535,960

16. INTEREST – BEARING LIABILITIES

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Current				
Short - term loan from bank				
Liabilities under trust receipt agreements (secured)	80,874,993	65,117,086	80,874,993	65,117,086
Promissory note (secured)	230,185,800	150,000,000	230,185,800	150,000,000
Total	311,060,793	215,117,086	311,060,793	215,117,086
Current portion of long-term loan from bank (secured)	-	18,075,400	-	18,075,400
Current portion of liabilities under finance lease agreement (unsecured)	2,708,862	4,060,303	2,708,862	4,060,303
Total current interest - bearing liabilities	313,769,655	237,257,789	313,769,655	237,257,789
Non - Current				
Long - term loan from bank (secured)	-	750,000	-	750,000
Liabilities under finance lease agreement (unsecured)	2,752,324	5,487,634	2,752,324	5,487,634
Total non-current interest - bearing liabilities	2,752,324	6,237,634	2,752,324	6,237,634

The periods to maturity of interest-bearing liabilities, excluding finance lease liabilities, as at 31 December 2016 and 2015 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Within one year	311,060,793	233,192,486	311,060,793	233,192,486
After one year but within five years	-	750,000	-	750,000
Total	311,060,793	233,942,486	311,060,793	233,942,486

On 22 April 2016, the Company redeem land and construction there on and machineries which have been mortgaged as collateral for credit facilities.

Liabilities under finance lease agreements

Liabilities under finance lease agreements as at 31 December 2016 and 2015 are payable as follows:

(Unit : Baht)

	Consolidated and Separate F/S					
	2016			2015		
	Future minimum lease payments	Interest	Present value of minimum lease payments	Future minimum lease payments	Interest	Present value of minimum lease payments
Within one year	2,950,538	(241,676)	2,708,862	4,494,448	(434,145)	4,060,303
After one year but within five years	2,877,382	(125,058)	2,752,324	5,854,368	(366,734)	5,487,634
Total	5,827,920	(366,734)	5,461,186	10,348,816	(800,879)	9,547,937

Interest-bearing liabilities of the Company as at 31 December 2016 and 2015 are denominated entirely in Thai Baht.

17. TRADE ACCOUNTS PAYABLE

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Other parties	108,381,418	164,556,624	108,381,418	164,556,624

The currencies denomination of trade accounts payable as at 31 December 2016 and 2015 are as follows:

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
THB	87,631,335	155,662,400	87,631,335	155,662,400
USD	20,535,929	6,411,738	20,535,929	6,411,738
EUR	214,154	2,482,486	214,154	2,482,486
Total	108,381,418	164,556,624	108,381,418	164,556,624

18. INCOME TAX

The movements in deferred income tax assets / liabilities for the years ended 31 December 2016 and 2015 are as follows:

(Unit : Baht)

	Consolidated F/S			
	(charged) / credit to			
	1 January		Other	31 December
	2016	Profit or loss	comprehensive income	2016
Deferred income tax assets				
From allowance for doubtful accounts	2,232,162	1,591,077	-	3,823,239
From allowance for obsolete and decline value of inventories	893,671	1,069,886	-	1,963,557
From accumulated depreciation for plant and equipment	220,003	(1,297)	-	218,706
From provision for warranty expenses	1,168,422	(418,655)	-	749,767
From employee benefits obligation	884,901	(63,556)	-	821,345
From taxable loss carried forward not exceeding 5 years	-	16,640,682	-	16,640,682
Total	5,399,159	18,818,137	-	24,217,296
Deferred income tax liability				
From liabilities under finance lease agreements	504,194	(295,808)	-	208,386
From translation adjustment	89,408	-	(838)	88,570
Total	593,602	(295,808)	(838)	296,956
Deferred tax assets - net	4,805,557	19,113,945	838	23,920,340

(Unit : Baht)

	Consolidated F/S			
	(charged) / credit to			
	1 January	Other		31 December
	2015	Profit or loss	comprehensive income	2015
Deferred income tax assets				
From allowance for doubtful accounts	1,733,009	499,153	-	2,232,162
From allowance for obsolete and decline value of inventories	688,335	205,336	-	893,671
From accumulated depreciation for plant and equipment	231,749	(11,746)	-	220,003
From provision for warranty expenses	803,049	365,373	-	1,168,422
From employee benefits obligation	513,514	106,244	265,143	884,901
Total	3,969,656	1,164,360	265,143	5,399,159
Deferred income tax liability				
From liabilities under finance lease agreements	526,703	(22,509)	-	504,194
From translation adjustment	-	-	89,408	89,408
Total	526,703	(22,509)	89,408	593,602
Deferred tax assets - net	3,442,953	1,186,869	175,735	4,805,557

(Unit : Baht)

	Separate F/S		
	(charged) / credit to		
	1 January 2016	Profit or loss	Other comprehensive income
			31 December 2016
Deferred income tax assets			
From allowance for doubtful accounts	2,232,162	1,591,077	-
From allowance for obsolete and decline value of inventories	893,671	1,069,886	-
From provision for impairment on investment in subsidiary	-	400,000	-
From accumulated depreciation for plant and equipment	220,003	(1,297)	-
From provision for warranty expenses	1,168,422	(418,655)	-
From employee benefits obligation	884,901	(63,556)	-
From taxable loss carried forward not exceeding 5 years	-	16,640,682	-
Total	5,399,159	19,218,137	-
Deferred income tax liability			
From liabilities under finance lease agreements	504,194	(295,808)	-
Total	504,194	(295,808)	-
Deferred tax assets - net	4,894,965	19,513,945	-

(Unit : Baht)

	Separate F/S		
	(charged) / credit to		
	1 January 2015	Profit or loss	Other comprehensive income
			31 December 2015
Deferred income tax assets from			
From allowance for doubtful accounts	1,733,009	499,153	-
From allowance for obsolete and decline value of inventories	688,335	205,336	-
From accumulated depreciation for plant and equipment	231,749	(11,746)	-
From provision for warranty expenses	803,049	365,373	-
From employee benefits obligation	513,514	106,244	265,143
Total	3,969,656	1,164,360	265,143
Deferred income tax liability from			
From liabilities under finance lease agreements	526,703	(22,509)	-
Total	526,703	(22,509)	-
Deferred tax assets - net	3,442,953	1,186,869	265,143

Income tax recognised in profit or loss

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Current tax expense				
Income tax under Revenue Code	-	32,329,834	-	32,329,834
Deferred tax expense				
Movements in temporary differences	19,113,945	(1,186,869)	19,513,945	(1,186,869)
Total income tax expense (income tax benefit)	(19,113,945)	31,142,965	(19,513,945)	31,142,965

Income tax recognised in other comprehensive income

	(Unit : Baht)					
	Consolidate F/S					
	2016			2015		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Foreign currency translation differences						
for foreign operations	4,187	(838)	3,349	447,038	(89,408)	357,630
Defined benefit plan actuarial losses	-	-	-	(1,325,714)	265,143	(1,060,571)
Total	4,187	(838)	3,349	(878,676)	175,735	(702,941)

	(Unit : Baht)					
	Separate F/S					
	2016			2015		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Defined benefit plan-actuarial losses	-	-	-	(1,325,714)	265,143	(1,060,571)

Reconciliation of effective tax rate

	(Unit: Baht)			
	CONSOLIDATED F/S		SEPARATE F/S	
	2016	2015	2016	2015
Income (loss) before income tax	(99,707,426)	149,693,410	(98,841,854)	151,376,010
<u>Add</u> Transaction added back under the conditions of the Revenue Code	20,051,705	11,462,545	19,551,905	11,462,545
<u>Less</u> Additional expense deductions/ exempted income				
Taxable loss carried forward not exceeding 5 years	(3,913,460)	(1,189,385)	(3,913,460)	(1,189,385)
Net taxable income (loss)	<u>(85,569,181)</u>	<u>159,966,570</u>	<u>(83,203,409)</u>	<u>161,649,170</u>
Net taxable income (loss)				
Net taxable income (loss) of the Company	(83,203,409)	161,649,170	(83,203,409)	161,649,170
Net taxable loss of subsidiary companies	(2,365,772)	(1,682,600)	-	-
	<u>(85,569,181)</u>	<u>159,966,570</u>	<u>(83,203,409)</u>	<u>161,649,170</u>
Income tax under the Revenue Code - at the rate of 20%	-	(32,298,834)	-	(32,298,834)
The amount of deferred tax expense (income) from the origination and reversal of temporary differences	19,113,945	1,186,869	19,513,945	1,186,869
Income tax (income tax benefit)	<u>19,113,945</u>	<u>(31,142,965)</u>	<u>19,113,945</u>	<u>(31,142,965)</u>

19. ACCRUED EXPENSES

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Accrued director and management remuneration	4,220,000	9,750,000	4,220,000	9,750,000
Accrued transportation	1,903,770	4,463,437	1,903,770	4,463,437
Accrued export expenses	1,854,918	365,317	1,854,918	365,317
Accrued commission	3,389,404	6,585,498	3,389,404	6,585,498
Others	3,973,046	3,789,315	3,404,945	3,462,837
Total	<u>15,341,138</u>	<u>24,953,567</u>	<u>14,773,037</u>	<u>24,627,089</u>

20. LIABILITIES UNDER EMPLOYEE BENEFITS OBLIGATION

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Statement of financial position				
obligations for:				
Post-employment benefits	4,106,727	4,276,567	4,106,727	4,276,567
Statement of comprehensive income:				
<i>Recognized in profit or loss:</i>				
Post-employment benefits	1,430,160	383,280	1,430,160	383,280
<i>Recognized in other comprehensive income:</i>				
Actuarial losses recognized in the year	-	1,325,714	-	1,325,714

The Company had established a defined benefit pension plan under the Thai Labour Protection Act B.E 2541 (1998) to provide retirement benefits to employees based on pensionable remuneration and length of service.

Movements in the present value of the defined benefit obligations for the years end 31 December 2016 and 2015 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Beginning balance as at 1 January	4,276,567	2,567,573	4,276,567	2,567,573
Recognised in profit or loss				
- Current service costs	1,246,425	269,095	1,246,425	269,095
- Interest on obligation	183,735	114,185	183,735	114,185
Recognised in other comprehensive income				
- Actuarial loss	-	1,325,714	-	1,325,714
Benefits paid during the year	(1,600,000)	-	(1,600,000)	-
Balance as at 31 December	4,106,727	4,276,567	4,106,727	4,276,567

Actuarial gains and losses recognized in other comprehensive income arose from:

	(Unit : Baht)
	Consolidated and Separate F/S
	2015
Demographic assumptions	315,074
Financial assumptions	401,161
Experience adjustment	609,479
Total	1,325,714

Actuarial assumptions

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

	2016	2015
Discount rate	4.04 percent per annum	4.04 percent per annum
Future salary average increment rate	7.37 percent per annum	7.37 percent per annum
Normal retirement age	60 years	60 years
Mortality rate	Thai Mortality Table 2008	Thai Mortality Table 2008

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

	(Unit : Baht)	
	Effect to the defined benefit obligation	
	Consolidated and Separate F/S	
	2016	2015
Discount rate (0.5% increment)	(269,507)	(246,227)
Discount rate (0.5% decrement)	294,622	269,462
Future salary growth (0.5% increment)	296,660	250,835
Future salary growth (0.5% decrement)	(273,499)	(231,668)

21. SHARE CAPITAL

At the Extraordinary Shareholders' Meeting No.1/2016 held on 2 June 2016, the shareholders passed a resolution to approve the capital increase from Baht 200,000,000 to Baht 270,000,000 by issuing 70,000,000 newly common shares at offering price of Baht 4.70 per share (the par value of Baht 1 per share), totalling Baht 329,000,000, with the premium on common share at Baht 3.70 per share, totalling Baht 259,000,000, to a group of investors, comprising Mr. Sathit Limpongpan and/or Mr. Chanthamome Phommany and/or Mr. Thatnakhone Thammavong by private placement. The offering price of the mentioned shares is 9.80% discount from the market price. The fund will be used for the investment in alternative energy power plant business and for the future business expansion, as well as for supporting the working capital and the liquidity for business operations. The Company registered the share capital increment with the Department of Business Development on 7 June 2016 and received the fully paid-up share capital on 14 June 2016.

22. LEGAL RESERVE

Pursuant to the Public Limited Companies Act. B.E. 2535, the Company is required to set aside as a statutory reserve at least 5 percent of its net profit for the year net of deficit (if any), until the reserve reaches 10 percent of the registered capital. This reserve shall not be distributable for dividends

23. DIVIDEND PAYMENT

At the Annual General Meeting of Shareholders for the year 2016 held on 31 March 2016, the shareholders passed a resolution to approve the dividend payment from the net profit for the year ended 31 December 2015 to shareholders at Baht 0.32 per share for 200,000,000 common shares, totaling Baht 64 million. The dividend was paid on 28 April 2016.

At the Annual General Meeting of Shareholders for the year 2015 held on 21 April 2015, the shareholders passed a resolution to approve the dividend payment from the net profit for the year ended 31 December 2014 to shareholders at Baht 0.18 per share for 200,000,000 common shares, totaling Baht 36 million. The dividend was paid on 15 May 2018.

24. PROVIDENT FUND

The Company and employee have established a contributory Provident Fund. This Provident Fund has already been registered under the Provident Fund Act, B.E. 2530. Under the Fund plan, employee has to contribute to the fund at the specific rate and will be entitled to receive the fund when staff is no longer member in accordance with regulation of the fund. The Company's contribution to the Fund for the year 2016 amounted to Baht 1.86 million (2015 : Baht 1.61 million).

25. EXPENSES BY NATURE

Significant expenses by nature for the for the years ended 31 December 2016 and 2015 are as follows :

	Consolidated F/S		Separate F/S	
	2016	2015	2016	2015
Raw materials and supplies used	386,078,885	782,610,327	386,078,885	782,610,327
Changes in finished goods and work in process	(14,642,722)	3,412,522	(14,642,722)	3,412,522
Salaries, wages and other employee benefits	88,731,605	113,077,120	88,625,005	112,866,733
Depreciation and amortization	42,812,412	40,023,514	42,812,412	40,023,514
Repair and maintenance expenses	8,862,556	9,159,110	8,862,556	9,159,110
Electric expense	4,945,939	6,628,999	4,945,939	6,628,999
Transportation expense	7,743,877	12,408,214	7,743,877	12,408,214
Marketing expense	8,755,196	7,480,205	8,755,196	7,480,205
Warranty expenses	4,150,717	8,419,996	4,150,717	8,419,996
Commission expense and sales promotion	6,656,589	12,944,714	6,656,589	12,944,714
Professional fee	7,089,274	1,996,945	5,248,225	1,996,945
Doubtful debt	7,955,385	2,495,765	7,955,385	2,495,765
Others	71,858,047	129,035,956	73,419,637	127,563,743
Total	630,997,760	1,076,981,682	630,611,701	1,075,299,082

26. FORWARD FOREIGN EXCHANGE CONTRACTS

The Company does not have any policy to use derivative financial instrument for speculation or commercial use. Forward foreign exchange contracts are made to manage exposure for fluctuation in foreign currency exchange rates on specific transactions.

As at 31 December 2016, the Company has open forward contracts for collection of payment from trade accounts receivable and repayment of accounts payable which settlement dates are ranging between 1 month and 6 months as follows:

	Foreign currencies	Contracts rates (Baht)
<i>Forward contracts for repayment of trade accounts payable and trust receipts</i>		
USD	2,246,372	34.684 – 36.125
<i>Forward contracts for collection of payment from trade accounts receivable</i>		
USD	78,100	35.684
AUD	60,800	26.235

27. SEGMENT REPORTING

The Company business operations categorized by geophysical for the years ended 31 December 2016 and 2015 are as follows:

(Unit : Thousand Baht)

	Consolidated F/S					
	For the years ended 31 December					
	Domestic		Export		Total	
	2016	2015	2016	2015	2016	2015
Revenues from sales	407,646	1,088,682	110,696	120,884	518,342	1,209,566
Cost of sales	(406,569)	(836,458)	(86,964)	(88,308)	(493,533)	(924,766)
Gross profit	1,077	252,224	23,732	32,576	24,809	284,800
Revenues from service	12,887	12,032	-	7,598	12,887	19,630
Cost of service	(10,023)	(10,960)	-	(682)	(10,023)	(11,642)
Gross profit	2,864	1,072	-	6,916	2,864	7,988
Interest expense					(7,760)	(8,768)
Depreciation and amortization expenses					(42,812)	(40,023)
Income (loss) before income tax					(99,707)	149,693
Total assets					1,220,805	1,068,953

(Unit : Thousand Baht)

	Separate F/S					
	For the years ended 31 December					
	Domestic		Export		Total	
	2016	2015	2016	2015	2016	2015
Revenues from sales	407,646	1,088,682	110,696	120,884	518,342	1,209,566
Cost of sales	(406,569)	(836,458)	(86,964)	(88,308)	(493,533)	(924,766)
Gross profit	1,077	252,224	23,732	32,576	24,809	284,800
Revenues from service	12,887	12,032	-	7,598	12,887	19,630
Cost of service	(10,023)	(10,960)	-	(682)	(10,023)	(11,642)
Gross profit	2,864	1,072	-	6,916	2,864	7,988
Interest expense					(7,760)	(8,768)
Depreciation and amortization expenses					(42,812)	(40,023)
Income (loss) before income tax					(98,842)	151,376
Total assets					1,219,509	1,066,703

Major Customer

For the years ended 31 December 2016 and 2015, the Company's major revenues arose from sales to Government enterprises and private companies amounted to Baht 90 million and Baht 404 million, respectively.

28. COMMITMENTS AND CONTINGENT LIABILITIES

As at 31 December 2016, the Company has obligations under a domestic bank guarantees for performance bonds required in the normal course of businesses approximately Baht 158 million.

29. FINANCIAL INSTRUMENTS

Foreign Currency Risk

The Company has exposure for foreign currency risk relating primarily to its trade accounts receivable and accounts payable and loans from banks which are denominated in foreign currencies. The Company entered into the forward exchange contracts when it considers necessary to reduce exposure on foreign currency risk.

Credit Risk

The Company provides credit term on its trade transactions. The Company manages its exposure to credit risk by closely monitoring collection of accounts receivable and focuses on overdue accounts. In the case of doubt about the collection of accounts receivable, the Company provides allowance in the accounts as deemed necessary.

Interest Rate Risk

The interest rate risk is that future movements in market interest rates that will affect the results of the Company operations and its cash flows. The Company's exposure to interest rate risk relates primarily to their deposits with bank, temporary investment, loans to associate company, loans from bank and liabilities under hire - purchase agreements as follows:

	(Unit : Baht)				
	Consolidated F/S				
	2016				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	72,637,984	-	26,013,794	98,651,779	0.125% - 0.375%
Temporary investment	221,867,629	-	-	221,867,629	1.33% - 1.49%
Trade accounts receivable	-	-	235,233,923	235,233,923	-
Loan to associated company	17,000,000	-	-	17,000,000	5.50%
Short - term loans from bank	311,060,793	-	-	311,060,793	2.92% - 3.25%
Trade accounts payable and other payable	-	-	114,683,120	114,683,120	-
Liabilities under finance lease agreements	-	5,461,186	-	5,461,186	2.40% - 4.00%

(Unit : Baht)

	Consolidated F/S				
	2015				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	88,002,273	-	5,556,830	93,559,103	0.75% - 0.875%
Temporary investment	20,000,378	-	-	20,000,378	-
Trade accounts receivable	-	-	470,437,342	470,437,342	-
Loans from bank	215,117,086	-	-	215,117,086	2.33% - 2.66%
Trade accounts payable and other payable	-	-	169,771,775	169,771,775	-
Long - term loans from bank	18,825,400	-	-	18,825,400	5.525% - 7.00%
Liabilities under finance lease agreements	-	9,547,937	-	9,547,937	2.40% - 4.00%

(Unit : Baht)

	Separate F/S				
	2016				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	15,643,841	-	8,667,666	24,311,507	0.125% - 0.375%
Temporary investment	221,867,629	-	-	221,867,629	1.33% - 1.49%
Trade accounts receivable	-	-	235,233,923	235,233,923	-
Loan to associated company	17,000,000	-	-	17,000,000	5.50%
Short - term loans from bank	311,060,793	-	-	311,060,793	2.92% - 3.25%
Trade accounts payable and other payable	-	-	114,653,070	114,653,070	-
Liabilities under finance lease agreements	-	5,461,186	-	5,461,186	2.40% - 4.00%

(Unit : Baht)

	Separate F/S				
	2015				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	69,694,599	-	5,549,724	75,244,323	0.75% - 0.875%
Temporary investment	20,000,378	-	-	20,000,378	-
Trade accounts receivable	-	-	470,437,342	470,437,342	-
Short - term loans from bank	215,117,086	-	-	215,117,086	2.33% - 2.66%
Trade accounts payable and other payable	-	-	169,771,775	169,771,775	-
Long - term loans from bank	18,825,400	-	-	18,825,400	5.525% - 7.00%
Liabilities under finance lease agreements	-	9,547,937	-	9,547,937	2.40% - 4.00%

As of 31 December 2016 and 2015, the financial instrument classified by the periods of time from the date on the statements of financial position to their maturity dates are as follows:

(Unit : Baht)

	Consolidated F/S			
	2016			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	98,651,779	-	-	98,651,779
Temporary investment	221,867,629	-	-	221,867,629
Trade accounts receivable	235,233,923	-	-	235,233,923
Loans to associated company	-	-	17,000,000	17,000,000
Short - term loans from bank	-	311,060,793	-	311,060,793
Trade accounts payable and other payable	-	114,683,120	-	114,683,120
Liabilities under hire - purchase agreements	-	2,708,862	2,752,324	5,461,186

(Unit : Baht)

	Consolidated F/S			
	2015			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	93,559,103	-	-	93,559,103
Temporary investment	20,000,378	-	-	20,000,378
Trade accounts receivable	470,437,342	-	-	470,437,342
Short - term loans from bank	-	215,117,086	-	215,117,086
Trade accounts payable and other payable	-	169,771,775	-	169,771,775
Long - term loans from bank	-	17,675,400	1,150,000	18,825,400
Liabilities under hire - purchase agreements	-	4,060,303	5,487,634	9,547,937

(Unit : Baht)

	Separate F/S			
	2016			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	24,311,507	-	-	24,311,507
Temporary investment	221,867,629	-	-	221,867,629
Trade accounts receivable	235,233,923	-	-	235,233,923
Loan to associated company	-	-	17,000,000	17,000,000
Short - term loans from bank	-	311,060,793	-	311,060,793
Trade accounts payable and other payable	-	114,701,220	-	114,701,220
Liabilities under hire - purchase agreements	-	2,708,862	2,752,324	5,461,186

(Unit : Baht)

	Separate F/S			
	2015			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	75,244,323	-	-	75,244,323
Temporary investment	20,000,378	-	-	20,000,378
Trade accounts receivable	470,437,342	-	-	470,437,342
Short - term loans from bank	-	215,117,086	-	215,117,086
Trade accounts payable and other payable	-	169,771,775	-	169,771,775
Long - term loans from bank	-	17,675,400	1,150,000	18,825,400
Liabilities under hire - purchase agreements	-	4,060,303	5,487,634	9,547,937

Fair value of financial instruments

The following methods and assumptions are used to estimate the fair value of each class of the Company's financial instruments.

- Financial assets are shown at estimated fair value.

The Company determines Level 1 fair values for financial assets such as cash and cash equivalents, temporary investment, and trade accounts receivable.

- Financial liabilities are shown at the book value which is considered fair value because such liabilities will be matured in short term.

The Company determines Level 1 fair values for financial liabilities such as trade accounts and other accounts payable.

The Company determines Level 2 fair values for financial liabilities using a discounted cash flow technique, which uses contractual cash flows and a market-related discount rate, such as short-term and long-term loans from banks, liabilities under financial lease agreement, and liabilities under employee benefits obligation

30. APPROVAL OF FINANCIAL STATEMENTS

These financial statements were authorized by the Company's authorized director on 14 February 2017.



คุณภาพงานที่ใส่ใจ
QUALITY OF DETAILS >>
D - DYNAMICS E - ENVIRONMENT
T - TEAMWORK A - ACHIEVEMENT
I - INNOVATION L - LEADERSHIP S - SERVICE

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