



ANNUAL REPORT 2013

QTC Energy Public Company Limited



www.qtc-energy.com

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Message from the Chairman of the Board

I would like to address all shareholders on behalf of the board of directors regarding QTC's listing on the Stock Exchange of Thailand. Every company director has been resolved from the start that, although the company is a medium-sized business focused on the development and production of engineering products and services in transforming energy as its main objectives. Apart from products and services meeting international standards, we need to help one another create a transparent and professional management system with good governance in the consideration of the interests of shareholders and, more importantly, to make dividend payments to shareholders at a reasonable per share ratio in a way that does not affect the stability of the company.

In line with the aforementioned resolution, the company would like to address all shareholders that the Corporate Governance Report of Thai Listed Company survey by the Thai Institute of Directors (IOD) in which more than 500 companies were surveyed that QTC received "Excellent" ratings in 4 categories. The fifth category is the responsibility of the Board of Directors which received a "Good" rating. I am confident that all directors will succeed in striving for a higher rating next time.

However, the company's management indicator in the previously mentioned 5 categories are only basic indicators of the company's work efficiency, which will give comfort to you, our shareholders, that your investments are well-handled at minimal risk.

A more important company objective is the effectiveness of the company's business in terms of secure growth with ability to continuously pay large dividends to shareholders, which has to be our main goal. However, because the company's products are engineering products and not daily consumer products for the public at large, the extent of the company's growth depends on the growth and development of the economic infrastructure within the country and countries in the company's primary market, Asia. Countries in particular have to be free from political confusion and interruptions to many public and private projects. However, this kind of problem will not discourage the company's personnel. Rather, we will accelerate our production capacity, cut costs and find more work in new markets later on.

With the hope that peace will soon return to Thailand, the different dimensions of the company's business plans in 2014 presented for the consideration of our shareholders during this meeting will be carried out and constantly monitored.

On behalf of the Board of Directors



Associate Professor, Doctor Somchob Chaiyavej
Chairman, Board of Directors



Message from the CEO and the Managing Director

In 2013, the Thai economy grew 2.9%, a decrease from last year due to the slowing down of expenses of the private sector. In the first half of the year, private consumption still played an important role in economic growth. Its growth could be attributed to the government's stimulating measures such the raising of minimum wage, intervention measures in agricultural products, as well as other factors that pushed for the growth of household consumption. As a result, business operators still made their investments in order to improve the efficiency to meet the need in the industrial sector.

Nevertheless, in the second half of the year, the government began to run out of measures to stimulate economic growth. This, together with political uncertainty pulled down consumption. At the same time, business operators slowed and postponed their investments to wait for clarity in political situation.

In 2013, the Company received a total income of 811.69 million baht, and net profit of 74.51 million baht; a 16% and 37% decrease respectively. A decrease in income was an effect of slowing economy and uncertain political situation, which resulted in the postponement of investments by business operators.

Nevertheless, the Company still commits to setting the policy and strategies to suit both domestic and international economic situation, to improve the efficient and production process, to reduce costs, to improve the capacity of its employees at all levels, as well as to plan new strategies to enter new markets to carve out more market shares. The value of electrical transformers market is approximately 9,000 million baht.

With the determination and commitment of the management team in conducting the businesses with integrity and ethics, with the aim to develop both the organisation and quality products, as well as to participate seriously in helping and improving the society continuously for sustainable growth, the Company organised a social project and social responsible activities throughout 2013. It received the CSRI Recognition Rising Star Award from the Corporate Social Responsibility Institute (CSRI), the Stock Exchange of Thailand. It is an award for a listed company who has just entered the competition and showed a remarkable success in corporate social responsibility.

For 2014, the Thai economy has been forecast to improve if the political situation became clearer, which would create demand from the state and private sectors. This will give rise to the growth in demand of electrical transformers following the increase in electrical usage. Nevertheless, the Company has plans to expand to new markets abroad, which is consistent with its growing production capacity of 30%.

I take this opportunity, on behalf of the Board of Directors, to thank all shareholders, customers, trade partners, business friends as well as all related parties for trusting in our operations. We are still committed to developing our organisation to meet the goals.

On behalf of the Board of Directors



(Mr. Poolpipat Tantanasin)
Chairman and Managing Director

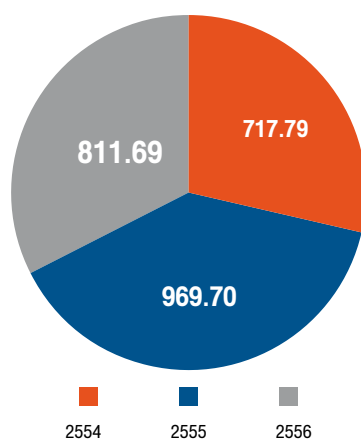
Financial Highlights

(Unit: million baht)

Performance	2011	2012	2013
Revenue from sales and services	714.46	959.51	803.95
Total revenue	717.79	969.70	811.69
Gross profit	208.29	264.25	211.53
Profit before interest and income taxes	124.56	163.17	100.48
Net profit	84.06	118.40	74.51
Net profit per share	0.49	0.59	0.37
Dividend per share	0.19 (200,000,000)	0.31 (200,000,000)	0.21 (200,000,000)
Total assets	570.44	788.97	735.84
Total liabilities	190.41	326.06	260.42
Shareholders' equity	380.03	460.92	475.42

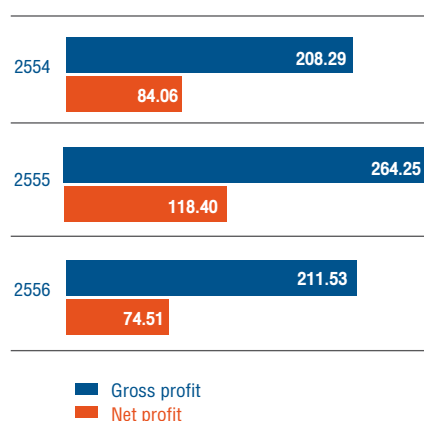
Total revenue

(Unit : Million Baht)



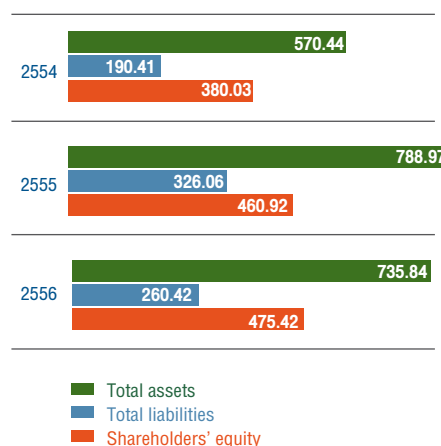
Gross profit

(Unit : Million Baht)



Total assets, Total liabilities and Shareholders' equity

(Unit : Million Baht)



Policy and Overview of Business Operations

1.1 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., with Mr. Poonphiphat Tantanasin as the founder. Mr. Poonphiphat Tantanasin has over thirty-seven 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 20 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.

1.2 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:

1.1 Hermetically Sealed Oil Type Distribution Transformers.

1.2 Open Type Transformers with Conservators.

2. Power Transformers

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.

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

QTC is a world-class manufacturer providing world-class quality in electric transformation equipment and services.

Management Principles

QTC is firmly committed to three good corporate governance principles.

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

Mission

We are firmly committed to meeting our customers' electrical system performance challenges with products and services meeting international standards.

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: - 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. [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: - 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. - 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 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 Councillor. - 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 July, 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.
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1.3 Policy and Business Performance Goals

The company has set a goal to become a manufacturer of world class transformers with emphasis on the development of quality and standards for the company's transformers in order to build confidence in maximum efficiency with continued wide acceptance of customers at home and abroad. The company intends to maintain and expand its customer base, especially in the member countries of the ASEAN Economic Community (AEC). The company has considered the state of competition expected to occur following the launching of the AEC. Therefore, the company has clear guidelines for investing in improved production efficiency over the next three years from 2012 to 2015. The company's personnel investments emphasize development based on the principles of human capital, which develops personnel in line with corporate strategies and tactics to increase competitive capacity during the new economic era which will begin in 2015. In addition, we intend to accelerate the development of supply chain management. After 2015, movements of raw materials between AEC countries will be exempted from customs taxes, which will be reduced to zero percent. Furthermore, each country will have policies to reduce logistics costs, so the company will have to prepare to handle the movements of products among AEC countries, which will be convenient, rapid and free from customs taxes, so the company can increase its competitive capacity in other ways. Moreover, the company places importance in the improvement of the quality and efficiency of service provision aimed at maximum customer satisfaction for customers who use QTC transformers and customers who use the transformers of other producers, which will be a marketing channel that will increase the company's transformer distribution in the future.

In managing the corporation to achieve the aforementioned goals, the company adheres to management principles under the process of "Quality of Details" and good governance principles, including conducting its business under corporate governance principles for sustainable growth.

1.4 Future Projects

The company has taken action toward projects for future investment. These details of these projects can be summarized as follows:

1. Megawatt Biomass Fuel Power Plant Project

As a result of the compressed biogas (CBG) investment project, after the company had already conducted feasibility studies for the project, the results obtained from studying the methods for producing gas from wastewater were summarized. The results did not achieve the set goals. Therefore, the



board has deemed it fitting to cancel the gas production project. At this time, a feasibility study is being conducted on using the gas yield to mix with palm kernel shells and wood fragments to produce fuel for the production of 9.9 MW for sale to the Electricity Generation Authority of Thailand. Four companies are participating in the joint venture, namely, QTC Energy PCL, Universal Adsorbent and Chemical PCL, Asia Green Energy PCL and Samroirot Power Co., Ltd. At present, a feasibility study is being conducted for the project. The results are expected to be ready for summarization by the end of 2014.

2. Lightning Arrester Production Project

Whereas the company has plans to invest in the production of polymer lightning arrester equipment, the company has enlisted the cooperation of ABB in term of main raw material support for the production of the lightning arrester equipment. The company is currently in the process of conducting a technological study on low cost manufacturing ability at a production output of no more than 50,000 sets per year. The current market demand is in the early stages, so the market is not large but will increase over the next three to five years. At present, the company is in the process of studying the data.

3. Electricity Transformer Production Investment Project in Laos

The company has plans to invest in the production of electricity transformer production in Laos. In consideration of the feasibility study and the signing of a joint venture contract with Panco Group Co., Ltd. on 20 June 2013, the company invested 85% and Panco Group Co., Ltd. invested 15%. The company is currently in the process of drafting a lease agreement for the land and expects the plant to be completely constructed by the end of 2014.

Board of Directors



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1. Prof. Dr. Somchob Chaiyavej Chairman of the Board

Age 78 Years

Education

- Ph D, Mechanical Engineering, Purdue University
- Course: Director Accreditation Program (DAP), Class of 62/2007

Other Positions

- Expert Director, Rajamangala University of Technology Thanyaburi
- Chairman of the Board, PATKOL Public Co., Ltd.
- Council President, North Bangkok College
- Expert Director, Thai-German Institute

2. Mr. Padetpai Meekun-iam Director

Age 69 Years

Education

- M.S. (Mechanical Engineering), Georgia Institute of Technology, U.S.A.
- Course: Director Certification Program (DCP), Class of 22/2002
- Audit Committee Program (ACP), Class of 42/2013
- Monitoring the Quality of Financial Reporting (MFR), Class of 17/2013
- Monitoring the System of Internal Control and Risk Management (MIR), Class of 14/2013
- Monitoring Fraud Risk Management (MFM), Class of 10/2013
- Monitoring the Internal Audit Function (MIA), Class of 14/2013

Other Positions

- Director, Tate Vehicle Co., Ltd.
- Director, Thai Agro Energy Public Co., Ltd.
- Director, MBK Resort Public Co., Ltd.

3. Mr. Polrachot Piyathanom Director

Age 61 Years

Education

- Master's Degree, Management, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Master's Degree, Business Administration, National Institute of Development Administration
- Course: Director Certification Program (DCP), Class of 118/2009
- Course: Director Accreditation Program (DAP), Class of 62/2007
- Course: Audit Committee Program (ACP), Class of 31/2010

Other Positions

- Director, Sang Kon Keng Co., Ltd.
- M-DIC Intertrade Co., Ltd.
- Director, M-DIC Holding Co., Ltd.

4. Mr. Nattapol Lilawattananan Director

Age 56 Years

Education

- MBA, Chulalongkorn University
- Course: Director Accreditation Program (DAP), Class of 10/2004
- Course: Audit Committee Program (ACP), Class of 3/2004

Other Positions

- Director, Unimit Engineering Public Co., Ltd.
- Director, Unique Mining Services Public Company Limited
- Director & Managing Director, Excellent Business Management Co., Ltd.
- Director & Managing Director, NBS Research Consulting Co., Ltd.



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5. Mr. Nakorn Phrprasert

Director

Age 62 Years

Education

- MBA, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Course: Director Accreditation Program (DAP), Class BJC/2004

Other Positions

- -None-

7. Mr. Siripong Boontam

Director

Age 53 Years

Education

- B.S. (Electrical Engineering), King Mongkut's Institute of Technology North Bangkok
- Course: Director Accreditation Program (DAP), Class of 78/2009

Other Positions

- -None-

6. Mr. Poonphiphat Tantanasin

Director

Age 61 Years

Education

- B.S. (Electrical Engineering) King Mongkut's Institute of Technology North Bangkok
- Course: Director Certification Program (DCP), Class of 117/2009
- Course: Director Accreditation Program (DAP), Class of 77/2009
- Course: Finance Statements for Directors (FSD), Class of 4/2009

Other Positions

- Director, M-DIC Holding Co., Ltd.
- Director, Jarin Apartment Limited Partnership

Management Team



1. Mr.Poonhiphat Tantanasin
Chief Executive Officer

2. Mr.Siripong Boontam
Deputy Managing Director

3. Mr. Panu Sinives
Manager, Supply Chain and
Logistic

4. Miss Boonpa Ruddist
Manager, General Management
Department

5. Miss Chotika Chumpoon
Manager, Finance &
Accounting Department

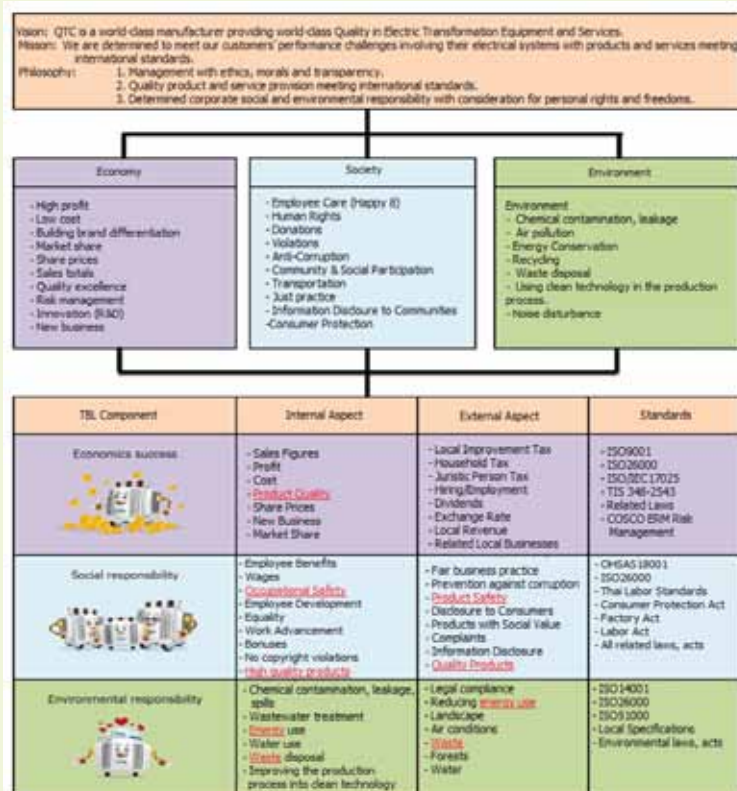
Corporate Social Responsibility

QTC Energy PCL is firmly committed to conducting its business with good practice adherent to the principles of good governance in combination with attention to environmental conservation and true social conscience and responsibility by awareness of stakeholders involved both inside and outside the organization from shareholders, employees, customers and communities to society at large in order to achieve sustainable business development.

In order to successfully conduct the organization's business to meet standards with conscientious performance and confidence in various actions in line with the Company's set vision and mission to instill true confidence in the organization's stakeholders and express corporate social responsibility in various and tangible ways. Hence, we have set corporate social responsibility (CSR) policy and appointed a board of directors and a CSR committee in order to oversee the work in this area with compliance to policy and standard practice guidelines meeting ISO26000 standards with a Chairman of the Board, Mr.Poonphiphat Tantanasin. The management structure is shown in the following link: <http://www.qtc-energy.com/index.php/csr-policy-qtc>.

- Vision : QTC is a world-class manufacturer providing world-class Quality in Electric Transformation Equipment and Services.
- Mission : We are determined to meet our customers' performance challenges involving their electrical systems with products and services meeting international standards.
- Philosophy : 1. Management with ethics, morals and transparency.
2. Quality product and service provision meeting international standards.
3. Determined corporate social and environmental responsibility with consideration for personal rights and freedoms.
- Values : The quality of DETAILS is at the heart of our principles and encompasses every area of QTC, covering everything from staff, to ways of thinking, ways of working, technological advancement, factory operations, products and consideration for society and the environment.
- D** → Dynamics = Our organization is perpetually active in the creation of a corporate culture in response to changes for sustainable advancement.
- E** → Environment = We focus on design and development for products and production processes with reduced energy requirements as well as social and environmental impact.
- T** → Teamwork = We give attention to human resources with determination to make improvements at every level leading to teamwork excellence.
- A** → Achievement = Quality corporate management with determination to achieve world-class goals.
- I** → Innovation = Process and software development under copyright laws in response to customers' challenging needs with speed and accuracy meeting international standards.
- L** → Leadership = Widespread domestic and international acceptance as a high quality electrical transformer manufacturer.
- E** → Service = Our expert engineering team is waiting to offer advice about electrical systems.
Our professional sales team has in-depth knowledge and understanding about our products.
Our competent post-sales service team is ready to handle and troubleshoot 24 hours a day.
Our delivery team is fast and punctual.

The company has analyzed and linked stakeholders in the company's business processes to be used as a CSR practice guideline in line with the organization's vision and mission which can be summarized as follows:



CSR Framework for QTC



By 2015, QTC will be a widely accepted organization as a world-class manufacturer of high quality electrical transformers 2558 QTC with a total quality management (TQM), a happy place to work building value for customers, employees and stakeholders, including society and the environment, under the principles of corporate governance which will help upgrade the company's competitive capacity in business with sustainable development by means of two key strategies, namely, building competitive capacity with high quality products and total quality management (TQM), and throughout human resource development in order to generate happiness within the organization.

In 2013, the company participated in the CSRI Recognition contest of 2013 in which the company received an award in the Rising Star category, which shows the company's determination to promote and develop its business processes with CSR on a continual basis. The award encourage all of our employees in the organization and has pushed the company toward achieving its goal of sustainable world-class status.

Nevertheless, the company still needs to develop and improve in many areas to demonstrate our concurrence and linkage with the company's vision, mission, goals, stakeholders, economy, society and the environment leading to corporate sustainability. The company's executives will support integration to cover every part with adherence to the practice guidelines of ISO26000 standards.



1 Fair Business Operations

• Fair Competition

The company gives importance to the framework of fair competition in its business practices with honesty and justice within the scope of the law and the company's business ethics. Furthermore, we adhere to equal opportunity competition with ethics, honesty, transparency and traceability. Thus, the company has offered opportunities to stakeholders in every group at every level with channels for filing complaints on violations of business ethics or any events considered to potentially impact the company's business or reputation with safety by reporting or informing in letters offering anonymity which can be sent directly to the company's board of auditors. Persons who file reports or information will be safely protected. If any effort is made to threaten informants, such efforts will be considered violations of ethical conduct. Therefore, the company has set policy involving the principles of fair competition as follows:

1.1 Policy on Conflicts of Interest

The company has policy for directors, executives and employees to exercise opportunities as the company's directors, executives or employees seeking personal gain. Thus, we have set the following regulations:

- The company's board of directors, board of audit and executives need to consider conflicts of interest concerning related transactions in compliance with the regulations set forth by the Stock Exchange of Thailand thoroughly honestly, frankly, reasonably and freely with consideration of the company's interests as the main focus to ensure that the aforementioned transactions are reasonable, in the company's primary interests and that interest groups will not be part of the aforementioned approval.
- No actions with potential conflicts of interest with the company can be performed, e.g. causing the company to lose interest or yield less gain than it should or divide gain from the company.
- No actions can be performed that would compete with the company's businesses.
- Personal related transactions potentially conflicting with the company's interests must be avoided.
- In cases where a transaction must be conducted in the company's interests, the transaction must be carried out in the same way as it would with outside personnel who have trade agreements in the same way as a reasonable person would conduct the transactions with a general partner who holds trading power from the authority of directors, managers or related persons and does not require consideration of approval with a duty to act in compliance with the regulations set forth by the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission in disclosing related information.
- Company directors, managers and employees, including the spouses of the aforementioned persons, are strictly forbidden from seeking gain in their personal businesses from the company such as any acts involving the sales of products and services to the company. If such acts occur, documents must be made explaining and disclosing the information to the company on every occasion.

1.2 Policy on Contacting Trade Partners

- Engage in conduct within the rules and framework of fair competition.
- Never defame trade competitors by making false accusations.
- Never violate intellectual property/rights.
- Never seek the secrets of trade competitors by using inappropriate or dishonest means.

1.3. Policies on Trade Partners and Trade Debtors

- Never demand, receive or pay any benefits that are dishonest to trade partners or debtors, and act appropriately and fairly according to the circumstances.
- Any procurements, purchases or employment involving the company and/or related companies or relatives of directors, managers, or employees at all levels will have to remain within the principles of equality, transparency, fairness for the company's maximum benefit and in compliance with the company's regulations and disclosure of verifiable information.
- Avoid procurements, purchases, and employments causing potential conflicts of interest with the company.
- Persons involved in the aforementioned procurement, purchase, or employment must not receive any direct or indirect benefits the trade partner and must remain neutral without intimate relationships with potential impact on decision-making.

- If there are reasons preventing performance in line with the agreement or contract, the responsible party has to report to the person's superiors immediately.
- Remain firmly committed to maintaining lasting relationships with trade partners and contract partners with clear objectives regarding the quality of products and mutual respect.
- Treat trade debtors equally and fairly and on the basis of fair gain for both parties.

1.4 Policies on Receiving/Giving Gifts

- The directors, managers, and employees will neither demand, grant, or consent to the acceptance of money of other benefits from the company's business partners.
- If employees receive expensive gifts on traditional occasions from the company's business partners, report to supervisors by the chain of command
- Conduct business and competition with legitimate strategies and refuse objects or funds from customers or trade partners because conflicts will arise in the performance of duty.
- Never directly or indirectly offer valuable gifts to public officials for the benefit of business dealings, except when gifts are given on traditional occasions, in which case the same rules apply as when giving gifts to the company.

1.5 Reporting Complaints and Making Recommendations

The company's board of directors has granted opportunities for employees and interested parties with channels for filing complaints, expressing opinions, and reporting illegal activities by making it possible to report by post to the company's Board of Audit at QTC Energy Public Company Limited, 2/2 Soi Krungthep Kritha 8 (5), Krungthep Kritha Rd., Hua Mark, Bangkapi, Bangkok 10240.

Procedures for processing complaints:

1. Persons receiving complaints are required to collect facts regarding violations of unethical conduct.
2. Persons receiving complaints are required to report facts to the audit committee for the investigation of facts and set measures for putting an end to the violation of illegal conducts.
3. People who receive complaints have a duty to report the results to the complainant if the identity of the complainant is revealed. In cases of importance, the person receiving the complaint is to report to the chairman of the board and the board of directors.

Protective Measures for Complainants

The company has set measures in place to protect complainants in line with the following regulations:

1. The complainant can choose not to reveal his/her identity if he/she deems it unsafe to do so. If, however, the complainant's identity is revealed, the company will be able to report progress and explain facts to the complainant.
2. Persons receiving complaints will maintain the confidentiality of secrets, considering safety by setting up measures to protect employees filing complaints and/or informants and/or cooperation in auditing with a guarantee from the company that the aforementioned actions will not cause or be seen as a cause to terminate, punish, or perform any action that would be potentially harmful to the aforementioned employee(s).

• Respecting the property rights of others.

The company is firmly committed to compliance with the laws involving intellectual property or other rights by not using work, information, inventions, or software belonging to other persons inside the company before receiving permission from the owners and maintaining rules in relation to respecting the property rights of others as follows:

1, Policies on Treatment of Trade Competitors:

- Act within scope of fair competition.
- Never defame trade competition by making false accusations.
- Never violate intellectual property/rights.
- Never seek the trade secrets of competitors by using inappropriate or dishonest means.

2. Orders Regarding Computer Software Installation

To ensure that the software the company uses is compliant with the Copyright Act of 1994, the company has assigned the MIS Department the task of handling the installation of all company software as follows:

- The information technology system is responsible for procurements and the installation of basic infrastructure software.
- The ERP system is responsible for procurements and the installation of the ERP system with the support of the information technology system.
- Never allow employees to install software without permission.
- In cases where an employee acts in violation, the employee will be held responsible for all of the wrongdoing in compliance with the Copyright Act of 1994 and the company will proceed in line with the company's regulations.
- **Promoting corporate social responsibility in the business chain.**

The company still has no official policy regarding the promotion of corporate social responsibility in interest groups within the business chain.

2 Anti-Corruption

- **Anti corruption policies and announcing intentions with other organizations**

At present, the company has announced anti-corruption policy with communications and publications to raise awareness among people involved with the company to neither demand nor accept money, objects, or any gain from the company's business partners. Moreover, the aforementioned must not engage in or perform any of the aforementioned or demand, engage in, or accept bribes for the gain of the company, personal gain or the gain of subordinates. Hence, the company has announced its anti-corruption policies to interested parties through the company's website at <http://www.qtc-energy.com/index.php/qtc56040>.

For announcements of intention to participate in the project, the Private Sector Collective Action Coalition Against Corruption ("CAC") is in the process of checking the company's readiness in every aspect for the entire auditing and follow-up system, fairness, attitudes of people in the organization in order to assure that the company is strong in every aspect before proposal for the consideration of the meeting of the company's board of directors.

- **Department Guidelines According to Policy**

Arranging for employees on the CSR team to participate in the 2013 "ACT NOW: Learning Together, Saving the Future" anti-corruption event on 6 September 2013.



Set risk management policies <http://www.qtc-energy.com/index.php/qtc56041> and establish a Board of Risk Management. In 2013, we provided lessons and guidelines for managers in line with standards and will expand to include operating employees in 2014.

Establish employee improvement plans by changing employee attitudes in the company in terms of fighting corruption to strengthen the minds and consciences of employees. The plans will be carried out in 2014.

- **Work Performance and Progress Disclosure**

In 2013, the National Anti Corruption Commission (NACC) sent an invitation letter to the electricity transformer manufacturers that won the price bidding to explain the issue of complaints in order to look into the facts surrounding the price bidding for the procurement of electricity transformers for the 2012 fiscal year by the Metropolitan Electrical Authority. As one of the winners of the bidding, the company has complied by assigning the managers and employees involved to testify to the facts before the commission. At present, no conclusions have been drawn by the aforementioned commission.



3 Respecting Human Rights

- **Applying principles and guidelines as international standards for the company**

The company is aware and attentive to company activities with potential impact on human rights in every aspect by acting in compliance with related regulations and policy to never employ child or forced labor and to never support activities violating human rights or corruption. At present, the company is concentrating on applying international guidelines and making official announcements to cover all interest groups.

- **Corporate policies and regulations (and agreements with other organizations)**

At present, the company has no human rights policies and no official agreements about human rights work, except for the internal management of the organization in which the company has established regulations in line with the second clause of the company's social responsibility policy to respect and give importance to human rights at all levels of employees. The regulations are as follows:

- Respect the human rights of all levels of employees and guarantee rights to personal safety, a clean and safe workplace that is hygienic and free from violations or abuse in every form.
- Manage the safety within the organization according to the OHSAS18001 standards.
- Consider and support rights and freedoms in the unionizing of employees for political, economic and socio-cultural rights.
- Take action toward resolving conflicts according to the principle of law.



- **Important measures regarding labor rights**

The company is strict about treating employees in compliance with the human rights principles specified above. Thus, the company has set up and enforced rules in manuals, rules, directives, and regulations in relation to the work by teaching new employees about rules and work regulations, work safety rules and business ethics. Moreover, the company has gathered and published portable manuals for all levels of employees to build understanding and proper conduct.

Each month, the company conducts "Manager Meets the Employees" as a means of communicating with employees about the company's situation and also as a way to accept recommendations from the employees for improvement to promote employee participation.



4 Fair Labor Treatment

• Employment and work relations

The company has set fair employment wages higher than the wages required by law because the company is located in an area surrounded by industrial estates which have relatively high labor competition. Apart from our employment wages that are higher than the wages required the law, the company is determined to create happiness within the organization with the Happy 8 principle characteristic of “QTC” resulting in fewer employee resignations. According to a survey of the feelings and opinions of the employees; the work atmosphere and attitude towards the organization is better and there have been no gatherings of employees to organize unions.

Over 80% Positive Employee Attitudes toward the Organization is a corporate objective to which managers of all levels have given importance and realize that the most important factor in the organization's success is to have a strong workforce with willing dedication in body and spirit and good work attitude with determination to win together. This is why activities are arranged to promote and improve various processes in combination with arranging outside organizations to survey the feelings and opinions employees have about the work, work atmosphere and the organization by using the Statistical Package for the Social Sciences = SPSS, conducted by the HR Teamwork Company. And the survey results for 2013 are 3.10 percent higher than in 2012.

Year	Score (Maximum Score: 5 points)	Calculated in Percentage
2012	3.686	73.72 %
2013	3.841	76.82 %

The results of the aforementioned survey have not yet achieved the goals set by the organization in which the company plans to improve the results in 2014 according to the Happy Work Place and according to the surveyor's' recommendations as follows:

- Managers and employees were found to have good relations and happiness in working together at an average of 3.90 which can be considered as a very good opportunity for the managers to change the attitudes of the employees and form attachments to the organization in various parts to reduce the rate of resignations.
- The majority of employees were found to be confident in their work abilities from the work dedication evaluation average score of 4.25 which is the highest score. The company would like to support an employee coaching system to build in dedication to work for the optimal interests of the organization.
- The majority of the employees were found to be proud to say to anyone that they are QTC employees with an average score of 4.16, which is a good opportunity for the company to expand this circle of pride to other people both inside and outside the organization.
- Of all 16 of the “negative” survey questions, as many as 11 questions were found to have a moderate average, or 86.75 percent of the negative questions. Thus, these questions are areas where the organization needs to take action, i.e. the complacency or uncertainty of employees, by improving attitudes and motivating employees at the operational level by using employee relationships in supervisory groups.

Sample Photos of Happy Work Place in 2013



QTC LEAGUE CUP 2013

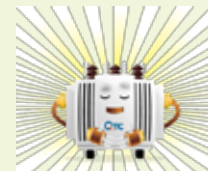




“Asa Pa Puan Suk” Activity is a mini concert performance in the garden of the employees’ music club once a month

Spreading happiness to employees and singing happy birthday for employees born that month.

Holiday activities and
Annual Vacation 2013
at Im Poo Hill,
Wang Nam Khiao



Songkran Activities– Offering
Traditional Water Blessings-Sermon
by Pra Mahasompong Talputo



Photograph Contest

“Loving Mother Because
She’s the Most Loved”

“Loving Dad Because
He’s the Most Loved”

• Occupational Health and Safety

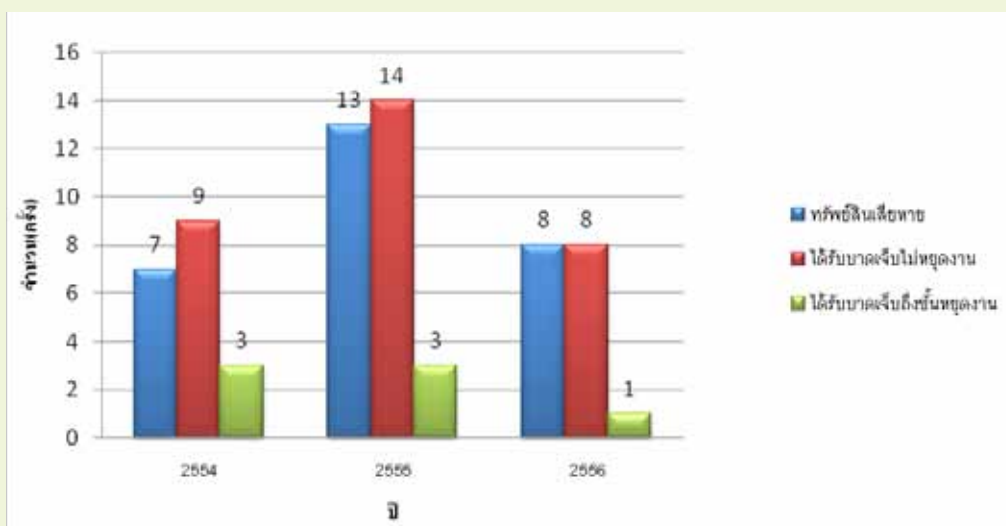
The company is firmly determined to promoting the safety of the employees and interest groups in addition to preventing accidents, injuries and sickness while working. And we constantly seek to locate and remove or control hazards related to the company's business performance by setting up occupational health and safety and work environment policies as guidelines for employees together with dissemination to interest groups via <http://www.qtc-energy.com/index.php/qtc53055>.

The main goal of occupational health, safety and work environment is zero accidents. All levels of employees in the organization give importance to this goal and have cooperated in seeking and removing occupational hazards. The results of the operations over the past three years have not yet been able to achieve this goal, but accidents are clearly in a downward trend. In 2013, accidents reduced from 43.33 percent in 2012 and the number of employees' accident-related leave days reduced from 95.74 percent in 2011. And the company remains firmly committed to continually reducing accidents to zero in line with the safety goals and conducting ongoing safety-promoting activities.

Table comparing work-related accidents for the past three years.

Severity/Damage	Number of Times/Year		
	2011	2012	2013
	Jan-Dec	Jan-Dec	Jan-Dec
Property damage	7	13	8
Injuries without leave	9	14	8
Injuries with leave	3	3	1
Total Number (times)	19	30	17
Total Number of Leave Days (days)	92	47	2

Graph comparing work related accident in the past 3 years.



The company has imparted knowledge and awareness to the employees regarding occupational safety as a means of removing and preventing dangers potentially occurring through training and various activities such as the following:

KYT activity about recognizing the dangers before performing work.

To build safety awareness and reduce work-related accidents.



Safety and health-promoting news as a source of learning and information for intra-organization communications



Arranging training courses on occupational safety

By an out-sourced resource person to reduce accidents



Safety and health-promoting activities

16-17 July 2013



• Diversity and opportunities for quality

The company treats all levels of employees with fairness and equality and discrimination against anyone due to similarities or differences, whether the aforementioned are physical, emotional, racial, religious, gender-related, age-related, educational or for any other reason. Hence, the company has set guidelines for treating employees in business ethics regarding the treatment of employees. When complaints are filed, the company will quickly try to resolve them fairly and without discrimination by clearly stating the aforementioned in work manuals, rules and regulations.

As a means of improving work knowledge and abilities for all levels of employees, the company recognizes the importance of driving the organization toward achieving its goals. Therefore, the company has setup two issues as goals for the organization as follows:

1. For improving employee work performance by having employees attend training courses to reduce at least 50% of the gap per year. In 2013, the gap was reduced from 2011 by 59.42 percent.
2. For improving human resources in line with career fields, employees require at least 50% training in different fields per year.



Course	Method	2013 Performance
On-the-Job Training	Setting the skills and knowledge for each position and having a manager to take responsibility for the training. Employee training can be conducted according to the level of skills and knowledge needed with close and regular evaluation to concentrate on developing capable employees who perform work so the training gap can decrease at least 50% per year.	If 69 people with gaps decrease to 41 people, the percentage is 59.42%
In-house Training	Core Competency Course Managerial Competency Course Function Competency Course Other Special Courses	47 Courses 190 Employees Average Training Hours 37/people/year
Public Training	Sending employees to participate in public training courses.	96 Courses 71 Employees Average Training Hours 16/people/year

The Company has prepared various facilities and services so all levels of employees have equal access to amenities, such as the contemporary music rehearsal room, the petanque court, the container library, an air-conditioned lounge, employee shops and dormitories for upcountry employees, etc.



Contemporary Music Rehearsal Room and Performance Stage



Container Library for an Outdoor Learning Environment

Our Gold Class Clean Food Good Taste Certified Food Court

serves to all levels of employees with menus regulated in compliance with nutritional standards and price-controlled rice with two entrees at 20 baht.



5 Responsibility to Consumers:

• Customer Health and Safety

The company's "electric transformers" are the products certified by the Industrial Standards Institute (ISI. 384-2543). Before transformers are delivered to customers, they are required to pass evaluation in an ISO/IEC17025 certified testing lab to ensure that the transformers meet IEC60076, ANSI standards or AS60076 standards, as well as meeting customer needs with management meeting related management standards such as ISO9001 quality management, ISO14001 environmental safety management and OHSAS18001 occupational health and work environment standards.



“Electric transformers” are categorized as tools or equipment used with high voltage work that is potentially hazardous or fatal. That is the reason why people who need to use electrical transformers are contractors, designers, or people who are well-versed in electricity. Furthermore the company delivers electricity transformer user manuals to customers for proper operations. However, “customers” may not be in the group purchasing electric transformers, e.g. ordinary people living near an electricity transformer installation site, or real business owners who are not the company’s direct customers. Therefore, the installations of electric transformers are regulated by the Electricity Generation Authority of Thailand to ensure they meet engineering and safety standards. And local electrical authorities have to check every time before transmitting electrical current. However, all QTC electric transformers are equipped with phone number tags so the general public can see and contact the company 24 hours a day in case of emergency, complaints or concerns.

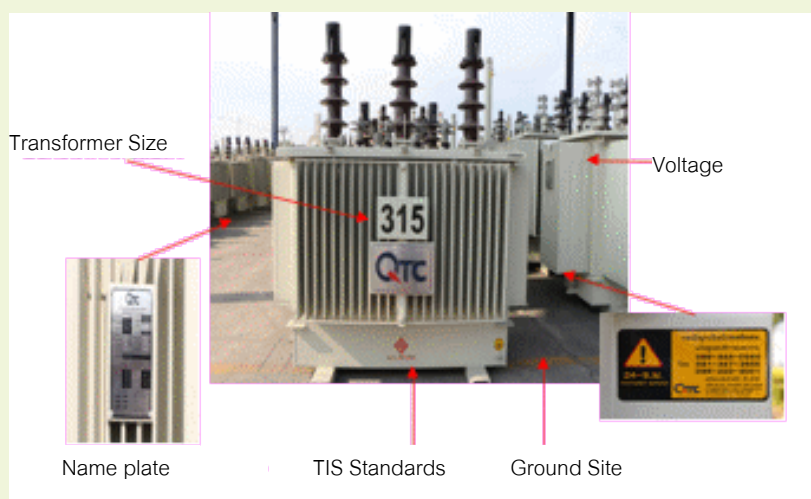
The company offers 24-hour “Maintenance and Repairs Services” with a team of mechanics. We operate in compliance with ISO9001, ISO14001 and OHSAS18001 standards. Operations involving customers are confirmed from the customer every time and service procedures are explained in detail. Moreover, we work in compliance safety regulations, pay attention to environmental awareness with preparations and planned drills for emergencies such as oil spills, fires, etc.



• Display of Product Label and Service Displays

The company recognizes the importance of properly displayed product information and has specified that name plates displaying information about the electric transformers be placed on the electric transformers. And because electric transformers are specific products with a usage life of more than 20 years, the designs of different electric transformers may differ according to customer needs. Therefore, the information displayed on the name plates is very important and must be possible to manufacturing traceability and past design information. That is why it is necessary to use stainless steel which is a durable material that does not fade.

Furthermore, UV resistant stickers come with a usage life of three years are attached to display phone numbers and contact information so the general public can call and report emergencies or report various complaints and concerns. If any sticker is found to be faded during a service round, it will be immediately be replaced with a new sticker.



• Marketing Communications and Customer Privacy

The company has policy regarding the treatment of people who are interested in the business chain such as customers, shareholders, competitors, trade partners, employees, society and the environment. The policy is announced in our business ethics as practice guidelines for the company's operations. The guidelines for responsibility to customers are as follows:

- Pay attention and treat every customer fairly by emphasizing the manufacture of quality products meeting standards and completely able to meet customer needs at commensurate and fair prices to all customers equally.
- Present quality products meeting customer specifications. Disclose information regarding products and services completely, correctly and with opportunities for customer to file complaints and criticize services. And work to the best of our ability for quick responses from customers.
- Provide excellent service with quality and effectiveness to generate customer satisfaction.
- Handle and protect the interests of customers properly and fairly.
- Act in strict compliance with customer specifications. In cases where specifications cannot be met, notify the customers to seek solutions.
- Treat customers politely and serve them reliably.
- Deliver quality products on time as specified.
- Support customers' CSR tasks.
- Guarantee products within suitable terms and in compliance with the Consumer Protection Act.

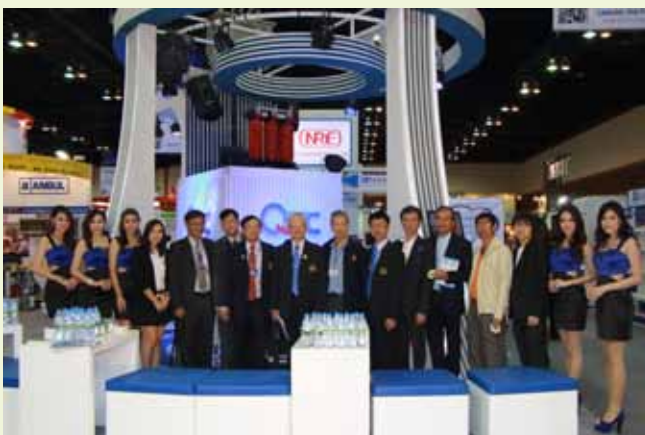
http://qtc-th.listedcompany.com/code_of_conduct.html



Because electric transformers are specific products, the installation process has to be controlled by engineering knowledge and operation has to be controlled by the Electrical Generation Authority of Thailand. They are not products ordinary people can purchase and use freely. In marketing, the company chooses to make a catalog for customers to display the company's production capacity and technical information on the electric transformers. The catalog provides information, details and advice to customers clearly, quickly and factually correct. The details of the catalog and technical information can be viewed at <http://www.qtc-energy.com/index.php/technical-data?lang=th>



For marketing in public relations advertisement, the company sets up exhibition booths in tradeshows associated with the company's product and service types for direct access to customers and opportunities to give product information to customers visiting tradeshows such as the Thai Electrical & Mechanical Contractors Association Exhibition (TEMCA 2013) from 16-17 August 2013 at Royal Cliff Hotels Group, Pattaya.



6 Environmental Care:

• Sustainable Energy Use

Energy Management

Electricity is the main energy used during the company's production process. In 2012, the company passed assessment for entrepreneurial development in the use of clean energy in Rayong. And in 2013, the company continued development by improving the machinery used in production, e.g. by removing old machines with high energy consumption rates from the production process and replacing them with new machines that are more effective and use less energy in response to growing production and to help conserve energy. The results cannot be summarized in numbers at this time.

The company continues to move forward regarding energy conservation, even though the production facility is not part of a network requiring energy conservation policies. By signing up for a consultation program on how to meet the ISO50001 standards and TLC ISO50001 standards by the Thai Industrial Standards Institute, the company has already been selected to enter the program and will begin in 2014 by planning to receive ISO5001 accreditation by the beginning of 2015 for the purpose of introducing knowledge to manage administration, information and analysis of information related to energy for greater effectiveness and tangibility.

Resource Management in the Production Process

QTC purchases its main raw materials for production, e.g. copper wire, copper sheets, silicon, and transformer oil, from manufacturers located both domestically and abroad. The quality of the raw materials is controlled to meet customer needs by various means, including regulations. In 2013, the company initiated the 5-S program to increase output. A consultant from the Technology Promotion Association (Thailand-Japan) entered the program to offer consultation and in-depth advice with the Lean Standard System by the Department of Industrial Promotion for the purpose of improving the production process for greater effectiveness and to reduce wasted raw materials during production. Both programs are continually moving forward as an important base for the company's employees in joining the program to improve total quality management (TQM) in 2014 with the consultation team of TQM-BEST CO., LTD. led by Dr. Weerapoj Lueprasitsakul.

Green Industry Program

QTC realizes the importance of operating a business with corporate social and environmental responsibility. Therefore, the company has joined the Green Industry Program with the Ministry of Industry. According to the evaluation results, QTC has been accredited as "Green Industry, Class 3" No. 3-2730/2556. The company is accredited from 19 June 2013 to 18 June 2016 which shows that environmental management is systematic with follow-up assessment and reviews for continuous improvements. The company has set a goal to reach Green Industry, Class 4 accreditation by 2015.

• Reducing and Preventing Pollution

The company is determined to take actions toward reducing the social and environmental impact of the company's production process and services, which is why the ISO14001 environmental management system has been introduced to the company with environmental policy notification at <http://www.qtc-energy.com/index.php/qtc56015> as a guideline for all levels of employees to practice strict adherence with the Safety and Environment Department as the supervisor to evaluate the actions and performance in accordance with the law and standards.

Pollution Control

Wastewater Quality: The QTC factory is not located near a natural water source and the production process of QTC electric transformers does not use water during the main production process. Water is only used for the cooling circulation of the vacuum oven and for cooling during the welding process which is a reservoir system. And water is sent for disposal once every year in compliance with the law. Furthermore, water is also used and consumed by the company's employees. The water quality test results are as follows:

The factory's wastewater testing results at the final destination in 2013

Parameters Measured	Test Results		Standard	Unit
	1/56	2/56		
	19/2/56	16/9/56		
BOD5	8.3	4.8	≤ 20	mg/l
Oil and Grease	0	0	≤ 5	mg/l
PH	8	6.3	5.5-9.0	-
Sulfides	0.53	0.6	≤ 1	mg/l as H2S
Suspended Solids	38	11	≤ 50	mg/l
Temperature	33	29	≤ 40	°C
Total Dissolved Solids	42	64	≤ 3000	mg/l
Total Kjeldahl Nitrogen	<5	<5	≤ 100	mg/l as H2S

The food court's wastewater testing results at the final destination in 2013.

Parameters Measured	Test Results				Standard	Unit
	1/56	2/56	3/56	4/56		
	19/2/56	16/9/56	3/12/56	14/1/57		
BOD5	266	155	92.5	84	≤ 20	mg/l
Oil and Grease	22.2	16	6	4	≤ 5	mg/l
PH	7.8	6	5.98	6.54	5.5-9.0	-
Sulfides	0.53	2.17	0	0.84	≤ 1	mg/l as H2S
Suspended Solids	76	128	6	77.5	≤ 50	mg/l
Temperature	28	28	26	25.4	≤ 40	°C
Total Dissolved Solids	409	306	346	124	≤ 3000	mg/l
Total Kjeldahl Nitrogen	30	15	16	11	≤ 100	mg/l as H2S

According to the test results of the food court wastewater at the final destination, some parameters were found to remain sub-standard. Therefore, the company has established measures by pumping out the wastewater in the tanks for removal once a month by authorized personnel from the Mabyangporn Tambon Administrative Organization. And in 2014, development plans will be set up and constantly monitored with the goal for the wastewater quality of the food court to meet the values set by the law.

Quality of the air ventilated from the chimneys: During the production of QTC electric transformers there is a stage where the transformers are put through a vacuum and hot air ovens in which a ventilation system is put in place to release hot air outside possibly contaminated by oil vapor from the transformers. Furthermore, we also use a dry spray system to paint as the last step in which some paint vapor might be mixed with the air. And for the step of preparing plywood insulation, we have selected a cutting machine with high safety and with a standardized dust removal system with a chimney to release the air outside which might also contain dust from the wood cutting. Therefore, the company has scheduled measurement of the air quality ventilated from on all four chimneys twice a year.

Air quality test results from the chimneys in 2013

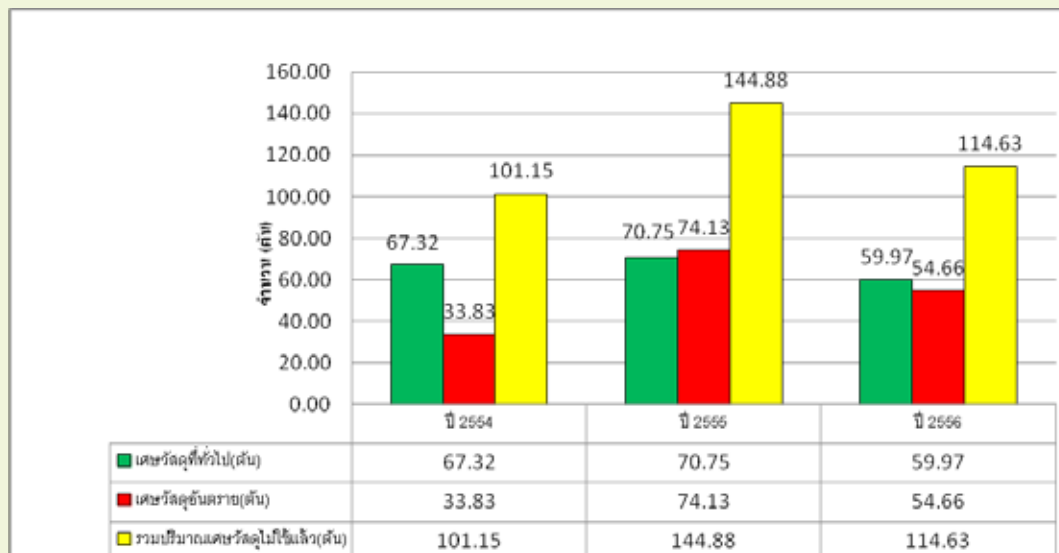
Parameter	Area			Standard	Unit
		1/56	2/56		
		21-3-56	16-9-56		
Particulate	Wood cutting room chimney	1.3	1.2	400	mg/m3
Oil mist	Vacuum oven chimney	3.22	10.05	-	-
Oil mist	Oven chimney (transformer repairs)	1.62	2.85	-	-
Toluene	Painting room chimney	1.88	1.88	-	-
Xylene		2.17	2.17	870	mg/m3

Waste Management

QTC intends to reduce waste by establishing various projects and campaigns to reduce waste from offices and waste from the production process such as the project to sort out plastic bottles, glass bottles and metal cans for sale by the employees participating in the project.

For trash or scrap materials from the production process, the company has sorted sellable garbage and contaminated waste that cannot be sold, selling and delivering within the limitations of the law.

Graph showing the summary of the amount of scrap materials no longer used in the production process from 2011-2013.



• Protection and restoration of the environment and biodiversity

Forests in the Factory Project: The environment surrounding the factory is high ground and separated from natural water sources and forests. Furthermore, the surrounding area belongs to a community of cassava and pineapple growers for industrial factories in addition to some empty space. The monsoon season is marked by heavy rain and floods. And the summer is marked by high temperatures and drought. Thus, the company decided to restore about four rai of empty land around the factory by establishing the “Forest in the Factory Project” to increase some green space and create a natural boundary, planting 751 trees from 14 species with employees participating in the project to instill a sense of corporate social and environmental responsibility among the employees.

“Forest in the Factory”

activities on Saturday, 27 July 2013, in an empty field area of 3 rai and 2 ngan at the factory.





“Volunteers Plant Coral to Restore Balance to Thai Seas”: Is one of the activities in the “QTC Volunteers Do Good Deeds” project considering coral reefs as an important marine ecosystem providing homes and food for various marine animals. Coral reefs are, therefore, a source of marine biodiversity, a food source, a source of fishing revenue, tourism and protection against coastal erosion by the waves. At present, Thailand’s coral reefs are increasingly deteriorating as a result of both direct and indirect human activities and nature.



Therefore, the company initiated the “Volunteers Plant Coral to Restore Balance to Thai Seas” activity on 22 June 2013 at Koh Samaesam Beach, a conservation area for “Marine biology and conservation camps” with 80 volunteer participants and 80 branches of coral by Dr. Prasan Sangpaibul, Vice Dean of Science and Technology at Rambhai Barni Rajabhat University and the President of the organization as speakers imparting knowledge about coastal and coral reef ecosystems, including the importance of conservation and the restoration of coral reefs providing habitats for large and small marine life. QTC arranged this activity with the objective of instilling awareness about conservation and conscientiousness about using natural resources among all QTC volunteers, including the dissemination of knowledge for the local residents in surrounding communities to realize the aforementioned importance.

7 Cooperation in the Improvement of Communities and Society

• Market and Job Creating Roles

For over 17 years, the company has been producing electricity transformers in Mabyangporm, Pluak Daeng, Rayong. Originally, the majority of the people in the aforementioned area were farmers. At present, however, trends are shifting toward an industrial society with many industrial estates appearing in the region. Therefore, farmers have changed their professions from farming to becoming factory workers with the construction of lodgings or apartments to support workers from outside the area.

QTC is a part of the community that creates opportunities and income for local residents with a policy of accepting employees meeting the conditions of the company, extending opportunities to local vendors to sell food with no requirement to pay rent or other expenses. All the vendors need to do is invest in materials for cooking. The company will control the prices and quality of foods along with helping vendors with living expenses for the differences in prices.

QTC has held the “Community Associates Meet QTC” activity for two consecutive years by inviting community leaders, monks, teachers and student representatives with community hospitals to discuss and observe the company’s production process with the main purpose of listening to community comments in requiring the company to join in the improvement of the community in line with the company’s needs and abilities. It is also an opportunity for the company to communicate with the community regarding environmental management by the company, at the same time giving scholarships to all

levels of students at every school with one scholarship per level for a total of 33 scholarships. The results of the second discussion in 2013 included points the company will consider and be able to carry out as follows:

- The school wants support from the company in granting opportunities to students to learn in industrial factories to inspire dreams in children.
- The school would like the company to use the special abilities of employees to help improve various abilities of teachers and students.
- Temples, schools and hospitals in the community would like the company to support the community with the company's electricity transformers to generate direct benefits for the community with ability to use the services in temple, school and hospital areas.
- The community would like the company to take part in various traditional activities practiced by local residents such as Elderly Day, candle processions at Buddhist Lent, ordination ceremonies and funerals in the community, etc.



QTC meets the Community Thursday, 15 August 2013



• Community Participation

QTC has always given importance to cooperation between the company and the community, society and the environment, even if the work of the factory does not affect the people in the community, society or the environment in any significant way. All cooperation occurs through activities concentrating on the participation and abilities of the company, and is a guideline capable of responding to the needs of people in the community.

QTC Loves Kids is a voluntary activity QTC holds annually in cooperation with the Mabyangporn Tambon Administrative Organization on National Children's Day. The QTC Loves Kids team sets up a booth for entertainment and gift-giving to children where each game offers a blend of safety and health-promoting information. And in 2013, QTC organized the Children's Day Fair at Mabyangporn School, Pluak Daeng District, Rayong Province with over 1500 students and youths from the schools in the community and other participants in the surrounding areas.



Safety and Health Promotion Week is an activity held inside the organization with the aim of promoting awareness of safety and health promotion for employees. However, because the needs of schools in Mabyangporn include providing opportunities to learn, the company invited student representatives from all four schools in the community participating in the project in order to build awareness and recognition of various potential hazards in the workplace on 17 July 2013. The project enjoyed cooperation and earned the admiration of teachers and students alike.

The **“Happy Temple” Project** is an activity supported by the Thai Health Promotion Foundation (HPF) and the Technology Promoting Association Thailand-Japan (TPA) with cooperation from private sector corporate allies also participating by successfully utilizing the 5-S concept in the workplace with the management of the temple grounds for neat, clean, pleasant surroundings under the slogan “Building a Happy Society with Temple-Centered Dissemination of 5-S discipline”. From the perspective of QTC, our objective is to foster good social awareness and participation by company employees. In 2013, QTC continued to set up teams of volunteers to participate in the “Happy Temple” project as a result of the abilities of the teams that learned various methods and techniques. In 2014, the company assigned the teams to participate in the One Temple, One Factory project by selecting temples from the areas surrounding the factories.

Sappapaya Activity,
Wat Dan, Rama 3 Rd.



Sappapaya Activity,
Wat Suthi Wararam,
Charoen Krung



“English Camp 2013” with ice-breaking activities for kids – Because the language and teamwork abilities of the QTC team are accepted by the school director in the community, Ban Huay Prab School, Mabyangporn, Pluak Daeng, Rayong, requested support from the company to help create ice-breaking activities for 200 fourth-six graders to building spirit and unity before joining “English Camp 2013” held by the school on 4 September 2013.

English Proficiency Improvement

– As a result of the English proficiency improvement plan for employees to prepare for the upcoming AEC in 2015 by using native speakers as teachers from the ECC language institute to teach employees in groups requiring improvement twice weekly in two-hour after work session. The project has attracted the interest of community leaders and the school directors who



have asked to join in by requesting a quota of two English teachers per school for a total of eight teachers to improve the language abilities of teachers for application in teaching their students. The company can see the long-lasting benefits for teachers and students; therefore the company supports teachers in participating with the company's employees at no cost. The project is ongoing.



QTC Works together in Aiding “Haiyan”

Victims in the Philippines by gathering the music club to perform a garden concert on 28 November 2013 to raise a total of 20,749 baht in donated funds from employees and managers to be sent to the victims through the Stock Exchange of Thailand.

Activities in the “Joining Local Brothers and Sisters” Project

- This project offers opportunities for employees to present projects to improve their hometowns with one contest held annually. The project has been running for three consecutive years with the company providing support in the projects with no more than 30,000 baht. In 2013, the project selected was the “Dharma Hearts Taking Distant Brothers and Sisters Back Home” project by Mr.

Surat Panomai's team. The company then provided support with 12,600 kilograms of cement valued at approximately 30,000 baht for use in the construction on the 1 December 2013 for the temple to use in compliance with the objectives of the project owner. This project made the employees proud to be part of the company. Parents and relatives of the employees are also proud of the employees for bringing good things to their hometowns.

The “Robot Camp, Science Camp and Information Technology” project is to show cooperation and support by giving scientific equipment to the Faculty of Engineering at King Monkut's Institute of Technology. The company supports with continued participation in the project. The company realizes that the project benefits society and can inspire underprivileged students in remote areas. It is also a channel for communicating the company's capacity for becoming known to engineering students who may return as important customers or new members of the company in the future.

In 2013, we held the “Searching for Information@ Andaman” activity at Ban Sala Dan School, Sala Dan, Koh Lanta, Krabi, in which QTC supported the testing of static electricity generator model VDG5K 500KVA DE GRAAFF GEN KIT valued at over 62,489 baht, and sent a CSR team to take part in the activities with groups of teachers and students as well as local residents in 4-6 December 2013.



As a result of the success of the aforementioned activities, the company plans to organize similar activities in 2014 in the Mabyang community area, offering opportunities to students and youths in the area so they can experience a variety of exciting experiments and create new learning experiences. The university and the faculties are happy to conduct the aforementioned activities at times when the company and schools in the area are ready.

• Social Investment and Assessing Social Impact

Energy Saving Electricity Transformer Research and Development Project: As a result of the company’s firm commitment to improving its electric transformers for high quality, reduced energy loss in the transformer and help for customers in saving energy. The company cooperated with an amorphous steel producer in the research and design of amorphous transformers as a successful achievement in 2012. And in 2013, we commenced production on three different sizes of prototype amorphous transformers which have passed testing. The Metropolitan Electricity Authority is also interested in the project, so they requested the research team of QTC to provide consultation and take the prototype transformers to test and collect information for subsequent improvements. In theory and if successful, this undertaking will dramatically reduce power consumption in Thailand. At present, however, the aforementioned project has slowed down due to political factors and internal changes in the Metropolitan Electrical Authority.



However, QTC’s research team has continued to move forward in the development of other prototypes for proposal to interested customers. We also realize the long-term benefits, especially in the Green Industry customer group both domestically and abroad.

8 CSR Innovations and their Dissemination

- Creative CSR
- Co-Creation with Stakeholders
- Social Innovation

General & 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	: 200 million shares
Paid-up Capital (ordinary shares)	: 200 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	: 62 Stock Exchange of Thailand Building, Ratchadapisek Road, Klongtoey, Bangkok 10110
Telephone	: 02-229-2800, 02-654-5999
Facsimile	: 02-359-1262-3

Auditors

Auditors	: Mr. Somkid Tiattrakul, Accounting Auditor's License No. 2785 or Mrs. Sumalee Chotdianan, Accounting Auditor's License No. 3322 or Mr. Kosol Yaemleemul, Accounting Auditor's License No. 4575
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	: 3P Professional Co., Ltd.
Office Address	: 10/186 The Trendy Office Building, 25th Sukhumvit 13 Sukhumvit Rd., Wattana, Klong Toei Nua, Bangkok, 10110
Telephone	: 02 168 7688 - 92
Facsimile	: 02 168 7693

2 Other Relevant Information

Investors can study additional information about the Company in the Company's Annual Disclosure Form (Form 56-1) posted at www.sec.or.th or www.set.co.th and the company's website at www.qtc-energy.com.

Characteristics of Business Operations

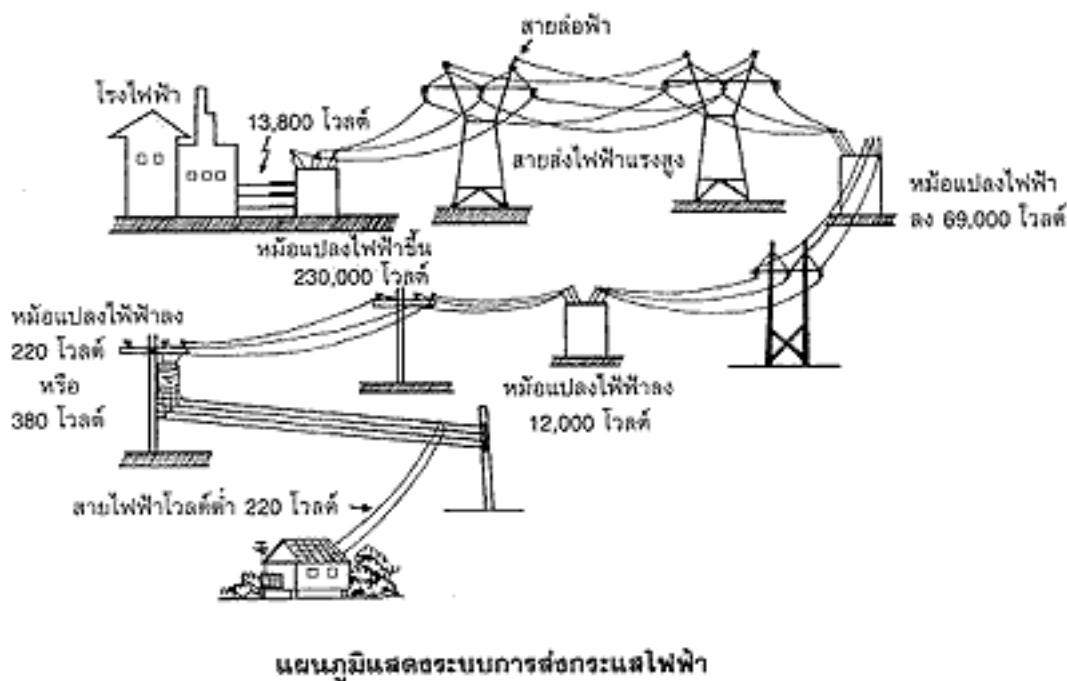
Business Operations of Each Product Line

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 two 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 10-5,000 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.

8.1.1.2 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.

In 2012, the company invested in restoration and extension of building and machines for electricity transformer production, such as 2-coil wiring machines capable of coiling at the time and silicon steel slitting machines. All the machines are fully assembled and have been ready to use since November of 2012.

In 2013, the company expanded its production capacity by building factories to manufacture electricity transformer tanks. Production is expected to expand by an additional 30% than its base production volume.

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.



Earthing Transformer



Dry-Type Class F&H



Unit Substation



Pad Mounted

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. Moreover, the 100 KVA, 150 KVA, 250 KVA, 300KVA, 500 KVA, 750KVA, 1000 KVA, 2000 KVA, and Earthing Transformer 1600A have 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 23 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 23 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 2013, 19-25% of income from net sales of electricity transformer comes from distributing agents, both domestic and abroad. As of January, 31, 2013, 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 other state and state enterprise customers e.g. Sattahip Electric Welfare, 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 whereby the marketing officer will be responsible for contacting the customers to present electrical transformer to the project's owner, architecture, and project advisor, including taking the customers on a tour to visit the factories to gain their trust of the company's products. After, the marketing officer contacts the contractor to start the sale process. The process begins with the specs and details of the electricity transformer which the customer wants to gather information as data for designing and price offering. This type of customer includes Powerline engineering public company limited, ItalThai development public company limited, Ritta Company Limited, Sino-thai engineering & construction public company limited, Demco public company limited, and First Technology Company Limited.

1.3 Distributing agents

Customers who are distributing agents and then onwards to end users. On the 31st January 2013, 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. The sales department will be responsible of selling through distributing agents and inspect these agents regularly to give information and strategy during each period, as well as conduct questionnaire on customer's satisfaction regarding the product and service provided by the company. They are also obliged to hear problems and take that to further improve and resolve later on.

1.4 Project or factory owners

This group of customer will purchase electricity transformer to use in their own factories or buildings such as CP-Meiji Company Limited, Advance Pepper Mill Company Limited, True Universal Convergence Company Limited, and Betagro Company Limited. The marketing officer and/or sales officer will directly contact the procurement department, as well as to advise and present the company's products for the customer to see the importance of using high quality electricity transformer which will greatly help save energy.

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	2011		2012		2013	
	MMillion Baht	%	MMillion Baht	%	MMillion Baht	%
Revenue from domestic sales						
(1) State and state enterprises	327.48	46.73	330.59	35.16	270.46	34.50
(2) Distributor	23.00	3.28	15.77	1.68	21.20	2.70
(3) Private	238.68	34.06	366.08	38.92	330.50	42.16
Total income from domestic sales	589.16	84.06	712.44	75.76	622.16	79.37
Revenue from foreign sales						
(1) Distributor	95.00	13.55	192.17	20.44	148.18	18.90
(2) Private	16.70	2.38	35.74	3.80	13.54	1.73
Total Revenue from Foreign Sales	111.70	15.94	227.91	24.24	161.72	20.63
Total Revenue from Sales	700.86	100.00	940.35	100.00	783.88	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. Since raw material prices such as silicon steel and copper foil are considerably high and fluctuates according to the World price with a small group of supplier, the company carefully tracks the price trend and amount of supply of each raw material.

2.4 Distribution and distribution channel

Distribution of electricity transformer will be proceeded by the sales department. The responsibility is divided into 2 fields- 1) domestic sales field, servicing state and state enterprise, distributing agents, and private companies, both contractors, industrial customers, and customers in different nations and 2) foreign sale field.

Apart from distribution through the company's sales department, the company also has policy to expand market to cover a wider customer base where it enters various product fairs such as electronic product and machinery fair organized by the Thai Electrical and Mechanical Contractors Association (TEMCA) and other industrial product fair which is the target fairs of the company. During each year, the company will join about 2-3 of these events and join product fairs along with the distributing agents such as ELINEX, IEEE Conference & Exhibition.

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.

The Process of Submitting Price Bids Can Be Summarized as Follows:



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 January, 31, 2013, 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.

Table showing revenue categorized by distributing through each distribution channel

Customer Type	2011		2012		2013	
	MMillion Baht	%	MMillion Baht	%	MMillion Baht	%
Direct sales from the company's Sales Department	255.38	36.44	458.08	49.34	344.04	43.89
Sale through product distributor	118.00	16.84	206.66	22.26	169.38	21.61
Sales through product auctioning	327.48	46.73	263.33	28.42	270.46	34.50
Total	700.86	100.00	928.57	100.00	783.88	100.00

3 Product provision

3.1 Production

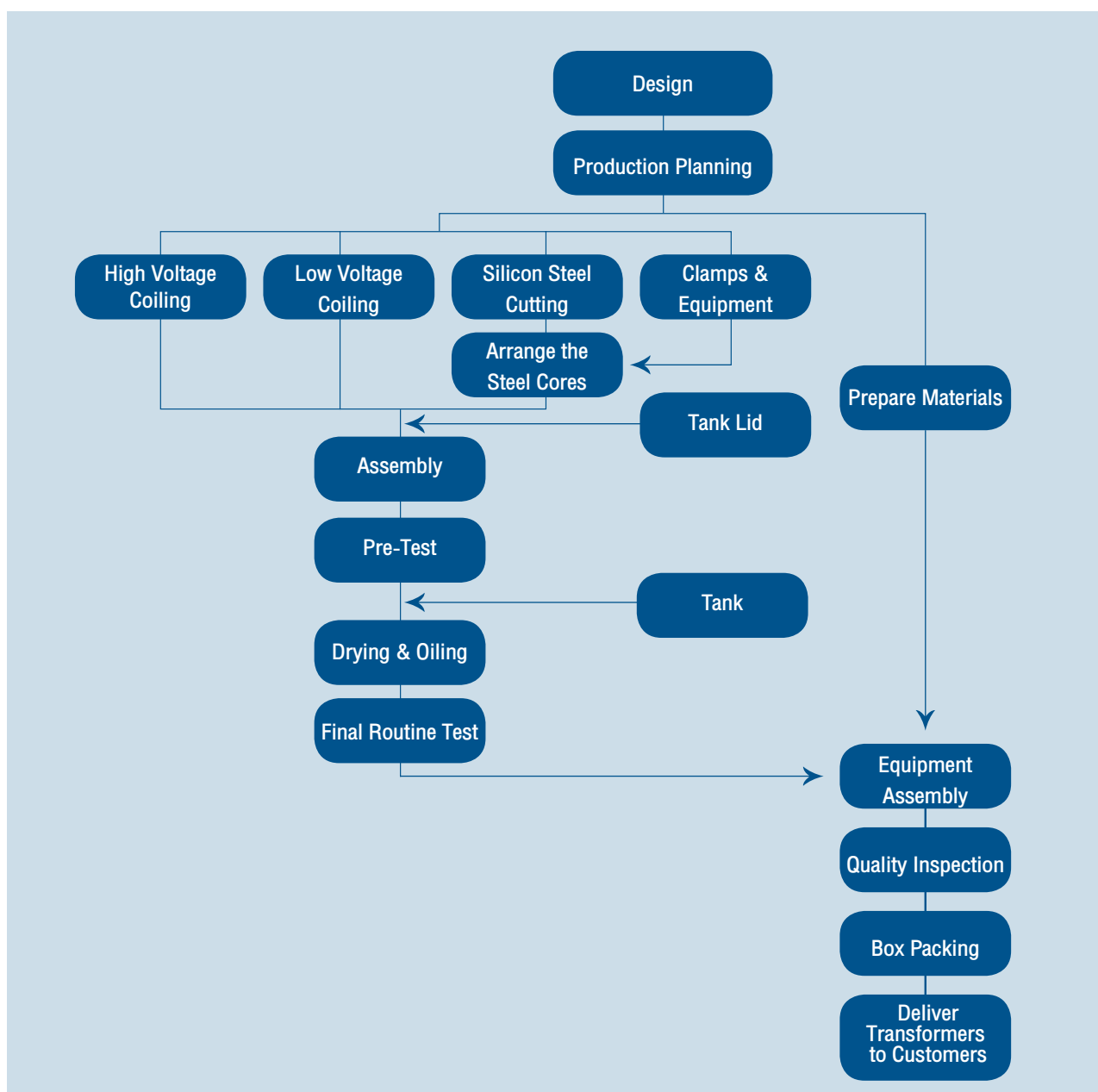
The company's factory is located at 149 Moo 2 Pluakdaeng-huai prap Road, Tambon Mabyangporn, Pluakdaeng District, Rayong on a 32 Rai land. All electricity transformer is a made to order product which the company has a policy of producing the exact match of product that has been requested by the customers and focus mainly on the product's quality. The technology towards the design and production, machinery used in production such as steel cutting machine, coil wrapping machine, and stove are imported from Germany. The testing process of each electricity transformer complies with international standard and controlled by a computer system. Therefore, the tests are accurate and up to speed. In 2012, the company had invested in building factories and purchasing new machines such as steel silting machine and coil wrapping machine to respond to the business expansion. In 2013, the company's production has been growing steadily with investment in factory expansion to produce electricity transformer tank to reduce production cost and respond to short duration of delivery demand. This will help improve the company's competitive advantage and support net sales growth forecasted within the next 5 years.

3.2 Production Capacity

	2009	2010	2011	2012	2013
Production Capacity (KVA)	952,000	952,000	976,000	1,215,000	1,482,000
Production Amount (KVA)	562,930	638,238	952,380	1,379,748	1,236,562
Production Capacity Rate (%)	59.13	67.04	97.58	113.56	83.44

In 2013, the production capacity and the production amount increased by approximately 21% from 2012, partially due to plans for increasing production capacity to support business growth over the next five years. That is why the company has geared production capacity to meet customer needs. Hence, the company has developed employee skills for accelerated work flow, improved machine efficiency and ordered new machinery to greatly increase production capacity at the same time, e.g. the 4-coil coil winding machine. Furthermore, the company has also improved the production process to shorten production time.

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

3.4 Raw Material Procurement

The top five main raw materials used for the production of the company's electric transformers are silicon steel, enameled round wires, electric transformer tank sets, copper foil and transformer oil. The company orders the raw materials from both domestic and foreign manufacturers and/or suppliers. Therefore, the company has policy for the purchase of raw materials by considering various factors as follows:

1. Raw Material Quality

Due to the fact that company policy give importance to product quality, the company emphasizes ordering quality raw materials from manufacturers/suppliers with potential and capability to deliver quality raw materials meeting specifications completely and as scheduled. The company has prepared an approved vendor list for use in screening for quality manufacturers and suppliers. In any case, the company has processes for evaluating the quality of raw materials, including visits and inspections of new manufacturers before granting approval to become the company's manufacturer/supplier. The company will review the evaluation results every six months by mainly considering the quality and delivery history of the raw materials. Furthermore, the Quality Assurance Department will conduct random testing of raw materials every time the vendor delivers the raw materials to ensure the quality of the raw materials used meet the requirements for the company's production process.

2. Raw Material Delivery Times

When ordering raw materials from domestic sources, the delivery time is approximately 15-30 days, depending on the product type. When ordering from foreign sources, however, the delivery time is approximately 1.5-3 months because the delivery time needs to be considered in terms of the country from which it was ordered. Therefore, if the materials can be ordered from domestic manufacturers/suppliers with quality similar to foreign manufacturers/suppliers or with quality meeting the company's specifications, e.g. the enameled round wire, paper insulated flat wire, enameled flat wire and various transformer parts, etc., the company usually orders from domestic sources because of the shorter delivery time, thereby making it more convenient and efficient to manage the product balance.

3. Raw Material Prices and Price Trends

The price of silicon steel and copper, in particular, which are considered a commodity with dynamic pricing according to the world market prices, the company considers each raw material order in terms of the order amount and an appropriate purchase time. The company follows the movements and trends of the raw material prices closely in order to effectively manage raw material costs.

4. Exchange Rates

Because the company has purchased raw materials from foreign countries in proportions of 37%, 37% and 31% from 2011-2013, respectively, the company will closely track the movements with the exchange rates of various important currencies and make proper purchase/sales agreements in foreign currencies beforehand as a means of preventing risks from potential fluctuations in currency.

5. No Exclusive Reliance on Only One or a Few Manufacturers/Suppliers

The company has a policy of procuring raw materials from many manufacturers/suppliers for each type of raw material, especially for silicon steel, enameled round wire, electric transformer tank set, copper foil and transformer oil. The company has only one or two main manufacturers/suppliers because each manufacturer/supplier has a minimum order amount and doing so increases the company's bargaining power with the aforementioned manufacturers/suppliers both for the price and the delivery time of raw materials. However, other than the aforementioned manufacturers/suppliers of raw materials, the company also orders raw materials from other manufacturers/suppliers to maintain good relations and minimize the risk of relying too heavily on one or a few manufacturers/suppliers.

Table showing the proportions of raw material purchases from domestic and foreign sources.

	2011		2012		2013	
	Million Baht	%	Million Baht	%	Million Baht	%
Raw materials purchased domestically.	304.45	63.00	398.06	63.36	324.22	68.82
Raw materials purchased abroad.	178.85	37.00	230.23	36.64	146.92	31.18
Total raw materials purchased	483.30	100.00	628.29	100.00	471.14	100.00

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

1. Silicon Steel

Silicon steel is considered an essential material in the production of electric transformers and is calculated in proportions of approximately 22.40 percent and 16.97 percent of the total value of raw material purchases in 2012 and 2013, respectively. The company mostly imports silicon steel from distributors in South Korea and some from Japan by pre-ordering the materials on a quarterly basis. However, because the high quality silicon steel used in the production of electricity transformers is a commodity with few manufacturers, silicon steel is manufactured in limited quantities. Therefore, in case the amount of silicon steel ordered from foreign countries is insufficient to meet the company's requirements, the company orders more silicon steel from other countries, so the company will be able to manufacture electric transformers on time as scheduled by the customers.

Table showing the proportion of silicon steel purchases from domestic and foreign sources.

	2011		2012		2013	
	Million Baht	%	Million Baht	%	Million Baht	%
Domestic	7.64	7.23	9.42	6.70	8.45	10.57
Foreign	98.04	92.77	131.37	93.30	71.50	89.43
Total	105.68	100.00	140.79	100.00	79.95	100.00

2. Enameled Round Wire

The enameled round wire is a material used for the coiling of the secondary coil which performs the task of receiving electricity from a high voltage power line and converting the electricity into a magnetic energy circling the steel core for transmission to the primary coil. The company has calculated the total amount of the enameled round wire in proportions at 14.72 percent and 15.39 percent of the total material cost for 2012 and 2013, respectively. Domestic manufacturers make up 100 percent of the suppliers because the enameled round wire manufactured domestically has qualities similar or equal to the wire imported from abroad but takes less time to purchase which enables the company to manage the product's balance more effectively.

3. Electricity Transformer Tank Set

In 2012 and 2013, the company purchased an electric transformer tank set calculated in proportions at 12.10 percent and 13.62 percent of the total material cost respectively. In 2014, the company will produce some electric transformer tank sets to help cut production costs and meet transformer needs with shorter delivery times to increase competitive capacity. However, the company continues to buy from 1-2 domestic manufacturers in line with the suitability of specifications and the number of orders, price and the product delivery time. The tanks the company manufactures take about 5-10 days and the delivery time for tanks ordered from foreign manufacturers is approximately 15-30 days.

Foreign manufacturers set a per kilogram price for electric transformer tanks. For the most part, this price will not change. In cases where manufacturers change the prices, the company needs to be notified at least one month in advance.

4. Transformer Oil

In 2012 and 2013 the company purchased transformer oil in proportions calculated at 8.84 percent and 7.72 percent of the total material cost, respectively. The transformer oil is manufactured specifically for electricity transformers and has good insulating properties. The oil performs the task of transporting the heat from inside the transformer to the outside of the tank to be emitted to the external air. In ordering the transformer oil, the production plan will be considered by ordering from domestic distributors approximately three months in advance because distributors have a minimum amount requirement for orders. Furthermore, the delivery time of the transformer oil is reconfirmed with the distributor by relying on information from close coordination between the Procurement Department and the Production Department to prevent material shortages. Consequently, the Procurement Department monitors the movement of oil prices by regularly requesting information from the distributors to effectively manage the purchasing of transformer oil.

5. Copper Foil

Copper foil is a material used for primary coil coiling which performs the task of transmitting electricity from the transformer to the load or connected equipment. In 2012 and 2013, the company purchased copper foil calculated in proportions of 9.55 percent and 10.95 percent of the total material cost, respectively. All of the copper foil bought by the company comes from foreign manufacturing sources. At present, the company orders from manufacturers in Germany and South Korea and has been trying to help develop capable domestic manufacturers able to meet international standards as an option and to support the company's supply system. For the ordering of copper foil, the specified minimum purchase amount is considered (Minimum Stock). If the company's amount is down to the minimum required amount, then the ERP system will notify the employees involved to order more materials. The aforementioned system will help the company manage the material balance effectively in proper amounts.

3.5 Environmental Impact

In the past, the company has had no disputes or prosecutions regarding the environment. The company has concentrated on the design and development of electric transformers using less energy that are environmentally friendly together with the technology selected by the company for the production process to conserve energy and effectively minimize environmental pollution, including safety to operators whether in copper foil pressing by using the cold press method which is smoke- and hot steam-free, the use of painting and decorating processes of the transformers in the spray booth which have equipment set up to remove paint fumes so paint does not spread into nearby areas and damage the environment. Moreover, the paint used for the transformers is also water-based, so it is not harmful to people and the environment, including the use of a moisture removal systems and an oiling system that uses less energy and reduces hot steam released into the environment.

Furthermore, in 2008 the company was granted ISO 14001:2004 environmental management accreditation, which is considered proof that the company has an effective environmental management system with control and improvement systems in the production process, including clear plans for managing the environment to reduce or eliminate environmental impact in compliance with regulations.

3.6 Research and Development

The company has always recognized the importance of research and development because our product quality must be capable of meeting all customers' needs in order to be important. Moreover, research and development will increase the company's competitive capacity while protecting and increasing market shares for the electricity transformer industry on a continual and steady basis. The company's research and development in the past can be summarized as follows:

- Research and development for product designs able to better respond to the demands of customers by cooperating with customers domestically and abroad.
- The research and development of products with quality meeting the product standards set forth by various related institutes and organizations both domestically and abroad. Obviously, the company's electricity transformers have been granted ISI 384-2543 certification by the Industrial Standards Institute, Ministry of Industry, and ISO 9001:2000 by the SGS institute of the United Kingdom and Thailand. Furthermore, the company is also capable of producing electric transformers meeting various international standards.

- To increase consumer confidence in the company's products, the company has submitted electricity transformers to short circuit testing. At present, the electric transformers passing the aforementioned test are transformer sizes 100KVA, 150KVA, 250KVA, 300KVA, 500 KVA, 750KVA, 1000 KVA, 2000 KVA and Earthing Transformer 1600A which has been certified for short circuit endurance by the CESI Institute, Italy, a world famous electrical testing institute. Moreover, the company is preparing to send a 315KVA transformer for additional testing in 2014.
- The company has continuously developed machinery for work by using the company's own research and development team to create highly efficient machines meeting user needs, increase production capacity using the same amount of space and save costs used in the purchase of new machinery from abroad.
- The research and development of energy saving electric transformers by using amorphous cores, which makes it possible to produce highly efficient, environmentally friendly electric transformers. As a result, the company has successfully produced amorphous electric transformer size 1000KVA as the first to function in Thailand which shows the company's capabilities and determination in research and development.
- The development of an electric transformer using aluminum for the transformer body as an alternative for customers who want to save energy but continue to retain the effectiveness and quality of original electric transformers.
- Research and development regarding the various infrastructures of electric transformers in cooperation with Thailand's leading universities to improve product quality and build customer confidence both domestically and abroad.

The research and development expenditure within the company's past four years can be summarized as follows:

Year	Research and Development Expenditures (Baht)
2009	-
2010	203,423.61
2011	1,372,932.00
2012	2,011,800.00
2013	993,861.00

Revenue Structure

Revenue Type	2011		2012		2013	
	Million Baht	Percent	Million Baht	Percent	Million Baht	Percent
Revenue from Electricity Distribution Transformer Sales	688.42	95.91	928.57	95.76	774.47	95.41
- Revenue from Domestic Transformer Sales	580.32	80.85	703.33	72.53	614.51	75.71
- Revenue from Overseas Transformer Sales	108.10	15.06	225.24	23.23	159.96	19.71
Revenue from Raw Material Sales ¹⁾	12.44	1.73	11.78	1.22	9.41	1.16
Consolidated Revenue from Sales	700.86	97.64	940.35	96.98	783.88	96.57
Revenue from Service Provision	13.60	1.89	19.16	1.98	20.07	2.48
Other Revenue ²⁾	3.33	0.46	10.19	1.06	7.73	0.95
Total Revenue	717.79	100.00	969.70	100.00	811.68	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

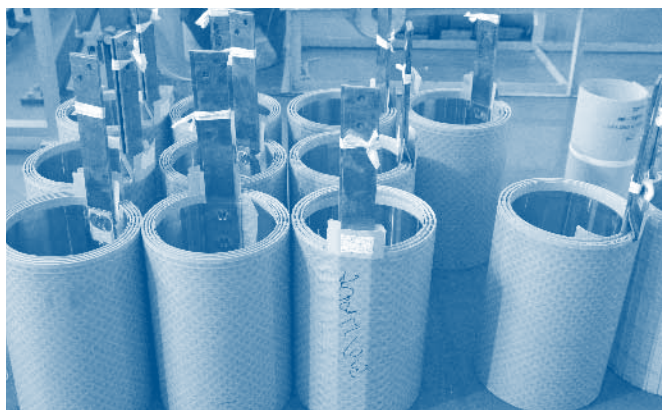
The electricity transformer manufacturing industry involves electrical power, which is considered an essential factor playing a significant role in daily living as well as national economic development. Thus, the growth of the electricity transformer manufacturing industry corresponds to annual power requirements depending on key factors such as population growth, industry growth and economical growth. In the past, power production, power demand and GDP all fluctuated in the same direction. Nevertheless, the growth of the power demand is considerably higher than domestic GDP growth. Thus, even during economic recessions, the power demand declines only slightly in conjunction with the decline of the domestic GDP, as evident in 1998 during a period of national economic crisis when the Thai baht value was floated with the inevitable consequence of an economic recession. Domestic GDP decreased from 3,072.6 billion baht in 1997 to 2,749.6 billion baht, a decrease of 10.51%, while power demand decreased from 81,998.02 GWH in 1997 to 79,899.63 GWH in 1997, a decrease of only 2.56%.

In addition to economic growth, population growth is also another factor influencing the national power demand. The Thai population is constantly increasing, which has resulted in expanding communities. The PEA and MEA, who are responsible for supplying power to domestic power users, need to invest more in the power distribution system. As a result, the demand for transformers, which are part of the power distribution system, has also increased.

As previously mentioned, electrical power is a necessary fundamental power. Furthermore, if supply is insufficient to meet demands, the people's living conditions and businesses as well as the national economy will be affected. Thus, the Ministry of Energy, in cooperation with the Electricity Generation Authority of Thailand, has devised a national power production development plan for Thailand. The most recent volume is the National Power Development Plan of 2010-2030 (PDP 2010). This plan projects increases in the maximum



power demand from 23,249 megawatts in 2010 to 52,890 megawatts in 2030, or an average of 4.42% per year. Power production capacity will increase from 31,349 megawatts in 2010 to 65,547 megawatts in 2030, an average increase of 3.96 per year. Thus, EGAT, MEA and PEA need to come up with a plan to invest in power capacity expansion and plans to improve and expand power distribution systems concurrent with the aforementioned development plan in order to be able to produce and distribute sufficient electrical power for the nation's future power demands. The aforementioned investment will cause domestic electricity transformer manufacturing and sales to expand as well.



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 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. Furthermore, when the company's 2012 foreign customer base is considered, it appears that 22.10% of foreign transformer sales came from Malaysian customers, which is the country in the region with highest power production growth. 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.

Australia is another important market for the company in terms of foreign transformer sales. In 2013, the average growth of power production continued to grow at 1%. Australia is a large market with a strong industrial sector. However, Australia's economic growth has faced a constant downturn with the power demand of the industrial sector and power distribution system in a stable or slightly declining phase. The company has expanded the market into Laos, the Philippines and Singapore in order to diversify risks and expand its customer base.

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.

Risk Factors

1 Risks of Revenue Fluctuations and Dependence on Large Customers

The company's revenue is derived from bidding for transformer sales to customer groups who are manufacturers and distributors of government electricity enterprises primarily consisting of the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA), which accounts for approximately 33-47% of all sales revenue. High revenue ratios from the sales of transformers to MEA and PEA may have impact on the company's revenue if the company loses the aforementioned customers. Furthermore, revenue from the sales of transformers to this group of customers depends upon the company's ability to win various bids while also depending on economic conditions and the budgets of each agency. Therefore, if the company does not win biddings or if biddings are rescheduled or agencies have reduced budgets for investing in transformer purchases, there will be impacts reducing the company's revenue and business performance. Therefore, the company emphasizes expanding the private sector customer base. The company also considers increasing product variety in response to the needs of every customer group. At present, the company is also able to produce power 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 2013, the company had revenue from the sales in foreign currency equal to 161.71 million baht, which was 20.63% of all sales revenue. At the same time, the company has also ordered the purchases of raw materials from foreign countries, 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.

4 Risks from Delayed Product Deliveries

Because most of the company's revenue is derived from the sales of transformers to MEA and PEA, the sales of products to the aforementioned agencies generally have standard purchase agreements with clear schedules for delivering products. If the company is unable to deliver transformers according to the time period set in the agreement, the company must compensate for damages or pay fines at the rate of 0.15-0.20% of the value of undelivered work. The aforementioned delayed product deliveries also covers cases of transformer repairs during the guarantee period in which the company must be held liable for repairing transformers to normal functional conditions and delivering transformers within specified times. The calculations of fines will be made daily beginning from the date of delayed product deliveries. The company maintains the key policy of manufacturing and delivering products to customers on time. The Sales Department and the Production Department will contact customers to update data, coordinate, and closely monitor the work in order to prevent errors which may prevent the company from delivering transformers to customers on time. With regard to transformer repairs, the company has currently improved transformer repairs for greater effectiveness by separating transformer repair lines from transformer production lines, which has helped the company manage time more efficiently. Furthermore, the implementation of the Enterprise Resources Planning (ERP) by the company has helped increase the efficiency of production planning.

5 Risks from Dependence on Main Executives in Conducting Business

The main executives in terms of the company's production and sales are persons with over 20 years' experience in the transformer industry who have opportunities to work with leading domestic transformer manufacturing companies and received training from leading foreign transformer companies for a long period of time. Hence, the executives have knowledge and expertise in the transformer industry along with good relationships with customers and suppliers both domestically and abroad. The aforementioned experience has made the company's transformers quickly receive reliability and acceptance from both domestic and foreign customers. Therefore, the company may be at risk due to dependence on the main executives in terms of managing operations. If there are changes in the aforementioned main executives, the company's management may be subject to impact. However, the company has clear goals for motivating executives and employees to work with the company for the long run. The main executives and most of the company's personnel have worked with the company from its founding. The company also has policies for training employees at all levels and arranging for the dissemination of experiences along with additional education for employees with objectives for the company's employees to have complete skills, knowledge, capabilities and understanding in their responsibilities. Moreover, the company has policies to promote each level of employees to advance with ability to progress continually in the company, thereby causing the company to be confident that the aforementioned policies will maintain the company's personnel sustainably.

6 Risks from Having a Group of Major Shareholders with Total Shares Over 50%

As of 31 December 2013, the holdings of Mr. Poonphiphat Tantanasin's group accounted for 125,014,600 shares, which is 62.51% of all distributed company shares, thereby causing the aforementioned group of shareholders to have power to control the company with influence in nearly every company decision whether concerning appointments of directors, requests for decisions on other topics requiring a majority vote of the shareholders' meeting, except for issues stipulating by laws or company regulations a requirement of votes amounting to no less than three out of four from the shareholders' meeting. Therefore, other company shareholders are at risk from their inability to collect votes to check and balance issues proposed by major shareholders for the consideration of the shareholders' meeting. Nevertheless, the company has appointed the Audit Committee to check, consider and screen prevent agenda items posing potential conflicts of interest in the future and to generate transparency in the company's operations. The structure of the company's board of directors consists of two executive directors and five non-executive directors, including the Chairmen of the company's board of directors and three audit directors. The aforementioned director structure will help create balance in votes considering various issues and help with the supervision and management of work for suitability and maximum efficiency.

Capital Structure

1 Company Stocks

As of 31 December 2013, the company had listed 200 million baht with 200 million baht in paid-up capital divided into 200 million ordinary shares with a par value of 1 baht per share.

2 Shareholder Structure

The Company's Top Ten Major Shareholders, as of 28 December 2013, which is the book closing date, is described below:

Top Ten Major Shareholders as of 27 December 2013			
No.	Shareholder	Number of Shares (Shares)	Shareholder Ratio (%)
1	Mr.Poonphiphat Tantanasin's Group		
	1.1 Mrs. Alisara Charoenvanich	37,696,000	18.85
	1.2 Miss Sisakarn Tantanasin	45,000,000	22.50
	1.3 Mr. Patcharapong Tantanasin	41,720,000	20.86
	1.4 Mr. Poonphiphat Tantanasin	598,600	0.30
	Total Shares held by Mr.Poonphiphat Tantanasin's Group	125,014,600	62.51
2	Thai NVDR Co., Ltd.	23,642,100	11.82
3	Mr. Worapoj Hirunpiwong	3,008,300	1.50
4	Mr. Prasert Lohawiboonsap	1,539,200	0.77
5	Mr. Supakorn Emasuda	1,500,000	0.75
6	Mr. Suebpong Tangtrongmitr	1,300,000	0.65
7	Mrs. Wandee Ekudomsin	1,150,000	0.58
8	Mr. Panom Kuansataporn	1,140,000	0.57
9	Mr. Viroj Tangsurakit	1,080,000	0.54
10	Miss Panisara Pranchaleesakun	1,079,300	0.54
	Other Shareholders	39,546,500	19.77
	Total	200,000,000	100.00

3 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

1 Board of Directors

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

First-Last Name	Position
1. Prof. Dr. Somchob Chaiyavej	Chairman and Independent Director
2. Mr. Poonphiphat Tantanasin	Director
3. Mr. Siripong Boontam	Director
4. Mr. Nakorn Phrprasert	Director and Independent Director
5. Mr. Padetpai Meekun-iam	Director and Chairman of the Audit Committee
6. Mr. Polrachot Piyathanom	Independent Director and Audit Director
7. Mr. Nattapol Lilawattananan	Independent Director and Audit 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. Siripong Boontam 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.

As a means of promoting and supporting the directors in attending every meeting held by the company's board of directors, the company has set a schedule for the meetings in advance on an annual basis as advance notification for the board of directors.

In 2012, the company held five board of directors' meetings and in 2013 another five board of directors' meetings were held with the following details on the attendance of each director:

Shareholder Name	No. of Meeting Attendances/No. of Meetings for 2012	No. of Meeting Attendances/No. of Meetings for 2013	Remarks
1. Prof. Dr. Somchob Chaiyavej*	4/4	4/5	
2. Mr. Poonphiphat Tantanasin	4/4	5/5	
3. Mr. Nipon Jaisin	2/4	-	Resigned as a director effective as of 1 June 2012.
4. Mr. Siripong Boontam	4/4	5/5	
5. Mr. Padetpai Meekun-iam	4/4	5/5	
6. Mr. Polrachot Piyathanom	4/4	5/5	
7. Mr. Nattapol Lilawattananan	4/4	5/5	
8. Mr. Nakorn Phrprasert	4/4	5/5	

Remark *Unable to attend the meeting due to a cold and fever.

2 Executive Board of Directors

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

First-Last Name	ตำแหน่ง
1. Mr.Poonphiphat Tantanasin	Chief Executive Officer
2. Mr.Siripong Boontam	Executive Director
3. Mr. Panu Sinives	Executive Director
4. Miss Boonpa Ruddist	Executive Director
5. Miss Chotika Chumpon	Executive Director

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.

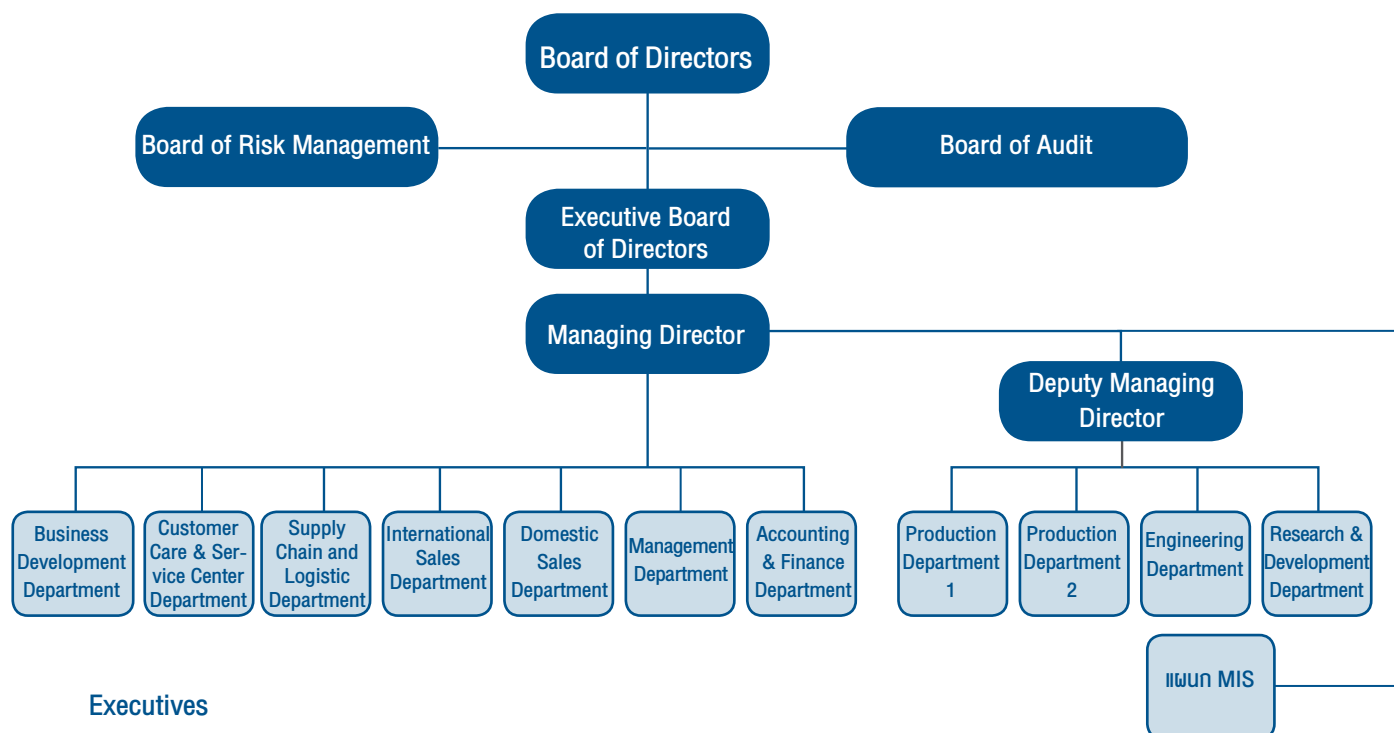
Scope of Authority and Duties of the Executive Board of Directors

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.

Corporate Management Structure

As of 31 December 2013, the company had the following corporate management structure:



Executives

The company has a total of eleven executives as follows:

First-Last Name	ตำแหน่ง
1. Mr. Poonphiphat Tantanasin	Chief Executive Officer & Managing Director
2. Mr. Siripong Boontam	Deputy Managing Director
3. Mr. Panu Sinives	Manager, Supply Chain and Logistics Department
4. Miss Boonpa Ruddist	Manager, General Management Department
5. Miss Chotika Chumpoon	Manager, Finance & Accounting Department
6. Mr. Charoensak Sarawong	Manager, Production Department 1
7. Mr. Siripong Boontam	Manager, Production Department 2
8. Mr. Chanvut Meeploi	Manager, Engineering Department
9. Mr. Ruangchai Krissanakriangkrai	Manager, International Sales Department
10. Miss Suanya Phumomanularp	Manager, Domestic Sales Department
11. Mr. Nippat Jingjamikorn	Manager, Customer Care & Service Center Department
12. Mr. Sasikanjana 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 and 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.

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
(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
(2) Investments outside of budget plans.	-	-	-	No 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 3 million baht	No 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 million baht

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.

13.3 Corporate Secretary

In the 1/2554 meeting of the company's board of directors on 24 February 2011, the board of directors passed a resolution to appoint Miss Boonpa Ruddist to the position of Corporate Secretary. The qualifications of the person holding the position of Corporate Secretary appear in Attachment 1 in compliance with Section 89/15 of the Securities and Exchange Act of 1992 revised by the Securities and Exchange Act (Volume 4) of 2008. Duties and responsibilities of the Corporate Secretary are as follows:

1. Arrange and maintain the following documents:
 - (a) Director's Charter
 - (b) Letters of notification of directors' meetings, minutes to the meetings of the company's board of directors and the company's annual reports.
 - (c) Letters of notification of shareholders' meetings and minutes to the meetings of shareholders.
2. Maintenance of reports on stakeholders reported by directors and executives.
3. Any other actions announced and stipulated by the Capital Market Supervisory Board.

As a means of building knowledge about the work of the Corporate Secretary and to enable the Corporate Secretary to efficiently perform the work of the Corporate Secretary, the company has stipulated that the Corporate Secretary receiving training in various courses such as a course on the basics of the law and regulations related to listed companies and corporate secretary courses with participation in various seminars held by the Stock Exchange of Thailand.

13.4 Remuneration for Directors and Executives

13.4.1 Monetary Remuneration

Remuneration for the Board of Directors

At the shareholders general meeting in 2013 which was held on 23 April 2013, a resolution was passed on the setting of director remuneration for 2013 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	Board of Audit Director		
1. Prof. Dr. Somchob Chaiyavej	Chairman	60,000	-	630,000	690,000
2. Mr.Padetpai Meekun-iam	Chairman of the Audit Committee / Director	50,000	75,000	350,000	475,000
3. Mr. Polrachot Piyathanom	Director / Audit Director	50,000	50,000	350,000	450,000
4. Mr. Nattapol Lilawattananan	Director / Audit Director	50,000	50,000	350,000	450,000
5. Mr. Nakorn Phrprasert	Director	50,000	-	350,000	400,000
6. Mr.Poonphiphat Tantanasin	Director	50,000	-	350,000	400,000
7. Mr.Siripong Boontam	Director	50,000	-	350,000	400,000
Total		360,000	175,000	2,730,000	3,265,000

No other form of remuneration.

Executive Remuneration

In 2012 and 2013, the company paid remuneration to executives amounting to 16.70 million baht and 18.82 million baht, respectively. The aforementioned remuneration includes salaries, bonuses and providence fund contributions. The only other form of remuneration would be a company car.

5 Personnel

5.1 Number of Employees

As of 31 December 2013, the company had a total of 181 employees (not including eleven executives) with 176 as regular employees and 5 as daily employees according to the following details:

Department	Regular Staff (persons)	Daily Staff (persons)	Total (persons)
Customer Care & Service Center		-	14
SupplyChain and Logistics	23	-	23
International Sales Department	12	-	12
Domestic Sales Department	2	-	2
Administration	10	-	10
Business Development	-	-	-
Accounting and Finance	10	-	10
Production	77	5	82
Engineering	21	-	21
Security	3	-	3
Research and Development	1	-	1
MIS	3	-	3
Total	176	5	181

Remarks: Under the company's organizational structure, the Customer Care and Service Center Department, the Supply Chain and Logistics 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 Production and Engineering Departments, the Security Department and Research and Development Department report to the Deputy Managing Director.

5.2 Labor Disputes

-None-

5.3 Employee Remuneration

Monetary Remuneration

In 2013, the company paid remuneration to its employees (not including executives) amounting to 59.19 million baht in the form of salaries, bonuses, overtime pay, provident fund contributions and other benefits.

Other Remuneration

-None-

5.4 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:

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.

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.

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.

Corporate Governance

1 Corporate Governance Policy

The company places importance in good corporate governance, because the company views good governance as an important mechanism in leading to effective, transparent and traceable systems of management, which will help build confidence in shareholders, investors, stakeholders and all parties concerned. Good corporate governance is an instrument that will enhance value, build competitive capacity, including the promotion of sustainable growth of the company in the long run. Therefore, the company has set policies for good corporate governance as set forth by the Stock Exchange of Thailand in the 3rd/2556 meeting of the board of directors on 8 August 2013, 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 fourteen days before the meeting date. 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, 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:
 1. Agenda 1 Consideration to approve the minutes to the shareholder's general meeting.
 2. Agenda 2 Consideration to acknowledge the company's performance for the previous year.
 3. Agenda 3 Consideration to approve the company's financial budget for the accounting cycle for the year ending 31 December of the previous year.
 4. Agenda 4 Consideration to approve the allocation of profits from operations for the previous year.
 5. Agenda 5 Consideration of the nomination of replacement directors for directors whose terms of office have expired.
 6. Agenda 6 Consideration to approve director's compensation.
 7. Agenda 7 Consideration of the appointment of auditors and set compensation for the annual audit.
 8. 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 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.
- 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, 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 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. 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.
- Unless necessary, 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,s 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.

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.

The 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

5.1 Board of Directors' Structure

5.1.1 Elements of the Board of Directors

The board of directors is composed of five directors and independent directors for at least one third of the number of directors on the entire board, but must be no less than three. The directors are appointed by the shareholder's meeting, with office term being three years and no limit to the number of office terms. At present, the company has three auditing directors. The aforementioned structure will create a check-and-balance system for the voting when issues are under consideration. According to company policy, the Chairman of the Board must only be an independent director.

5.1.2 Director Qualifications

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.

5.1.3 Independent Director Qualifications

- (1) Independent directors must hold no more than 1% of all company, parent company, subsidiary, affiliated company or juristic person shares entitled to vote with potential conflicts of interest. Shares held by related persons are also counted.
- (2) Independent directors must be persons who are not and never have been directors who have participated as managers, subordinate, employees, consultants with regular salaries, or persons with power to control the company, parent company, subsidiaries, affiliated companies, equal level subsidiaries, or juristic persons with potential conflicts of interest, unless the person has not had met the aforementioned criteria for no less than two years prior to the date of submitting applications to the SEC.
- (3) Independent directors must not be persons related by blood or legal registration as a parent, spouse, sibling or child, including spouses of children, to major executives, shareholders, persons with authority to control, or executive candidates, or persons with authority to control the company or its subsidiaries.
- (4) Independent directors must not have or ever have had business relationships with the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest in characteristics which may obstruct independent judgment. Moreover, independent directors must not be or ever have been a major shareholder, director, or executive of persons with business relationships with the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest, unless independent directors have been free from the aforementioned characteristics for no less than two years before the date of the application for SEC permission.
- (5) Independent directors must not be or ever have been auditors to the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest. Moreover, independent directors must not be or ever have been a major shareholder, director, executive or manager-shareholder of auditing offices employing auditors for the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest, unless the independent director has been free from the aforementioned characteristics for no less than two years prior to the date of application for SEC permission.
- (6) Independent directors must not be or ever have been service providers in any profession, including legal consultant services or financial consultant services, which have received service fees of more than two million baht per year from the company, parent company, subsidiaries, affli-

ated companies, or juristic persons with potential conflicts of interest. Moreover, in cases where professional service providers were juristic persons, this includes being a major shareholder, a director, an executive or managing partner of auditing offices employing auditors to the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest, unless the independent director has free from the aforementioned characteristics for no less than two years prior to the date of application for SEC permission.

- (7) Independent directors must not be directors appointed to represent company directors, major shareholders, or shareholders associated with major shareholders of the company.
 - (8) Independent directors must not have any other characteristics preventing independent opinions concerning the company's operations.
- 5.1.4 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.
 - 5.1.5 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.
 - 5.1.6 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.
 - 5.1.7 Each independent director may be an independent director for no more than nine consecutive years.
 - 5.1.8 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.
 - 5.1.9 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).
 - 5.1.10 The board of directors appoints a Corporate Secretary with duties and responsibilities concurrent with the Securities and Exchange Act as follows:
 1. Arrange and maintain the following documents:
 - (a) Director's Charter
 - (b) Letters of notification of directors' meetings, minutes to the meetings of the company's board of directors and the company's annual reports.
 - (c) Letters of notification of shareholders' meetings and minutes to the meetings of shareholders.
 2. Maintenance of reports on stakeholders reported by directors and executives.
 3. Any other actions announced and stipulated by the Capital Market Supervisory Board.

5.2 Sub-Committees under the Company's Board of Directors

The board of directors also sets up sub-committees to help with corporate governance as follows:

1. The company has a Managing Director as the party to set business guidelines and strategy in line with the targets set by the board of directors and to facilitate management.
2. The Board of Audit – the company has a total of three audit directors to perform duties concerning specific matters and to propose issues to the board of directors for consideration and awareness. The Board of Audit's rights and duties have been set within the scope of the power and responsibilities of the Board of Audit. At least one audit director must possess adequate knowledge and experience in accounting in order to execute the duty of auditing the credibility of the company's financial statements.
3. The Nomination and Remuneration Committee – This committee is composed of 2/3 independent directors. The chairman is an independent director holding the duty of recruiting and selecting candidates for the office of director in the board of directors to monitor the succession of office, to evaluate the work performance of the Managing Director, to propose remuneration policy and other benefits for the board of directors, sub-committees, managing directors, and deputy managing directors, to review the director remuneration structure, director and executive remuneration to suit the duties and responsibilities as well as the company business performance.

4. The board of risk management – The board of risk management performs duties in overseeing the company's risk management procedures to ensure execution of duty in line with the business plan, policy and strategy set by the board of directors.

5.3 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.
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.
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. The power to authorized 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.
11. 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.

5.4 Board of Directors' Meetings

The board of directors must execute its duties through the board meetings as follows:

1. The board meeting schedule is prepared in advance for the entire year and reported to each director to ensure awareness.
2. The board of directors holds board meetings at least once every three months, and may hold special meetings as necessary. In each meeting, agendas are clearly set and meeting invitations are sent with details seven days ahead of time, so the board of directors has a sufficient amount of time to study the data. Minutes to the meetings are recorded in writing and the board-approved minutes to the meeting are kept available for verification by the board of directors and related individuals.
3. The Chairman of the Board or the Managing Director is the party to consider and select matters to be placed on the meeting agenda. Each director proposes meeting agendas independently.
4. The chairman of the board allots a sufficient amount of time for the executives to propose matters and the directors to discuss key issues with prudence. Minutes to the meeting are in writing and kept for directors and related persons to verify.
5. The board of directors encourages the company's high-ranking executives to attend meetings with the board to provide additional details as directly related to problems and to ensure the board is sufficiently familiar with the high-ranking executives for the benefit of considerations involving the work succession.
6. The company has set policy for non-executive directors to hold meetings to discuss management problems without the management's presence and report meeting results to the Managing Director.
7. The board of directors has appointed the Corporate Secretary to the board of directors to performs the duty of supporting the preparation of meeting agendas and the preparation of meeting invitations in addition to overseeing and holding meetings, maintaining meeting documents and preparing minutes to the meeting to be submitted to the Chairman of the Board before presenting to the meeting for approval consideration of the minutes to the meeting.

5.5 Board of Director's Self Evaluation

The board of directors has stipulated that its performance will be evaluated at least once a year for the purpose of awareness about problems and barriers occurring during the previous year in order to assure that the board's operations are more effective because the board learns its own responsibilities and helps improve relationships between the board of directors and the management. Thus, corrective guidelines are concurrent with the principles of corporate good governance.

5.6 Remuneration

The company sets remuneration for directors and executives at a suitable and sufficient level to maintain directors and quality team executives without having to pay overly high remuneration. Furthermore, the level is comparable to that of companies in the same industry. The factors to be considered include experience, duties, roles and responsibilities. Director's remuneration payments must be approved by the shareholder's meeting. Executive remuneration payments are concurrent with the principles and policy set forth by the board of directors in consideration of duties and responsibilities, individual executive performance and company performance. For the directors of sub-committees, the remuneration is commensurate with roles and responsibilities.

5.7 Director and Executive Development

- 5.7.1 The board of directions has set policy to promote and facilitate the arrangement of training and resource persons related to the company's corporate governance system, including directors, auditing directors, executives and secretaries, so operations are continually improved, i.e. the courses of the Thai Institute of Directors Association (IOD).
- 5.7.2 The company prepares documents and information for the use of new director's in the execution of duty. Manuals on business characteristics and the company's business operations are also provided for new directors.

5.7.3 The company has suitable and transparent plans for recruiting employees to be under obligation for all key management positions to ensure that the company acquires executives with professionalism and ability to manage independently from the influence of major shareholders or any individuals. The plan is reviewed by the board of directors on an annual basis. The executives appointed as successors will be developed in line with the individual development plan in order to be ready for future promotion.

5.8 Stake Holding Reports

The company assigns directors and managing directors to report personal stake holdings and the stake holdings of related parties at the time they take office or when there are changes in information. Furthermore, information is to be reviewed annually in line with the criteria and methods for reporting stake holdings of company directors and executives set forth by the board of directors.

In 2013, in order to concur with good corporate governance principles and for the purpose of transparency, the company arranged for the evaluation of the CEO's work performance for 2013 to inform, consider and review any problems and barriers in the past.

2 Sub-Committees

The company has three subcommittees composed of the Board of Audit, the Board of Management and the Board of Risk Management. The directors of the board of directors, director of the Board of Audit, director of the Board of Risk Management and director of the Board of Management and company's executives are fully qualified pursuant to Article 68 of the Public Company Act of 1992 and related notifications of the Capital Market Supervisory Board. The company's management structure can be described as follows:

2.1 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. Padetpai Meekun-iam	Chairman of the Board of Audit
2.	Mr. Polrachot Piyathanom*	Audit Director
3.	Mr. Nattapol Lilawattananan*	Audit Director

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

Miss Wandee Sibunruang is the Internal Auditor and Secretary of the Board of Audit.

Scope of Duties and Responsibilities for the Board of Audit

1. To review the accuracy and sufficiency of the company's financial reports.
2. 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.
3. 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.
4. 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.

5. 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.
6. 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:
 - (a) Opinions on the accuracy, completeness and credibility of the company's financial report.
 - (b) Opinions on sufficiency of the company's internal control system.
 - (c) Opinions on legal compliance on securities and exchange, and securities market regulations or laws related to the company's business.
 - (d) Opinions on auditor's suitability.
 - (e) Opinion on potential conflict of interest transactions.
 - (f) Number of Board of Audit's meetings and meeting attendance by each audit director.
 - (g) Overall opinion or observation rendered by Board of Audit receives on execution of duty in line with charter.
 - (h) 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.
7. Any other operations assigned by the board of directors with the Board of Audit's approval.

2.2 The Board of Risk Management

In order to ensure the efficiency of corporate risk management, the board of risk is under obligation to monitor the company's risk management process for proper concurrence with the business plan, policy and strategy within the scope set by the board of directors in writing in the framework of the criteria for the Board of Risk Management. The Board of Risk Management is composed of the following individuals:

1. Mr.Poonhiphat Tantanasin	Chairman of The Board of Risk Management
2. Mr.Siripong Boontam	Director
3. Mr. Panu Sinives	Director
4. Mr. Ruangchai Krissanakriangkrai	Director
5. Miss Boonpa Ruddist	Director
6. Mr. Charoensak Sarawong	Director
7. Mr. Chanvut Meeploi	Director
8. Miss Suanya Phummanulap	Director
9. Miss Chotika Chumpoon	Director

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.

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.

3 Director Recruitment

Director recruitment is carried out in the shareholder's meeting. The board of directors is the party to consider experience, knowledge, ability and legal qualifications because the company has no committee to recruit people for the aforementioned office at this time. Next, the shareholder's select directors in line with the criteria and methods set forth in the company's regulations.

3.1 Elements and Appointment of the Board of Directors

The descriptions of the elements, recruitment, appointment, removal or termination of directors are set forth in the company's regulations, which can be summarized as follows:

1. The company's board of directors comprises no less than five directors and no less than half of all directors must reside in the Kingdom with qualifications as set forth by law.
2. Shareholders' meetings must select directors according to the following criteria and methods:
 - (1) Each shareholder has the right to cast votes equal to the number of shares held by that shareholder.
 - (2) Each shareholder may use their votes to elect one or several persons as directors. In cases where a shareholder elects several persons as directors, the shareholder may not give unequal votes to any person.
- (3) The persons who receive the highest number of votes will be the persons appointed as directors in order according to the number of directors allowed or the number of directors being elected at the time of the meeting. In cases where the next person in line exceeds the quota of directors allowed or the number of directors being elected at that time with equal votes, the Chairman will cast the deciding vote.
3. In every annual shareholder's meeting, one-third of the existing directors must be released from office. If the number of directors cannot be divided equally into three parts, the number of directors nearest one-third of the existing directors must be released from office. Directors who will be out of office in the first and second years following the registration of the company must draw lots. In subsequent years, the directors who have been in office longest must be released. Directors whose terms will expire may be reelected.
4. Any director wishing to resign must submit a resignation form to the company. Resignations shall be effective from the date the resignation form reaches the company.
5. In cases where director's seats become vacant due to causes other than expiration of term, the company's board of directors may select persons with qualifications who have no prohibited characteristics according to the laws governing public limited companies and/or laws on securities and securities exchanges as directors in the next meeting. Unless the remaining term of the directors is less than two months, new replacement directors may remain in office only for the remaining term of the director who was replaced.
The decisions of the board of directors must be made with votes of no less than three-fourths of the remaining directors.
6. Shareholder's meetings may pass a resolution for any director to be released from office prematurely with votes of no less than three-fourths of shareholders entitled to vote and in attendance at the meeting.

13.3.2 Elements and Appointments of Independent Directors

The company's board of directors will jointly consider the basic qualifications of independent director candidates by considering qualifications and prohibited characteristics of directors according to the Public Limited Company Act, laws on securities and securities exchanges, announcements of the Capital Market Supervisory Board, including announcements, rules and/or related regulations. Furthermore, the company's board of directors will consider selecting independent directors from qualified persons with work experience and suitability in other aspects before proposal to the meeting of shareholders for consideration of appointment as a company director. The company has set policy for appointing independent directors at one out of three directors and the number of independent directors must be no less than three independent directors.

Qualifications of Independent Directors

1. Independent directors must hold no more than 1% of all company, parent company, subsidiary, affiliated company or juristic person shares entitled to vote with potential conflicts of interest. Shares held by related persons are also counted.
2. Independent directors must be persons who are not and never have been directors who have participated as managers, subordinate, employees, consultants with regular salaries, or persons with power to control the company, parent company, subsidiaries, affiliated companies, equal level subsidiaries, or juristic persons with potential conflicts of interest, unless the person has not had met the aforementioned criteria for no less than two years prior to the date of submitting applications to the SEC.
3. Independent directors must not be persons related by blood or legal registration as a parent, spouse, sibling or child, including spouses of children, to major executives, shareholders, persons with authority to control, or executive candidates, or persons with authority to control the company or its subsidiaries.
4. Independent directors must not have or ever have had business relationships with the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest in characteristics which may obstruct independent judgment. Moreover, independent directors must not be or ever have been a major shareholder, director, or executive of persons with business relationships with the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest, unless independent directors have been free from the aforementioned characteristics for no less than two years before the date of the application for SEC permission.
5. Independent directors must not be or ever have been auditors to the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest. Moreover, independent directors must not be or ever have been a major shareholder, director, executive or manager-shareholder of auditing offices employing auditors for the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest, unless the independent director has been free from the aforementioned characteristics for no less than two years prior to the date of application for SEC permission.
6. Independent directors must not be or ever have been service providers in any profession, including legal consultant services or financial consultant services, which have received service fees of more than two million baht per year from the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest. Moreover, in cases where professional service providers were juristic persons, this includes being a major shareholder, a director, an executive or managing partner of auditing offices employing auditors to the company, parent company, subsidiaries, affiliated companies, or juristic persons with potential conflicts of interest, unless the independent director has free from the aforementioned characteristics for no less than two years prior to the date of application for SEC permission.
7. Independent directors must not be directors appointed to represent company directors, major shareholders, or shareholders associated with major shareholders of the company.
8. Independent directors must not have any other characteristics preventing independent opinions concerning the company's operations.

13.3.3 Elements and Appointments of the Audit Committee

The company's board of directors will appoint the Audit Committee comprising of a minimum of three Audit Directors by appointing independent directors with qualifications meeting the specifications set forth by laws governing securities and securities exchanges, including the announcements, regulations and/or rules of the Stock Exchange of Thailand. Furthermore, independent directors holding the position of Audit Directors must meet the following additional qualifications:

1. Independent directors must not be directors assigned by the board of directors in the business operations of the company, parent company, subsidiaries, affiliated companies, subsidiaries of the same level, or juristic persons with potential conflicts.
2. An Audit director must not be a director of the parent company, subsidiaries, or registered subsidiaries of the same level.
3. Audit Directors must have sufficient knowledge and experience to perform duties as Audit Directors. A minimum of one Audit Director must have sufficient knowledge and experience to perform duties in checking the validity of financial budgets.

Each Audit Director shall have a three-year term in office.

4 Supervision of Subsidiaries' and Affiliates' Operations

At present, the company has neither subsidiaries nor affiliates. Thus, there is no supervision over the operations of subsidiaries and affiliates. However, if in the future the company has subsidiaries or affiliates, the board of directors will set policy for the supervision of the subsidiaries and affiliates.

5 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.

6 Auditor Remuneration

Audit Fees

The company will pay audit fees to the following:

- The company's auditor. For the previous accounting cycle, an amount of 750,000 baht was paid to the auditor.
- The company paid no audit fees to the auditor's office, persons or businesses associated with the auditor and the auditor's audit office during the previous accounting cycle.

Non-Audit Fees

The company does not have other non-audit fees.

Internal Control and Risk Management

In Board of Directors Meeting No. 1/2557 on 20 February 2014 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.

1 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.

At present, the company has no internal audit department. However, the company has hired P & L Internal Audit Co., Ltd. to perform the duty of auditing the company's internal control systems since 2006 until the end of 2012. And in 2013, the company hired IVL Audit Co., Ltd. to perform the task of conducting internal audits for the company from then until the present. The aforementioned internal auditors have compiled reports on the results of assessment and internal auditing and these reports have been submitted for the acknowledgement of the Board of Audit on a regular quarterly basis. The company has revised and adjusted the practice of various departments according to the recommendations of the internal auditors.

2 Board of Audit Report

The Board of Audit of QTC Energy Public Co., Ltd. was appointed by the board of directors and is composed of Mr. Padetpai Meekun-iam as the Chairman of the Board of Audit, Mr. Nattapol Lilawattananan and Mr. Polrachot Piyathanom as Audit Directors. The scope for the key duties and responsibilities according to the Board of Audit Charter is to care for the company's financial reports in compliance with generally accepted accounting standards and principles for checking the company's operations to ensure compliance with good governance principles with an efficient internal control system in compliance with related specifications and laws, and supervision of cases involving potential conflicts of interest between the company and associated individuals. In 2013, the Board of Audit held a total of five meetings with the following key topics:

1. The Board of Audit has examined the quarterly financial statements and the financial statement for 2012 with the management and accounting auditors in order to assure that the company's financial reports have been prepared accurately according to the generally accepted accounting standards and with sufficiently complete disclosure of information and the remarks accompanying the financial statement are credible as well as the observations and acknowledgement of the problem-solving guidelines in the interests of the company.
2. Consideration of the disclosure of information on connected and related transactions accurately, absolutely and sufficiently. Moreover, the company has performed according to the business terms and criteria set forth by the Stock Exchange of Thailand.
3. Support and importance for corporate governance, in order to ensure good governance concurrent with the principles of the Stock Exchange of Thailand in order to assure transparency and ethics to build confidence among shareholders, investors, customers, trading partners and all related parties.
4. Supervise internal audit work so the work is performed independently by arranging to hire IVL Auditing Co., Ltd., to perform the company's internal audits with the Board of Audit as the party considering the annual audit plans, reporting on internal audits, continually following up on internal audit findings with the management in order to instill confidence that operations associated with the annual internal audit plans are carried out efficiently and effectively whereby the findings of the annual internal audit discover no errors in terms of key internal controls.
5. Evaluate the internal control system according to the guidelines set forth by the Capital Market Supervisory Board and the Stock Exchange of Thailand which cover work, finance, working in compliance with the law. The Board of Audit views the company as having sufficient and effective internal control.
6. Consider selection of appointments and nominate Grant Thornton Co., Ltd. as the company's accounting auditors to be proposed to for the approval of the shareholders' general meeting.

Hence, the Board of Audit has meticulously performed its duty with independence and expressed the same opinion with not limitations in receiving information with good cooperation from the company. It has also reported the results in the meeting to the company's board of directors every time.

3 Internal Audit & Governance Supervisors

In the Board of Audit Meeting Held on 19 February 2013, No. 1/2556, IVL Audit Co., Ltd. was appointed as the company's internal auditor for 2013. IVL Audit Co., Ltd. appointed Ms. Suwaldee Seeboonruang as main person responsible for performing the task of conducting the company's internal audits.

The Board of Audit has considered the qualifications of IVL Audit Co., Ltd. and Ms. Suwaldee Seeboonruang and deemed the aforementioned to be suitable and sufficient for performing the aforementioned task because the aforementioned are independent and have sixteen years of experience in conducting internal audits in businesses or industries with the same characteristics as the company. Furthermore, they have been trained in courses involving the performance of internal audits such as the Director Accreditation Program by the Thai Institute of Directors (IOD) and the Board of Audit Program by the Thai Institute of Directors (IOD). The company has also appointed the Accounting and Finance Department the task of coordinating with the outsourced auditor.

Hence, the consideration and approval of the appointment, removal, transfer of the company's internal audit supervisor must be granted or agreed upon by the Board of Audit. The qualifications of the internal audit supervisor appear in Attachment 2.

Related Transactions

1 Type of Relationship

QTC Energy Public Company Limited (“the Company”) has related transactions with individuals posing potential conflicts of interest comprising shareholders and/or company executives. Related companies mean companies with individuals who might have conflicts of interest with the company, who have relationships with the aforementioned company executives or shareholders. The types of relationships can be summarized as follows:

Persons With Potential Conflicts of Interest	Type of Relationship
QTC Service Chiangmai Co., Ltd.	Mrs. Sisapim Wongkham is the signatory director authorized to sign on behalf of the company and holds 99.94 percent of the shares in QTC Chiangmai. She is related as the younger sister of Mr.Poonphiphat Tantanasin, who holds the position of Chief Executive Officer and Managing Director of the company. In addition, the former wife and children of Mr. Mr.Poonphiphat jointly hold shares in the company for a total holding of 62.51 percent.
SMI Metal Work Co., Ltd.	Mr. Thitipat Techapiboonchai is the signatory director authorized to sign on behalf of the company and holds a 100 percent shareholding in SMI Metal Work Co., Ltd. He is related as the relative of Miss Boonpa Ruddist who holds the position of Managing Director.
Mr.Poonphiphat Tantanasin	Holds the position of Chief Executive Officer and Managing Director and the former wife and children of Mr. Poonphiphat jointly own a 62.51 percent shareholding.
QTC PANCO Co., Ltd.	Mr. Poonphiphat Tantanasin is the signatory director authorized to sign on behalf of the company and holds 85 percent of the shares in the registered capital of QTC PANCO Co., Ltd. Mr. Poonphiphat Tantanasin holds the position of Chief Executive Officer and Managing Director. In addition, the former wife and children of Mr. Mr.Poonphiphat jointly hold shares in the company for a total holding of 62.51 percent.

2 Related Transaction Details

In 2013 and 2012, the company carried out transactions with individuals who might have potential conflicts of interest with the following transaction details:

1 Goods and Service Sales Transactions

Persons With Potential Conflicts of Interest	Transaction Type	Related Transaction Value (million baht)		Necessity and Validity of Related Transactions
		2013	2012	
QTC Service Chiangmai Co., Ltd. (QTC Chiangmai) Conducts the business of service provision related to electrical systems.	Goods & Service Sales Trade Accounts Receivable	8.89 0.62	5.28 0.23	The company sells electricity transformers and raw materials which are components of electricity transformers, i.e. gas sealed transformers, low voltage terminal lugs, gasket sets and insulators, etc., including the provision of repair services for electricity transformers to QTC Service Chiangmai, which is one of the company's distributors. The sales prices for goods to QTC Service Chiangmai is a discounted rate equal to the discount rate offered to the company's other distributors. Moreover, the trading terms are similar to the trading terms set for the company's other distributors. The Audit Committee has considered the issue and holds the view that the aforementioned sale of goods and services transaction is one of the company's normal and valid trading types.
SMI Metal Work Co., Ltd. Conducts the business of transformer casing and cover manufacturing.	Goods and Service Sales Trade Accounts Receivable	0.60 -	0.17 0.02	The company has raw materials which are components for electricity transformers, such as RAL paint and primer, etc. The Audit Committee has considered the issue holds the view that the aforementioned sale of goods and services transaction is one of the company's normal and valid trading types.
QTC PANCO Co., Ltd Conducts the business of manufacturing and selling electricity transformers.	Goods and Service Sales Trade Accounts Receivable	2.43 2.46	- -	The company sells electrical transformers and raw materials which are components of electricity transformers. The Audit Committee has considered the issue and rendered the view that the aforementioned sale of goods and services transaction is one of the company's normal and valid trading types.

2 Sales and Administrative Expense Transactions

Persons With Potential Conflicts of Interest	Transaction Type	Related Transaction Value (million baht)		Necessity and Validity of Related Transactions
		2013	2012	
QTC Service Chiangmai Co., Ltd. (QTC Chiangmai) Conducts the business of service provision related to electrical systems.	Goods and Service Purchases Trade Accounts Payable	0.001 -	0.004	This is an expense incurred by the company's hiring of QTC Service Chiangmai to provide the following services for the company's customers in areas located in areas/provinces near the offices of QTC Service Chiangmai: transformer cargo, inspection, repair and crane lift fees, etc., because the company's cargo trucks and/or mechanics have full queues preventing them from providing services to customers. Furthermore, QTC Service Chiangmai is able to provide services for customers rapidly and reliably. The service fees QTC Service Chiangmai collected from the company can be compared to expenses incurred in the company's service provision and/or can be compared to service fees incurred in outsourcing the work to a third party. The Audit Committee has considered the issue and holds the view that the aforementioned sale of goods and services transaction is one of the company's normal and valid trading types. The related service fees are appropriate.
SMI Metal Work Co., Ltd. Conducts the business of transformer casing and cover manufacturing.	Goods And Service Purchases Trade Accounts Payable	0.50 -	2.56 -	The company purchased transformer casing and covers. The purchase price obtained from SMI Metal Work is comparable to purchase prices incurred with other companies. The Audit Committee has considered the issue and holds the view that the aforementioned sale of goods and services transaction is one of the company's normal and valid trading types. The related service fees are appropriate.

Measures or Procedures for Approving Related Transactions

The company has set forth measures for entering into related transactions between the company and persons with potential conflicts of interest by arranging for the Audit Committee to offer opinions regarding the necessity of entry into related transactions, the reasons for the related transactions and the suitability of fees for related transactions by considering various conditions for concurrence with characteristics of normal market trading, i.e. prices/fees comparable to third parties. In cases where the Audit Committee lacks expertise in considering potential related transactions, the company will provide persons with particular knowledge and expertise, such as auditors, property appraisers, law offices, etc., who are independent from the company and persons with potential conflicts of interest, to provide opinions regarding the aforementioned related transactions to accompany the decisions of the Audit Committee for presentation to the meeting of the board of directors or the meeting of shareholders, depending upon the case.

Furthermore, the company has set forth measures to prevent executives or stakeholders from participating in the approval of transactions in which executives or stakeholders may obtain direct or indirect gains or losses. Furthermore, the company's board of directors must ensure the company's compliance with laws on assets and stock exchanges, regulations, announcements, orders, or specifications of the Capital Market Supervisory Board and the Stock Exchange of Thailand, including compliance with specifications regarding the disclosure of information on related transactions and acquisitions or sales of significant assets belonging to the company or its subsidiaries, accounting standards set forth by the Federation of Accounting Professions and the Accountants and Licensed Auditors Association of Thailand. The company's board of directors must disclose related transactions in remarks accompanying budgets which have been audited or reviewed by the company's auditors.

Future Trends for Related Transactions

The company may have continual related transactions in the future, which will be according to characteristics of normal business transactions with clear designation of policies for entering into related transactions at normal prices and under trade conditions of businesses similarly set forth for persons and/or unrelated companies, e.g. sales of products, provision or receipt of services, etc. The related transactions that will occur will be concurrent with the company's business needs and in the company's interests. The Audit Committee will consider auditing practices according to set criteria and provide opinions regarding the validity of transactions occurring every quarter.

Transactions for products sold to QTC Service Chiangmai Co., Ltd. and QTC PANCO Co., Ltd. (Laos), which is a person with potential conflict of interest, will continue in the future. The company has set policies for setting prices and discounts for the sale of transformers and raw materials or equipment which are components of transformers provided for each type of customer, including sales representatives effective as of 15 May 2011 and with the objective of increasing clarity and enabling comparisons of prices and discounts in the sale of products to QTC Service Chiangmai Co., Ltd., which must be concurrent with prices and discounts provided for other sales representatives, in order to aid the Audit Committee in its consideration of opinions regarding the justice and validity of the sales of products to both companies. Hence the Audit Committee will be able to proceed systematically, especially during periods when the company has no sales of products to other sales representatives.

For potential related transactions not concurring with the company's normal business operations in the future, the company will arrange for the Audit Committee to check whether or not practice is compliant with criteria and assure that the reasons for the aforementioned transactions are disclosed before the company proceeds with the transactions by acting in compliance with the measures and procedures for approval as set forth above. Nevertheless, with regard to related transactions with potential conflicts of interest regarding potential future benefits, the Audit Committee will have to practice according to the laws governing securities and securities exchange, as well as the rule, announcements, orders or specifications of the Capital Market Supervisory Board and the Stock Exchange of Thailand, and further including practice according to specifications regarding disclosure of related transactions and the acquirement or sales of assets belonging to the company or its subsidiaries as well as practice in compliance with the accounting principles set forth by the Federation of Accounting Professions and the Accountants and Licensed Auditors Association of Thailand.

Board of Audit Report

QTC Energy PCL's Board of Audit is composed of Mr. Padetpai Meekun-iam as the Chairman of the Board with Mr. Nattapol Lilawattananan and Mr. Polrachot Piyathanom as directors. The board of audit's scope, duties and responsibilities are specified in the Board of Audit Charter. Key duties within that scope are to ensure that the company's financial reports are compliant with standards and generally accepted accounting principles, to audit the company's business operations in line with good corporate governance principles and to ensure that the company has efficient internal control systems compliant with related regulations and legal stipulations in addition to reviewing cases with potential conflicts of interest between the company and related parties. In 2013, the board of audit held a total of five meetings covering the following relevant agendas:

1. The Board of Audit has reviewed the quarterly financial statements and annual financial statements for 2013 in conjunction with the administration and the auditors to ensure that the company's financial reports have been properly prepared in line with standard and generally accepted accounting principles with sufficient, accurate and credible disclosure in the remarks accompanying the financial statements. The Board of Audit also points out issues of interest and acknowledges problem-solving guidelines in the interests of the company.
2. The Board of Audit has considered the company's disclosure of information on related party transactions and connected transactions. The Board of Audit deems the company's disclosure of information on related party transactions and connected transactions to have been carried out accurately, completely and sufficiently and in line with the business requirements and criteria set by the Stock Exchange of Thailand.
3. The Board of Audit supports and gives importance to corporate good governance in line with the principles set by the Stock Exchange of Thailand to ensure transparency and moral ethics resulting in assurance to the shareholders, investors, customers, trade partners and all related parties.
4. The Board of Audit has reviewed the internal audit work to ensure it has been conducted independently. An out-sourced company, IVL Audit Co., Ltd., was hired as the auditor. The Board of Audit will be the party considering annual internal audit plans, internal audit reports and consistent follow-up on internal audit results with the administration in addition to offering advice to the internal auditor in order to ensure that the annual internal audit operation is carried out efficiently and effectively. For the 2013 internal audit results, no significant internal control flaws were discovered.
5. The Board of Audit evaluated the internal control system in line with the guidelines set by the OSEC, which cover the control of operations, finance and legal compliance. The Board of Audit has deemed the company's internal control to be adequate and effective.
6. The Board of Audit considered the nomination and remuneration plans for 2014 made by the auditor and proposed that the board of directors appoint Mr. Somkid Tiatrakul, Auditor License No. 2785, or Mrs. Sumalee Chokdeeanan, Auditor License 3322, or Mr. Theerasak Chuasisakul, Auditor License No. 6624 or Miss Sansanee Poonsawat, Auditor License No. 6977, from Grant Thornton Co., Ltd as the company's auditor with remuneration set at 860,000 baht for subsequent proposal to the stockholder's general meeting.

The Board of Audit performed its duty with prudence and independence, rendering opinions candidly without limitations on the data received. The Board of Audit has had the company's cooperation and submitted minutes to meetings to the board of directors on every occasion.

On behalf of the Board of Audit,



(Mr. Padetpai Meekun-iam)

Chairman, Board of Audit

18 February 2014

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 2013 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 2013.



(Prof. Dr. Somchob Chaiyavej)
Chairman of the Board

Report of Independent Auditor

To the Shareholders of QTC Energy Public Company Limited

I have audited the accompanying financial statements of QTC Energy Public Company Limited which comprise the statement of financial position as at 31 December 2013, and the related statements of comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes disclosure summarizing significant accounting policies and others.

Management's responsibility for the financial statements

The Company's management is responsible for the preparation and the fair presentation of these financial statements in accordance with Thai Financial Reporting Standards. This responsibility includes the establishment of necessary internal controls relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Thai Standards on Auditing. Those standards require that I comply with ethical requirements, including planning and performing the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Samet

An audit involves performing procedures to obtain audit evidences about the amounts and disclosures in the financial statements. The selected audit procedures depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and presentation of the financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of financial statements.

I believe that the audit evidences I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position as at 31 December 2013 and the results of operations and cash flows for the year then ended of QTC Energy Public Company Limited in accordance with Thai Financial Reporting Standards.



Mr. Somkid Tiatragul

Certified Public Accountant

Registration No. 2785

Bangkok, Thailand

20 February 2014

Performance and Financial Status

1 Financial Statement

1.1 Summary of Auditing Reports

- (a) Financial Statement 2011 was audited by Mr. Somkit Tiatrakul, Auditor's License No. 2785, of Grant Thornton Co., Ltd.

The auditor audited the company's financial statements and rendered the opinion that the financial statement displayed the company's financial status as of 31 December 2011 and the company's performance for the year ending on the same date to be accurate in terms of relevant contents in compliance with generally accepted accounting principles.

- (b) Financial Statement 2012 was audited by Mr. Somkit Tiatrakul, Auditor's License No. 2785, of Grant Thornton Co., Ltd.

The auditor examined the company's financial statement and rendered the opinion that the financial statement displayed financial status as of 31 December 2012 and the company's performance for the year ending on the same date to be accurate in terms of significant contents in compliance with Thai standards for financial reports.

- (c) Financial Statement 2013 was audited by Mr. Somkit Tiatrakul, Auditor's License No. 2785, of Grant Thornton Co., Ltd.

The auditor audited the company's financial statement and rendered the opinion that the financial statement accurately displayed financial status on 31 December 2013 and the company's performance for the year ending on the same day in terms of significant contents in compliance with Thai standards for financial reports.

1.2 Table Summarizing Financial Status and Performance

Balance Sheet

	2011		2012		2013	
	THB Million	%	THB Million	%	THB Million	%
Assets						
<i>Current Assets</i>						
Cash and Cash Equivalent Transactions	46.89	8.22	43.54	5.52	117.36	15.95
Temporary Investments	52.10	9.13	35.29	4.47	10.84	1.47
Trade Debtors						
- Ordinary Debtors - Net	115.27	20.21	258.01	32.70	126.07	17.13
- Related Companies	1.90	0.33	0.25	0.03	3.09	0.42
Inventory – Net	147.82	25.91	176.24	22.34	151.35	20.57
Value Added Tax Pending Refund	-	-	3.42	0.43	0.38	0.05
Other Current Assets	3.46	0.61	7.94	1.01	7.77	1.06
<i>Total Current Assets</i>	367.44	64.41	524.69	66.50	416.86	56.65

	2011		2012		2013	
	THB Million	%	THB Million	%	THB Million	%
<i>Non-Current Assets</i>						
Limited Bank Deposits	0.54	0.09	-	-	0.58	0.08
Other Investments	0.05	0.01	0.05	0.01	0.05	0.01
Land, Buildings & Equipment - Net	197.51	34.62	259.37	32.88	314.17	42.70
Computer Programs	4.73	0.83	2.86	0.36	1.64	0.22
Deposits	0.17	0.05	-	-	1-	-
Deferred Assets Tax	-	-	1.99	0.25	2.55	0.34
<i>Total Non-Current Assets</i>	203.00	35.59	262.28	33.50	318.99	43.35
<i>Total Assets</i>	570.44	100.00	786.97	100.00	735.85	100.00
Liabilities & Shareholder Equity						
<i>Current Liabilities</i>						
Overdraft Withdrawals & Short-Term Loans from Financial Institutions.	64.46	11.30	137.24	17.44	74.05	10.06
Trade Creditors	60.96	10.69	77.44	9.84	75.99	10.33
Long-Term Loans with Payment Due within 1 Year.	9.90	1.74	14.07	1.79	22.93	3.12
Rent-to-Buy Contracts Creditors Due within 1 Year.	1.74	0.31	3.08	0.39	3.08	0.42
Outstanding Income Tax	19.53	3.42	30.56	3.88	11.10	1.51
Outstanding Expenses	18.13	3.18	16.43	2.09	16.84	2.29
Product Deposit Receivables	5.64	0.99	3.42	0.43	7.65	1.04
Other Current Liabilities	6.50	1.14	8.87	1.13	10.11	1.37
<i>Total Current Liabilities</i>	186.86	32.76	291.11	36.99	221.75	30.14
<i>Non-Current Liabilities</i>						
Long-Term Loans - Net	0.26	0.05	26.70	3.39	31.08	4.22
Rent-to-Buy Contract Creditors	1.34	0.24	6.11	0.78	5.16	0.70
Liabilities for Employee Benefit Obligations	1.95	0.34	2.13	0.27	2.43	0.34
<i>Total Non-Current Liabilities</i>	3.55	0.62	34.94	4.44	38.67	5.26
<i>Total Liabilities</i>	190.41	33.38	326.05	41.43	260.42	35.40

	2011		2012		2013	
	THB Million	%	THB Million	%	THB Million	%
<i>Shareholder Equity</i>						
<i>Capital Stock</i>						
Authorized Share Capital	200.00	35.06	200.00	25.41	200.00	27.18
Issued and Paid up Share Capital	200.00	35.06	200.00	25.41	200.00	27.18
Premium on Common Stocks	45.94	8.05	45.94	5.84	45.94	6.24
<i>Accumulated Profit</i>						
Allocated – Reserved in Compliance with the Law	20.00	3.51	20.00	2.54	20.00	2.71
Not Allocated	114.09	20.00	196.98	24.78	209.48	28.47
<i>Total Shareholder Equity</i>	380.03	66.62	462.92	58.57	475.42	64.60
<i>Total Liabilities and Shareholder Equity</i>	570.44	100.00	788.97	100.00	735.84	100.00

Profit-Loss Statement

	2011		2012		2013	
	THB Million	%	THB Million	%	THB Million	%
Revenue						
Revenue from Sales	700.86	97.64	940.35	96.97	783.88	96.57
Revenue from Services	13.60	1.90	19.15	1.98	20.07	2.47
Other Revenue	3.33	0.46	10.20	1.05	7.73	0.96
<i>Total Revenue</i>	<i>717.79</i>	<i>100.00</i>	<i>969.70</i>	<i>100.00</i>	<i>811.69</i>	<i>100.00</i>
Capital & Expenses						
Sales Capital	500.17	69.68	687.40	70.89	582.69	71.79
Service Capital	6.00	0.84	7.86	0.81	9.73	1.20
Sales & Service Expenses	87.06	12.13	111.28	11.48	118.79	14.63
<i>Total Expenses</i>	<i>593.23</i>	<i>82.65</i>	<i>806.54</i>	<i>83.17</i>	<i>711.21</i>	<i>87.62</i>
Profit (Loss) before Deduction of Interest and Income Tax	124.56	17.35	163.16	16.83	100.48	12.38
Interest Payable	7.21	1.00	7.73	0.80	6.94	0.86
Juristic Person Income Tax	33.29	4.64	37.04	3.77	19.03	2.34
<i>Profit (Loss) - Net</i>	<i>84.06</i>	<i>11.71</i>	<i>118.40</i>	<i>12.26</i>	<i>74.51</i>	<i>15.58</i>
<i>Net Profit (Loss) Per Share (Fully Diluted) (THB)</i>	<i>0.41</i>		<i>0.59</i>		<i>0.37</i>	
Net Profit (Loss) Per Share (Weighted Average) (THB)	0.49		0.59		0.37	
<i>Par Value (THB)</i>	<i>1.00</i>		<i>1.00</i>		<i>1.00</i>	<i>1.00</i>

Cash Flow Statement

(Unit: THB Million)	2011	2012	2013
Cash Flow from Operational Activities			
Net Profit before Income Taxes	117.36	155.44	93.53
Adjustment to Reconcile Net Profit to Cash Flow from Operating Activities			
Price Depreciation and Amortization Costs	24.28	27.43	35.95
Allowance for Doubtful Debts	2.21	2.65	1.35
Allowance (Reverse Allowance Entry) Out-Dated Products	1.53	0.51	0.40
Losses from Asset Sales	(0.60)	(2.33)	(1.00)
Unrealized Loss (Profit) from Exchange Rates	0.34	(1.59)	(1.75)
Allowance for Employee Benefit Obligations	0.20	0.06	0.21
Interest Payable	7.21	7.73	6.94
Profit from Operations before Changes in Assets and Operating Liabilities	152.53	189.90	135.62
Operating Asset Turnover Decrease (Increase)			
Trade Partners	(63.58)	(143.74)	128.11
Inventory	(63.47)	(28.94)	24.50
Pending Value Added Tax Refund	-	(3.42)	3.04
Other Current Assets	2.08	(4.31)	0.17
Operating Liabilities Increase (Decrease)	-		-
Trade Creditors	33.70	16.48	(1.47)
Product Deposits Receivable	3.68	(2.22)	4.23
Other Current Liabilities	(3.31)	0.68	1.61
Cash from Operating Activities	61.63	24.43	295.81
Taxes Payable	(24.14)	(25.52)	(39.03)
Interest Payable	(7.12)	(7.64)	(6.85)
Net Cash (Spent) from Operating Activities	30.37	(8.73)	249.93
Cash Flow from Investment Activities			
Bank Deposits with Limitations – Decrease (Increase)	(0.54)	0.54	(0.58)
Temporary Investment Increase	(52.10)	16.84	24.45
Cash from Equipment Sales	0.66	2.34	1.19
Funds Paid to Purchase Other Fixed Assets	(61.42)	(78.39)	(82.30)
Net Cash Flow (Spent) from Investment Activities	(113.40)	(58.67)	(57.24)
Cash Flow from Financing Activities			
Bank overdrafts and Short-Term Loans from Financial Institutions – Increase (Decrease)	5.66	74.37	(66.72)
Long-Term Bank Loan Payments	4.30	30.61	13.25
Debt Payments under Rent-to-Buy Contracts	(2.22)	(2.94)	(3.45)
Cash Received from Capital Increase	95.94	-	-
Cash Dividend Payments	(21.00)	(37.99)	(61.95)
Net Cash (Spent) from Financing Activities	82.68	64.05	(118.87)
Cash & Cash Equivalent Transactions – Increase (Decrease) - Net	(0.35)	(3.35)	73.82
Cash & Cash Equivalent Transactions as of 1 January	47.23	46.89	43.54
Cash & Cash Equivalent Transactions as of 31 December	46.89	43.54	117.36

1.3 Table Summarizing Relevant Financial Ratios

Description	2011	2012	2013
Liquidity Ratio			
Liquidity Ratio (times)	1.97	1.80	1.88
Quick Liquidity Ratio (times)	1.16	1.19	1.18
Cash Flow Liquidity Ratio (times)	0.19	(0.04)	0.97
Trade Debtor Current Ratio (times)	7.56	4.99	4.05
Average Collection Period (days)	48.26	73.09	90.12
Inventory Turnover Ratio (times)	12.11	12.57	9.64
Average Sale Period (days)	30.13	29.04	37.88
Current Creditor Ratio (times)	11.49	9.50	7.35
Debt Payment Period (days)	31.34	38.43	49.68
Cash Cycle (days)	47.05	63.70	78.32
Profitability Ratios			
Gross Profit Margin (%)	29.15	27.54	26.31
Operating Profit Margin (%)	16.97	15.94	11.54
Other Profit Margins (%)	0.46	1.06	2.37
Cash-Profit Ratio (%)	25.05	(5.69)	269.48
Net Profit Margin (%)	11.71	12.34	9.27
Return on Equity Ratio (%)	27.89	28.01	15.88
Efficiency Ratios			
Return on Asset Ratio (%)	18.12	17.39	9.77
Return or Fixed Asset Ratio (%)	59.17	62.79	38.22
Asset Turnover Ratio (times)	1.55	1.41	1.05
Financial Policy Ratios (Leverage Ratios)			
Debt to Shareholder Equity Ratio (times)	0.50	0.71	0.55
Interest Coverage Ratio (times)	8.66	2.71	38.29
Debt Service Coverage (times)	0.34	(0.06)	1.46
Dividend Payout Ratio (%)	45.20	52.37	56.37

2. Explanation and Analysis of Financial Status and Performance

Overall Past Performance

The company operates in the business of manufacturing and distributing transformers, which is involved with and related to electricity generation and requirements, because transformers are devices used to adjust electricity voltage from the source to levels meeting the needs of users, such as industrial factories, residential homes and tall buildings, etc. Therefore, the company's growth trends are moving in the same direction as electricity demand. Furthermore, according to projections for electricity demand by the Electricity Generating Authority of Thailand (EGAT), the nation's maximum requirement for electricity in the next twenty years during 2010-2030 is expected to increase at an average rate of 3.91% per year. This increase in the demand for electricity has resulted in EGAT, which has duties and responsibilities involving electricity generation and transmission systems of Thailand, including the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA) which are responsible for distributing electricity to users, has had to make modifications and expand electricity distribution systems in line with Thailand's plans for developing electricity production capacity, thereby resulting in an increased demand for transformers.

Following the economic crisis of 1997, the domestic economy has gradually expanded. The industrial sectors have expanded production capacity to support increasing domestic and international customer demands, which has caused the domestic demand for electricity to gradually escalate. For this reason, revenue from the company's sales and services have grown continually from 512.20 million baht in 2010 to 700.86 million baht in 2011 and 940.35 million

baht in 2012 in line with the expansion of the economy and manufacturing industrial sectors. In the past, the prices of key raw materials whether in the form of silicon wire and copper foils used to insulate low voltage wires have had high degrees of fluctuation. However, the experience of the management team members who have been in the transformer industry for more than thirty-five years and the use of modern and efficient machinery and production technologies have enabled the company to profit throughout this period of time. Furthermore, the company has realized the importance of implementing the Enterprise Resources Planning or ERP system in managing all of the company's sections, whether in production, procurement, sales, accounting or finance and including warehouse management in a coordinated system capable of linking data quickly with real-time systems to enhance the company's overall performance with greater efficiency.

The fact that the company places importance on the quality of transformers produced by the company is evident in the fact that the company's transformer products have been certified for meeting the standards of various accreditation institutes, such as TISI 384-2543 from the Thai Industrial Standards Institute, Ministry of Industry, ISO 9001:2000 for designs, production and maintenance of distribution transformers, including the fact that the company has been certified for testing laboratory capacity in compliance with TISI 17025-2548 (ISO/IEC 17025:2005) standards. Moreover, the company is able to manufacture transformers with quality meeting international standards, which is proof of international quality and customer acceptance.

(1) Revenue

The company had the total revenue of 717.79 million baht in 2011, 969.70 million baht in 2012 and 811.69 million baht in 2012. The details on revenue from sales and services, including other revenue can be summarized as follows:

Revenue from Sales

Customer Type	2011			2012			2013		
	THB Million	Ratio (%)	Growth Rate (%)	THB Million	Ratio (%)	Growth Rate (%)	THB Million	Ratio (%)	Growth Rate (%)
Government Agencies and Enterprises	327.48	46.73	41.42	330.59	35.16	0.95	270.46	34.50	(18.19)
Sales Representatives	118.00	16.84	20.08	207.94	22.11	75.07	169.38	21.61	(19.63)
Private Sector	255.38	36.44	40.03	401.82	42.73	57.82	344.04	43.89	(13.78)
Total Revenue from Sales	700.86	100.00	36.83	940.35	100.00	34.17	783.88	100.00	(16.64)

In 2011, the company earned revenue from sales at 700.86 million baht, which was an increase of 36.83% from 2010. Revenue from the sale of transformers to government agency and government enterprise customers increased from 231.56 million baht and 182.37 million baht, respectively, in 2010 to 327.48 million baht and 255.38 million baht, respectively, in 2011 for growth ratios of 41.42% and 40.03, respectively, as a result of investments to expand the electricity distribution systems of the electricity authorities in line with domestic economic recovery. Revenue from the sale of transformers to sales representative customers was 18.01 million baht, an increase of 20.08% from 2010.

In 2012, the company earned revenue from sales at 940.35 million baht, an increase of 34.17% from 2011. Revenue from the sale of transformers to domestic private sector customers and sales representatives increased from 255.38 million baht and 118.00 million baht, respectively, in 2011 to 401.82 million baht and 207.94 million baht, respectively, in 2012, for growth ratios of 57.35% and 76.22 due to domestic economic expansion and economic expansion in the Asian region with investments and expansions in the energy business group. Revenue from the sales of transformers to government agency and government enterprise customers was at 330.59 million baht, which was close to 2011.

In 2013, the company earned revenue from sale at 738.88 million baht, a decrease of 16.64% from 2012. Revenue from sale of transformers to domestic private sector customers and customers abroad decreased from 356.06 and 225.24 million baht in 2012 to 319.77 and 159.96 million baht respectively in 2013, for dip ratios of 10.19 and 28.98% respectively due to domestic political instability during the year and fiercer competition.

Revenue from Services

Revenue from the company's services during 2011-2013 amounted to 13.60, 19.16, and 20.07 million baht, respectively. Revenue from services can be divided into (1) revenue from transformer repairs, (2) revenue from providing transformer inspection and maintenance services and (3) revenue from transformer rentals. When revenue from services in 2013 was considered, the revenue was found to comprise revenue from transformer repairs at 15.21 million baht, which was a ratio of 75.78% of revenue from services, revenue from providing transformer inspections and maintenance services at 3.15 million baht for a ratio of 15.71% of revenue from services and revenue from transformer rentals at 0.81 million baht for a ratio of 4.08% of revenue from services.

Other Revenue

Other revenue of the company comprised revenue from selling scraps, profits from exchange rates and interest receivables, etc. In 2011-2013, the company earned other revenue at 3.33, 10.20 and 7.73 million baht, respectively. In 2011, the company earned other revenue amounting to 3.33 million baht. Other revenue in the form of main transactions comprised revenue from selling scrap materials at 1.35 million baht, revenue from the sales of fixed assets amounting to 0.60 million baht and doubtful debt returns amounting to 0.73 million baht. In 2012, the company earned other revenue amounting to 10.20 million baht. Other revenue in the form of main transactions comprised revenue from selling scrap materials amounting to 2.95 million baht, revenue from sales of fixed assets at 2.33 million baht, profits from exchange rates at 2.36 million baht and doubtful debt returns amounting to 1.11 million baht. In 2013, the company earned other revenue amounting to 7.73 million baht. Other revenue in the form of main transactions comprised revenue from selling scrap materials amounting to 2.45 million baht, doubtful debt returns amounting to 1.00 million baht, and other revenue amounting to 2.92 million baht.

(2) Costs and Expenses

The company's relevant expenses consisted of the costs of sales and services, sales expenses, administrative expenses and interest payables. In 2011-2013, the company incurred total expenses amounting to 600.43, 814.26 and 718.15 million baht, respectively, as shown in the following details:

Sales and Services Costs and Gross Profit

Sales and service costs are considered as a key company expense. The company incurred sales and service costs amounting to 506.17 million baht in 2011, 695.26 million baht in 2012 and 814.26 million baht in 2013, for ratios of 84.30%, 85.39% and 82.49%, of total expenses, respectively.

When costs of sales and services were compared to revenue from sales and services, the company earned the aforementioned ratios at 70.85%, 72.46% and 73.69% of revenue from sales and services, respectively, or at gross profit margins of 29.15%, 27.54% and 26.31% respectively. The factors with impact on the company's gross profit margins are as follows:

1. The product sales ratio goes to a customer mix each year from the Company's previous customer mix which could be divided into the following three main types: (1) Government and Government Enterprise Customers; (2) Sales Representative Customers and (3) Private Sector Customers. Transformers are sold to all three types of customers at different gross profit rates whereby government and government enterprise customers had the highest gross profit rate because the sales involve large purchase orders each time which makes the cost per unit lower than manufacturing transformers for other types of customers. These are followed by international sales representatives. In 2011, which was a year when the company had a high gross profit as evident in the transformer

sales rate to government and government enterprise customers that amounted to 46.73 percent of the revenue from total sales. In 2012 and 2013, the company earned revenue from transformer sales to this customer group at only 35.16 and 34.50% respectively. Furthermore, if considered in terms of revenue from transformer sales to sales representative customers, the ratio was 16.84 percent in 2011, 22.12 percent in 2012 and 21.61 percent in 2013.

2. Raw materials costs, particularly main raw materials comprising silicon steel (electrical steel), round enameled wire and copper foil which are raw materials with few manufacturers and where prices are adjusted by supply and demand in the global market, so there is a high degree of fluctuation. After the global economic crisis, the price of silicon steel has continually declined from 2010 to 2012 by approximately 43% while the prices of round enameled wire and copper foil have continually escalated until 2012 when the price of both of these raw materials escalate higher than prices in 2011 by approximately 10-13%, and decreased in 2013 by 7-9%.

Sales and Management Expenses

The company's sales and management expenses amount to 87.06 million baht in 2011, 111.28 million baht in 2012 and 118.79 million baht in 2013, for ratios of 12.13 percent, 11.48 percent and 14.78 percent of the total profit, respectively.

In 2011, the company incurred expenses in sales and services amounting to 87.06 million baht, an increase of 13.50 percent from 2010. The main expenses incurred in sales and services comprise expenses associated with executives and employees at a ratio of 29.65 percent; depreciation at a ratio of 10.35 percent and traveling expenses at a rate of 7.09 percent of the expenses incurred in sales and services. If the sales and services expense ratio is considered per total revenue, the ratio amounts to 12.13 percent, which is down from 14.64 percent in 2010. The reason stemmed from the increased total revenue which was higher than the increase ratio for expenses incurred in sales and services.

In 2012, the company incurred expenses in sales and management amounting to 111.28 million baht, which was an increase of 27.81 percent from 2011 because the company incurred increased expenses associated with executives and employees from 25.81 million baht in 2011 to 29.39 million baht due to the company's revenue restructuring, which increased the number of executives, and raises in monthly salaries. In addition, the company has continually invested in fixed assets, whether in terms of a new office building or investments in factory machinery and equipment to improve production efficiency. The result has been increased devaluation from 9.01 million baht in 2011 to 12.38 million baht in 2012. Consequently, relevant expenses incurred in sales and administration in 2012 comprise expenses associated with executives and employees amounting to 26.41 percent with devaluation amounting to a rate of 11.13 percent and traveling expenses amounting to 6.81 percent of the expenses incurred in sales and management.

In 2013, the company incurred expenses in sales and management amounting to 118.79 million baht, which was an increase of 6.75 percent from 2012 because the company incurred increased expenses associated with executives and employees and raises in monthly salaries. In addition, the company has continually invested in fixed assets, whether in terms of a new office building or investments in factory machinery and equipment to improve production efficiency. The result has been increased devaluation from 12.38 million baht in 2012 to 15.84 million baht in 2013. Relevant expenses incurred in sales and administration in 2013 comprise expenses associated with executives and employees amounting to 25.32 percent with devaluation amounting to a rate of 13.33 percent and traveling expenses amounting to 6.74 percent of the expenses incurred in sales and management.

Interest Payable Obligations

During 2011-2013, the company had interest payable obligations of 7.20, 7.72 and 6.94 million baht, respectively. Most of the company's interest payable obligations occurred as a result of using P/N and LC/TR funds, which were current loan limits involving both domestic and international purchases of raw materials. Moreover, the company had long-term loans with a commercial bank to be used for investment in the construction of a new office building and investments in additional machinery to increase production efficiency, thereby resulting in the company's interest payables from the aforementioned long-term loans.

(3) Net Profit

According to the abovementioned performance during 2011-2013, the company earned net profits of 84.06, 118.88 and 74.51 million baht, respectively, for net profit ratios of 11.71, 12.26 and 9.27 percent, respectively.

If the net profit ratio is considered for the past year, it is evident that the company's net profit ratio has increased. If the company's revenue has increased, including the income ratio from product sales, namely, the group of customers with high gross profit margins at increasing ratios because the company's expenses incurred in sales and services amount to approximately 37-40 percent, which are expenses that do not fluctuate with income, such as expenses associated with executives and employees, devaluation, etc. In 2012, the company's revenue from sales increased at a rate of 34.17 percent from 2011, but the net profit ratio increased only slightly as a result of the higher ratios in sales to customers in the private sector group and the sales representative group. In 2013, the company's net profit decreased due to revenue from sales which decreased at a rate of 16.64% from 2012, and the company also incurred the afore-mentioned expenses that do not fluctuate with income.

Return on Equity

When the return on equity is considered, it becomes evident that the return on equity adjusted in the same direction as the increased net profit ratio whereby the company had a return on equity equal to 27.89 percent in 2011, 25.79 percent in 2012 and 15.88 percent in 2013. For 2013, the return on equity ratio reduced in comparison with 2012 because the company had lower net profit in 2013 compared to 2012, and higher shareholder equity according to the company's performance at 15.88 percent. Furthermore, in 2011-2013, the company had continual dividend payments to shareholders at dividend payout ratios of 45.20, 52.15 and 56.37 percent, respectively.

Financial Status

(a) Assets

In the years ending 2011-2013, the company had total assets amounting to 570.44, 786.97 and 735.84 million baht, respectively. The company's main assets comprise land, buildings and equipment, trade debtors and inventory. In 2013, the aforementioned relevant asset ratios amounted to 44.60, 17.51 and 20.52 percent, respectively. The descriptions of the company's relevant assets are summarized as follows:

Trade Debtors

The company had trade debtors before deducting allowances for doubtful debts amounting to 120.00 million baht at the end of 2011, 262.11 million baht at the end of 2012, and 134.61 million baht at the end of 2013, for ratios of 21.04, 33.31 and 18.25 percent of total assets, respectively. At the end of 2013, trade debtor total before deduction of allowances for doubtful debts decreased by 48.64 percent compared to 2012 because in 2012 there was a large number sale at the end of the year and consequently there were many debtors who had not reached the collection period.

The company has policy to grant customers a credit term of approximately 30-60 days. For new customers, however, the company may stipulate that customers pay in cash before product deliveries or products. Or in the case of international customers, the company may stipulated that customers transfer

money into accounts or pay as L/C at Sight, depending upon the customer analysis by the Sales Department which gives primary consideration to customer repayment capacity. In the past, the company had a mean debt collection period of 48.26 days in 2011, 73.09 days for 2012, and 90.12 days in 2013.

Days Payable Outstanding	31 December 2011		31 December 2012		31 December 2013	
	THB Million	%	THB Million	%	THB Million	%
Not Due	91.48	76.24	160.73	61.33	67.56	51.37
Overdue						
No More than 3 Months	14.30	11.91	92.25	35.20	53.46	40.64
3-6 Months	4.11	3.43	1.80	0.69	4.60	3.49
6-12 Months	4.60	3.83	0.69	0.27	0.46	0.35
Over 12 Months	5.50	4.58	6.64	2.54	5.46	4.15
Trade Debtors before Debit Allowance for Doubtful Debts	119.99	100.00	262.11	100	131.53	100
Debit – Allowance for Doubtful Debts	(4.72)		(4.11)		(5.46)	
Trade Debtors - Net	115.27		258.00		126.07	

According to the aforementioned table, it is evident that debtors not due for payment to the company at the end of 2011-2013 had ratios of 76.24%, 61.33% and 51.37% of trade partners before deduction of allowance for doubtful debts, respectively, while the company's outstanding debtors had ratios of 23.76%, 38.67% and 48.63% of trade partners before deduction of allowance for doubtful debts, respectively. Most of the debtors were debtors with outstanding payments for no more than three months because the company was unable to collect pending bill placement and customer payments because most of the company's private customers comprise electrical systems contractors purchasing the company's transformers for installation at various projects. Therefore, the payment of product prices to the company was dependent on whether or not customers were able to collect from project owners, which may take a long time. Nevertheless, the company was able to collect all debts from the aforementioned debtors.

At the end of 2011-2013, the company had ratios for debtors who had not paid for over a year amounting to 4.58%, 2.53% and 4.15% of the figure for trade partners before deduction of allowance for doubtful debts, respectively. In 2013, the total for debtors who had not paid for more than one year decreased from 2012 by 17.77%. Nevertheless, the company considered taking action toward follow-up on the aforementioned debts, including legal actions or negotiations for debtors who could still be contacted to gradually repay the company by considering in terms of the suitability and necessity of each debtor. The management gives importance and closely monitors the progress and operations of related departments in monthly meetings, thereby resulting in the company receiving repayment from debtors for whom allowance for doubtful debts had been set at 0.20 million baht in 2011, 1.18 million baht in 2012 and 1.36 million baht in 2013.

Concerning policies for setting allowances for doubtful debts for 2011 and 2012, the company has considered setting allowances for doubtful debts from the amounts anticipated to be uncollectible from debt collection experience and the current status of each debtor. In 2013, the company considered setting allowances for doubtful debts from debtors who had not paid for more than 1 year, and at the end of 2013, the company set allowances for doubtful debts amounting to 5.46 million baht.

Inventory

At the end of 2011-2013, the company had inventory before deducting product quality depreciation and allowances for product value amounting to 150.44, 179.37 and 154.87 million baht, respectively. The largest component for inventory was raw materials at the ratios to total inventory of 48.03%, 55.86% and 40.49% respectively, due to the following:

- Raw materials used in the production of transformers, such as silicon wire and cooper foil are products with few manufacturers, and the company had to reserve products from producers or suppliers in advance in order to have sufficient amounts of raw materials needed for production and minimize risks due to raw material price fluctuations.
- In general, multiple sizes of raw materials are required for the production of a set of transformers. The use of different amounts of each raw material size with raw material purchase orders have minimum orders resulting in a raw materials inventory.
- Because certain types of raw materials, such as copper foil and round enameled wire, etc., have characteristics of being rolls, there will be scraps of copper or wire leftover from the requisition of raw materials. The company has considered sales of the aforementioned scraps of raw materials as fitting and recorded the aforementioned scraps of copper or wire as remaining raw materials when the scraps have not been sold.

	31 December 2011		31 December 2012		31 December 2013	
	THB Million	%	THB Million	%	THB Million	%
Raw Materials	72.26	48.03	100.19	55.86	62.72	40.49
Ongoing Work	13.99	9.30	11.45	6.39	21.17	13.67
Finished Products	53.40	35.50	57.22	31.90	65.75	42.46
Products En-Route	10.79	7.17	10.51	5.86	5.23	3.38
Total Inventory	150.44	100.00	179.37	100.00	154.87	100
Debit – Reserve for Depreciation & Devaluation	(2.62)		(3.13)		(3.52)	
Inventory -Net	147.82		176.24		151.35	

When the ratios of finished product to inventory are considered at 35.50% at the end of 2011, 31.90% at the end of 2012, and 42.46% at the end of 2013, changes have clearly moved in the same direction as product sale periods equal to 30.13 days, 29.04 days and 37.88 days, respectively. Finished products comprise (1) finished transformers pending delivery to customers because the company will deliver products to customers in most transformer sales at the places specified by the customers, so customers have to prepare facilities to accept transformer deliveries from the company which are sometimes rescheduled. Hence, the company needs to record the aforementioned transformers as finished products because the company may record as revenue in compliance with the company's accounting policies only when transformers have been delivered to customers and (2) transformers have been manufactured as reserves for sale. The fact that the company's total sales rose sharply in 2011 and 2012 caused the company to give greater importance to the production of finished transformers as reserves for sale in 2013, which were standard transformers with regular purchase orders that helped the company plan production more efficiently and have more finished transformers in inventory.

In 2013, the company had inventory before debiting allowances for depreciation and allowances for product value at 154.87 million baht which was a decrease from the end of 2012 by 13.66%. Total inventory before the aforementioned reserve debit comprised raw materials at 62.72 million baht, ongoing work at 21.17 million baht and finished products at 65.75 million baht, which were decrease of 37.40%, an increase of 84.89% and an increase of 14.91% from the total at the end of 2012 respectively. Consequently, the company had to order the purchase of raw materials in advance and produce transformers for delivery to customers as scheduled in the beginning of 2014.

At the end of 2012 and 2013, the company set reserves for product devaluation at 2.31 million baht and 2.11 million baht, respectively, for all types of inventory. The Production Department considered in terms of the use of each inventory item. If any item was not usable, the company would consider selling the aforementioned inventory item as raw material scrap and reserves for product devaluation equal to the difference between costs and expected sales prices. Furthermore, the company reduced reserves for product devaluation by 0.82 at the end of 2012 and 1.41 million baht at the end of 2013 and for finished products by considering the difference between the costs of finished transformers and expected net value from sales.

Land, Buildings and Equipment

The company had net land, buildings and equipment amounting to 197.51 million baht at the end of 2011, 259.37 million baht at the end of 2012, and 314.17 million at the end of 2013, which were ratios to total assets of 34.62%, 32.96% and 42.60% respectively.

In 2011, the company constructed new office buildings at 28.98 million baht (under construction) and invested 25.10 million baht in the purchase of additional machinery and equipment such as coil winding machines, metal cutting machines and current transformers, etc.

In 2012, the company had net land, buildings and equipment which were increased from 2011 by 61.86 million baht because the company a new constructed office building (completed in 2012) and factory buildings amounting to 30.03 million baht with an investment of 22.10 million baht in the purchase of additional machinery and equipment, such as metal slitting machines, metal cutting machines and coil winding machines, etc.

In 2013, the company had net land, buildings and equipment which were increased from 2012 by 54.80 million baht because the company constructed additional factories amounting to 15.87 million baht and invested 74.00 million baht in the purchase of additional machinery and equipment, such as metal slitting machines, metal cutting machines and coil winding machines, etc.

(b) Liquidity

Cash Flow

In 2011, the company had net cash flow from operating activities amounting to 30.37 million baht because the company had profits before tax deductions amounting to 117.36 million baht and used the profits as current capital for increased inventory by 63.47 million baht and increased trade debtors by 63.58 million baht and the company had increased trade creditors at 33.70 million baht. The company invested net cash flow of 113.40 million baht in investment activities by temporarily investing 52.10 million baht in the Krung Thai Sa-Som-Sub Fund and invested 61.42 million baht in the purchase of purchase fixed assets. Significant assets in which the company invested comprised machinery and equipment amounting to 25.10 million baht and new office buildings amounting to 28.97 million baht. Furthermore, the company had net cash flow from procurement amounting to 82.68 million baht by receiving 95.94 million baht from the issuance of shares to increase capital while paying dividends to shareholders amounting to 21.00 million baht. For the aforementioned reasons, the company had a reduction of 0.35 million baht in cash and cash equivalent transactions in 2011.

In 2012, the company had net cash flow spent in operating activities amounting to 8.70 million baht. Although the company had profits before tax deductions amounting to 155.44 million baht, the company used the profits as current capital in increased trade debtors by 145.39 million baht, product increases by 28.94 million baht and the company's investment of 78.39 million baht in fixed assets. The main assets in which the company invested consisted of the new office building and factory buildings amounting to 30.03 million baht, machinery and equipment at 22.10 million baht and purchases of more utilities, office decorations and vehicles while the company had net cash flow from procurement amounting to 64.05 million baht. The company had more short term loans from financial institutions at 74.37 million baht, more long term loans at 46.27 million baht and paid dividends to shareholders at 37.99 million baht. For the aforementioned reasons, the company had a reduction of 3.35 million baht in cash and cash equivalent transactions in 2012.

In 2013, the company had net cash flow from operating activities amounting to 249.93 million baht because the company had profits before tax deductions amounting to 93.53 million baht and used the profits as current capital for increased inventory by 24.50 million baht and increased trade debtors by 130.92 million baht. The company invested net cash flow of 82.30 million baht. The main assets in which the company invested consisted of the new factory buildings amounting to 15.87 million baht, machinery and equipment at 74.00 million baht, while the company had net cash flow from procurement amounting to 118.87 million baht. The company had more short term loans from financial institutions at 66.72 million baht, more long term loans at 29.92 million baht and paid dividends to shareholders at 61.95 million baht. For the aforementioned reasons, the company had a reduction of 73.82 million baht in cash and cash equivalent transactions in 2013.

(Unit: THB Million)	2011	2012	2013
Cash (Spent) from Operating Activities	30.37	(8.70)	249.93
Net Cash (Spent) from Investment Activities	(113.40)	(58.70)	(57.23)
Net Cash (Spent) from Financing Activities	82.68	64.05	(118.87)
Cash & Cash Equivalent Transactions – Increase (Decrease)	(0.35)	(3.35)	73.82

Liquidity Ratios

At the end of 2011-2013, the company had liquidity ratios of 1.97, 1.80 and 1.88 times, respectively, with quick liquidity ratios of 1.16, 1.19 and 1.18 times, respectively. The reason quick liquidity ratios were vastly different from liquidity ratios was due to the company's ratios of inventory to current assets at high rates of 40.23%, 33.59% and 36.17% respectively.

When the company's cash cycle was considered, it becomes evident that the company's cash cycles were 47.05 days in 2011, 63.70 days in 2012 and 78.32 days in 2013. The company's mean debt collection periods during 2011-2013 were 48.26 days, 73.09 days and 90.12 days respectively. In 2012 and 2013, the company's debt collection period increased because the company sold large quantities of products to projects which were delivered at the end of the year, thereby increasing the number of outstanding debtors. Debt payment periods were 31.34 days, 38.43 days and 49.68 days respectively.

	2011	2012	2013
Liquidity Ratio	1.97	1.80	1.88
Quick Liquidity Ratio	1.16	1.19	1.18
Average Collection Period	48.26	73.09	90.12
Average Sale Period	30.13	29.04	37.88
Debt Payment Period	31.34	38.43	49.68
Cash Cycle	47.05	63.70	78.32

(c) Capital Sources

Liabilities

At the end of 2011-2013, the company had total liabilities amounting to 190.41, 326.06 and 260.42 million baht, respectively. It can be seen that total liabilities increase or decrease due to increase or decrease in sales as the company had to purchase enough raw materials for producing goods. However, when the company's liability structure was considered, most liabilities were found to be current liabilities in the company's routine operating activities for total liabilities ratios of 98.13% at the end of 2011, 89.28% at the end of 2012, and 85.15% at the end of 2013. Significant current liabilities comprised short-term loans from financial institutions at 28.43% of total liabilities at the end of 2013, most of which comprised promissory notes and LC/TR used to order purchases of raw materials domestically and abroad. Furthermore, current liabilities also include trade accounts payable with the ratio of 29.18% of total liabilities at the end of 2013.

Shareholders' Equity

At the end of 2011, the company had shareholders' equity of 382.51 million baht, an increase of 159.74 million baht from 2010 because the company increased capital with the resolution of the annual meeting of 2011 on 18 March 2011 which approved the company to increase registered capital by 50 million baht, thereby resulting in the company having registered capital of 200 million baht and a premium on shares of 45.94 million baht at the end of 2011. Furthermore, the company paid 21 million baht in dividends and recorded estimates of liabilities

for previous costs in line with obligations for employee benefits on 1 January 2011 at 1.74 million baht. The aforementioned recording was an impact from Thai Accounting Standards 19 on Employee Benefits enforced since 1 January 2011 while the company had increased accumulated profits by 84.06 million baht from performance in 2011. At the end of 2012, the company had shareholders' equity of 460.92 million baht, an increase from the end of 2011 by 80.89 million baht, which was an increase in profits from performance amounting to 118.88 million baht while the company paid dividends to shareholders at 37.99 million baht.

At the end of 2013, the company had shareholders' equity of 475.42 million baht, an increase from the end of 2012 by 12.51 million baht, which was an increase in profits from performance amounting to 74.51 million baht while the company paid dividends to shareholders at 62.00 million baht.

Suitability of Capital Structure

The company had a ratio of liability to shareholders' equity of 0.50 times at the end of 2011, 0.71 times at the end of 2012, and 0.55 times at the end of 2013. In 2012, the company had a higher liability to shareholders' equity ratio compared to other years due to the issuance of purchase orders for large quantities of raw materials by the company during the last quarter in amounts adequate for production during the fourth quarter of 2012 and the first quarter of 2013, thereby resulting in increased short-term loans used in operations to 214.68 million baht in 2012 from 125.42 million baht in 2011. In addition, the company had increased long term loans to 26.69 million baht in 2012 from 0.26 million baht in 2011 due to investments in the new office building, factory buildings and machinery to enhance production efficiency.

3. Main Factors and Influences with Potential Impacts on Future Performance and Financial Status

Impacts from uncertainty of bidding results because government and government enterprise customers generating and distributing electricity, such as the Metropolitan Electricity Authority and the Provincial Electricity Authority, use the process of purchasing transformers by bidding, thereby increasing uncertainty in terms of revenue from the company's sales because revenue from the company's sales is dependent on bidding capabilities. Furthermore, revenue from sales is also dependent on economic conditions and the budgets of each agency, which will have impacts on the period of time when the aforementioned agencies will open biddings. In the past, the company earned revenue from transformer sales to this group of customers at approximately 32-45% of total income from sales, which was a high ratio. Nevertheless, the company and the company's executives have been operating in the business for a long period of time, resulting in the company having good relationships with the MEA and the PEA over a long period of time with confidence in transformer quality. In addition, the company is one of the manufacturers capable of producing high quality transformers meeting the needs of both agencies. Hence, the executives believe the company has sufficient capacity to sell transformers to both the MEA and the PEA on a continue basis in the long run.

4. Auditor Remuneration

In the fiscal year ending 31 December 2013, the company paid audit fees to the company's auditor, Grant Thornton Co., Ltd., in the amount of 750,000 baht. Other than the aforementioned fees, the company has no other fees to pay to the auditor, auditing offices where auditors are originally affiliated and persons or business related to the auditor or auditing offices where auditors are originally affiliated.

Statements of Financial Position

AS AT 31 DECEMBER 2013

ASSETS

		Baht		
		31 December 2013	31 December 2012	31 December 2011
	Notes		(Restated)	(Restated)
CURRENT ASSETS				
Cash and cash equivalents	6	117,360,228	43,537,796	46,886,072
Temporary investment	7	10,842,674	35,291,304	52,101,041
Trade accounts receivable - general customers - net	8	126,072,694	258,007,101	115,269,873
- related companies	9	3,085,449	251,397	1,904,814
Inventories - net	10	151,350,355	176,245,505	147,820,054
Refundable value added tax		375,716	3,416,824	-
Other current assets		7,771,228	7,942,745	3,626,934
Total Current Assets		416,858,344	524,692,672	367,608,788
NON - CURRENT ASSETS				
Restricted deposits with bank	11	579,588	-	539,963
Other investment - at cost	12	50,000	50,000	50,000
Property, plant and equipment - net	13	314,170,253	259,367,966	197,510,174
Computer software - net	14	1,640,317	2,862,771	4,730,908
Deferred income tax asset	18	2,545,110	1,994,203	2,478,005
Total Non - Current Assets		318,985,268	264,274,940	205,309,050
TOTAL ASSETS		735,843,612	788,967,612	572,917,838

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

Statements of Financial Position (Continued)

AS AT 31 DECEMBER 2013

LIABILITIES AND SHAREHOLDERS' EQUITY

		Baht		
		31 December 2013	31 December 2012	31 December 2011
	Notes		(Restated)	(Restated)
CURRENT LIABILITIES				
Short - term loans from banks	15	74,048,052	137,237,545	64,459,541
Trade accounts payable		75,985,382	77,442,700	60,958,299
Other payables		4,532,156	3,307,809	4,683,370
Current portion of :				
- Long - term loans	16	22,932,000	14,072,000	9,895,349
- Liabilities under financial lease agreements	17	3,075,568	3,078,827	1,742,609
Accrued income tax	18	11,103,293	30,561,299	19,526,408
Accrued expenses	19	12,314,347	13,126,125	13,445,892
Deposits from customers		7,651,213	3,421,633	5,642,975
Other current liabilities	20	10,111,066	8,871,685	6,500,521
Total Current Liabilities		221,753,077	291,119,623	186,854,964
NON - CURRENT LIABILITIES				
Long - term loans - net	16	31,084,859	26,696,859	260,000
Liabilities under financial lease agreements - net	17	5,156,614	6,113,993	1,346,459
Liabilities under employee benefits obligation	21	2,428,554	2,126,227	1,948,044
Total Non - Current Liabilities		38,670,027	34,937,079	3,554,503
TOTAL LIABILITIES		260,423,104	326,056,702	190,409,467

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

Statements of Financial Position (Continued)

AS AT 31 DECEMBER 2013

LIABILITIES AND SHAREHOLDERS' EQUITY (Continue)

	Baht		
	31 December 2013	31 December 2012 (Restated)	31 December 2011 (Restated)
SHAREHOLDERS' EQUITY			
Share capital : common share, Baht 1 par value			
Registered 200,000,000 shares	200,000,000	200,000,000	200,000,000
Issued and fully paid - up 200,000,000 shares	200,000,000	200,000,000	200,000,000
Premium on common shares	45,939,064	45,939,064	45,939,064
Retained earnings			
- Appropriated for legal reserve	20,000,000	20,000,000	20,000,000
- Unappropriated	209,481,444	196,971,846	116,569,307
TOTAL SHAREHOLDERS' EQUITY	475,420,508	462,910,910	382,508,371
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	735,843,612	788,967,612	572,917,838

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

Statements of Comprehensive Income

FOR THE YEARS ENDED 31 DECEMBER 2013

		Baht	
		2013	2012 (Restated)
	Notes		
Income from sales and services			
Sales	9	783,879,695	940,352,086
Service income		20,074,959	19,156,003
Total income from sales and services		803,954,654	959,508,089
Cost of sales and services			
Cost of sales	9 , 24	(582,686,601)	(687,400,281)
Cost of services	24	(9,733,061)	(7,861,055)
Total cost of sales and services		(592,419,662)	(695,261,336)
Gross profit		211,534,992	264,246,753
Other income		7,734,965	10,196,035
Income before expenses		219,269,957	274,442,788
Selling expenses	24	(36,691,338)	(37,444,002)
Administrative expenses	24	(82,101,269)	(73,833,093)
Total expenses		(118,792,607)	(111,277,095)
Income before financial cost and income tax		100,477,350	163,165,693
Financial cost		(6,942,414)	(7,725,934)
Income before income tax		93,534,936	155,439,759
Income tax	18	(19,025,338)	(37,043,224)
INCOME FOR THE YEAR		74,509,598	118,396,535
Other comprehensive income (loss) for the year		-	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		74,509,598	118,396,535
Basic earnings per share			
Income (Baht per share)		0.37	0.59
Weighted average number of common shares (share)		200,000,000.00	200,000,000.00

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

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

Statements Of Changes In Shareholders' Equity

FOR THE YEARS ENDED 31 DECEMBER 2013

	Notes	Baht			
		Issued and fully paid - up share capital	Premium on common shares	Retained Earnings	
				Legal reserve	Unappropriated
					Total
Balance as at 1 January 2012 - as previously reported		200,000,000	45,939,064	20,000,000	114,091,302
Adjustment for cumulative effect of changes in accounting policy for deferred income tax as at 31 December 2011	3	-	-	-	2,478,005
Balance as at 1 January 2012 - as restated		200,000,000	45,939,064	20,000,000	116,569,307
Dividend paid	23	-	-	-	(37,993,996)
Comprehensive income for the year - restated		-	-	-	118,396,535
Balance as at 31 December 2012		200,000,000	45,939,064	20,000,000	196,971,846
Balance as at 1 January 2013 - as previously reported		200,000,000	45,939,064	20,000,000	194,977,643
Adjustment for cumulative effect of changes in accounting policy for deferred income tax as at 31 December 2012 - net	3	-	-	-	1,994,203
Balance as at 1 January 2013 - as restated		200,000,000	45,939,064	20,000,000	196,971,846
Dividend paid	23	-	-	-	(62,000,000)
Comprehensive income for the year		-	-	-	74,509,598
Balance as at 31 December 2013		200,000,000	45,939,064	20,000,000	209,481,444
					475,420,508

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

Statements of Cash Flows

FOR THE YEARS ENDED 31 DECEMBER 2013

	Baht	
	2013	2012
Cash flows from operating activities :		
Income before income tax	93,534,936	155,439,759
Adjustments to reconcile income before income tax to net cash provided from (used in) operating activities :		
Depreciation and amortization	35,950,042	27,432,260
Allowance for doubtful account	1,350,920	2,651,800
Allowance for obsolete and decline value of inventories - net	396,433	512,419
Gain from disposal of fixed assets	(1,003,060)	(2,330,090)
Unrealized gain from exchange rate	(1,754,980)	(1,593,884)
Unrealized gain on revaluation of investment	(2,970)	(26,128)
Provision for employee benefits obligation	208,613	90,710
Interest expense	6,942,414	7,725,934
Cash provided from operations before changes in operating assets and liabilities :	135,622,348	189,902,780
Decrease (Increase) in operating assets :		
Trade accounts receivable - general customers	130,922,537	(145,389,028)
Trade accounts receivable	(2,811,874)	1,653,417
Inventories	24,498,717	(28,937,870)
Refundable value added tax	3,041,108	(3,416,824)
Other current assets	171,517	(4,315,811)
Increase (Decrease) in operating liabilities :		
Trade accounts payable	(1,472,334)	16,484,401
Other payable	1,224,347	(1,375,561)
Accrued expenses	(811,778)	(319,767)
Deposits from customers	4,229,580	(2,221,342)
Other current liabilities	1,191,455	2,371,164
Cash provided from operations	295,805,623	24,435,559
Interest payment	(6,844,700)	(7,638,461)
Income tax payment	(39,034,251)	(25,524,531)
Net cash provided from (used in) operating activities	249,926,672	(8,727,433)

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

Statements of Cash Flows (Continued)

FOR THE YEARS ENDED 31 DECEMBER 2013

	Baht	
	2013	2012
Cash flows from investing activities:		
Decrease (increase) in restricted cash deposits	(579,588)	539,963
Decrease in temporary investment	24,451,600	16,835,865
Proceeds from sales of fixed assets	1,196,263	2,339,958
Payment for purchasing assets and down payment	(82,303,546)	(78,386,634)
Net cash used in investing activities	(57,235,271)	(58,670,848)
Cash flows from financing activities:		
Increase (decrease) in short - term loan from banks	(66,717,249)	74,371,888
Increase in long - term loans	29,920,000	46,270,859
Repayment of long - term loans	(16,672,000)	(15,657,349)
Payment of liabilities under financial lease	(3,447,646)	(2,941,397)
Paid for dividend	(61,952,074)	(37,993,996)
Net cash provided from (used in) financing activities	(118,868,969)	64,050,005
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	73,822,432	(3,348,276)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	43,537,796	46,886,072
CASH AND CASH EQUIVALENTS AT END OF YEAR	117,360,228	43,537,796
Supplemental disclosures for cash flows information		
Non - cash item		
Purchase assets under financial lease	2,487,008	9,045,149

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

1. GENERAL INFORMATION

QTC Energy Public Company Limited was incorporated as a limited company under The Civil and Commercial Code of Thailand on 9 June 2003. The Company registered the change of its status to a Public Company Limited and the change of its name to “QTC Energy Public Company Limited” on 19 August 2010. The Company’s shares had been listed for trading in “MAI” of the Stock Exchange of Thailand (SET) on 28 July 2011. The Company is engaged in the manufacture, distribution and maintenances of electrical transformers. The Company’s registered head office is located 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.

2. BASIS OF FINANCIAL STATEMENT PREPARATION

The accompanying financial statements have been officially prepared in Thai in accordance with the Accounting Act B.E. 2543 and Thai Accounting 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. 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.

During the year 2013, the Federation of Accounting Professions has announced the application of accounting standards, the financial reporting standards that were amended in 2012, and the interpretation of accounting standards and reporting standards, effective for fiscal years beginning on or after 1 January 2014. The Company’s management has considered the effects from the implementation of these financial reporting standards in the preparation of to the Company’s financial statements.

The financial statements have been prepared with the same manner as prior year, except for the adoption of TAS 12 Income taxes as follow:

TAS 12 Income tax

This accounting standard requires the Company to identify temporary differences arising between the carrying amount of an asset or liability in the statement of financial position and related tax bases in order to recognize the income tax effects as deferred income tax asset or liability subjecting to certain recognition criteria. Effective 1 January 2013, the Company has changed this accounting policy and restated the prior year financial statements, presented as comparative information, as if the Company had recognized the income tax effects as deferred income tax assets or liabilities in the previous years.

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 it relates to items recognized directly in equity or other comprehensive income.

Current income tax

Current income tax is the expected tax payable or claimable, under the income tax prevailing, on the taxable income or loss 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 previous years.

Deferred income tax

Deferred income tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purpose and the amounts used for taxation purpose. Deferred income tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, using tax rates enacted or substantively enacted at the end of the reporting period.

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

A deferred income tax asset is recognized to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. Deferred income tax assets are reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that the related tax benefit will be realized.

3. CUMULATIVE EFFECT OF THE CHANGE IN ACCOUNTING POLICY FROM THE ADOPTION OF NEW ACCOUNTING STANDARD

Effective 1 January 2103, the Company initially adopted TAS 12 “Income Taxes”. The cumulative effect of the change in the accounting policy is separately presented in the statements of changes in shareholders’ equity.

The amounts of adjustments affecting the statements of financial position and the statements of comprehensive income are summarized below.

	Baht		
	31 December 2013	31 December 2012	1 January 2012
Statements of financial position			
Increase in deferred income tax assets	3,404,673	3,084,235	2,950,235
Increase in deferred income tax liabilities	859,563	1,090,032	472,230
Increase in unappropriated retained earnings – net	2,545,110	1,994,203	2,478,005
	Baht		
	For the years ended 31 December		
	2013	2012	
Statements of comprehensive income			
Increase (Decrease) in income tax expense		(550,907)	483,802
Increase (Decrease) in basic earnings per share (Baht per share)		0.0028	(0.0024)

The movement in cumulative effect of change in accounting policy for deferred income tax are as follows :

	Baht
Retroactive adjustment of retained earnings as at 31 December 2011	2,478,005
Effect to the operations for the year 2012 - net	(483,802)
Retroactive adjustment of retained earnings as at 31 December 2012 - net	1,994,203

4. SIGNIFICANT ACCOUNTING POLICIES

Revenue and expense recognition

Sales are recognized when delivery has taken place and the transfer of risks and rewards has been completed, excluding value added tax and discounted.

Service income, excluding value added tax and discounted, is recognized when the services has been rendered.

Other income and expenses are recognized on an accrual basis.

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 invoice amount net of allowance for doubtful accounts (if any). 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 of purchases consist of purchasing prices and other related direct cost, excluding discounts and allowances (if any).

Cost of finish goods and work in process consist of raw materials, direct labor, other direct expenses and overhead, allocated based on the production process.

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

Property, plant and equipment

Property, plant and equipment are recorded at cost. Cost is measured by the cash or cash equivalent price of obtaining the asset that bring it to the location and condition necessary for its intended use. Plant and equipment are presented in the statements of financial position at costs less accumulated depreciation. When assets are sold or retired, their costs and accumulated depreciation are eliminated from the accounts and any gain/loss resulting from their disposals is included in the statements of comprehensive income.

The Company depreciates its plant and equipment by the straight - line method over the estimated useful lives of the assets based on the segregation of components of assets, if each part is significant with different useful lives. Estimated useful lives of the assets are as follows:

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

No depreciation is made for land, building in progress, and machine and equipment under installation.

Expenditure for additions, renewals and betterment are capitalized. Repair and maintenance costs are recognized as expenses when incurred.

Computer software

Computer software is presented at cost less accumulated amortization. Amortization is calculated by reference to cost on a straight-line basis over the estimated period of 5 years. The computer software will be adjusted when there is an indication of impairment.

Income tax

Income tax is provided for in the accounts based on the taxable profits determined in accordance with the Revenue Code.

Employee benefits

Salaries, wages, bonuses, and contributions to the social security fund and provident fund, are recognized as expenses on an accrual basis.

Post-employment benefits (Defined contribution plans)

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

Post-employment benefits (Defined benefit plans)

The Company has obligations in respect of the severance payments for employees upon retirement under the Labor Law. The Company treats these severance payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined by actuary, using the projected unit credit method.

Segment of financial information

Segment of information is presented in respect of the Company's businesses. The primary format, geographical segments, is based on the Company management and internal reporting structure.

Basic earnings per share

Basic earnings per share are determined by dividing the net income for the year by the weighted average number of paid up common shares outstanding during the year.

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.

Leases

Leases of equipment where the Company assumes substantially all the benefits and risks of ownership are classified as finance leases. Finance leases are capitalized at the estimated present value of the underlying lease payments or the present value of the 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 balance. The lease payment obligation under the lease agreement, net of financial interest payment, is recorded as liability under finance lease. The interest element of the finance charge is charged to operations over the lease period. The equipment acquired under finance leasing contract is depreciated over the useful life of the asset. 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 charged to statements of comprehensive income on a straight – line basis over the period of the lease. When an operating lease is terminated before 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.

Foreign currency transactions

Foreign currency transactions during the year are translated into Baht at the exchange rate on transaction dates. The balance of foreign currency monetary assets and liabilities at the date of the statements of financial position are translated into Baht at the rate prevailing at that date. Exchange gains or losses are included in the statement of comprehensive income.

Use of accounting estimates

The preparation of financial statements in conformity with TAS requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying amounts of assets and liabilities that are not readily apparent from other sources. Accordingly, actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed by management on an ongoing basis. Revision to accounting estimates are recognized in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods, if the revision affects both current and future periods.

Provisions for liabilities and expenses, and contingent assets

Provisions are recognized when the Company has present legal or constructive obligations as a result of past events with probable outflow of resources to settle the obligation, and where a reliable estimated of the amount can be made. The contingent assets will be recognized as separate assets only when the realization is virtually received.

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

5.1 Critical accounting estimates, assumption and judgments

5.1.1 Impairment of trade accounts receivables

The Company sets an allowance for doubtful accounts to reflect impairment of trade accounts receivable relating to estimated losses resulting from the inability of customers to make required payments. The allowance is based on consideration of historical collection experience couple with a review of outstanding receivables at the closing date.

5.1.2 Allowance for decline value and defective inventories

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

5.1.3 Plant, equipment and computer software

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.

5.1.4 Impairment of assets

The Company considers allowances for impairment of assets when there is an indication that an asset may be impaired. When there has been a significant decline in the fair value of asset, the management will determine the estimated recoverable amount.

5.2 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.

6. CASH AND CASH EQUIVALENTS

	Baht	
	2013	2012
Cash on hand	160,000	160,000
Cash at banks		
- Current account	22,276,219	14,013,476
- Savings account	94,924,009	29,364,320
Total	117,360,228	43,537,796

7. TEMPORARY INVESTMENT

	Baht
Balance as at 1 January 2013	35,291,304
<u>Add</u> Additional investment during the year	145,000,000
<u>Less</u> Disposal of investment during the year	(169,451,600)
Adjustment for unrealized gain from changes in value of investment	2,970
Balance as at 31 December 2013	10,842,674

The Company has temporarily investment in The Krung Thai Sa-Som-Sub Fund K51 (KTSS: K51) which yields more return than general savings deposits. The said investment does not have any restriction for redemption.

8. TRADE ACCOUNTS RECEIVABLE – NET

The outstanding trade accounts receivable balances as at 31 December 2013 and 2012 are classified by ages as follows:

	Baht	
	2013	2012
<u>Trade accounts receivable – general customers</u>		
Not yet due	67,564,034	160,733,608
Past due :		
Less than 3 months	53,457,225	92,251,791
3 - 6 months	4,591,335	1,798,145
6 - 12 months	460,100	693,999
Over 12 months	5,458,533	6,637,171
Total	131,531,227	262,114,714
<u>Less</u> Allowance for doubtful accounts	(5,458,533)	(4,107,613)
Net	126,072,694	258,007,101
<u>Trade accounts receivable – related companies</u>		
Not yet due	3,085,449	233,527
Past due :		
Less than 3 months	-	17,870
3 - 6 months	-	-
6 - 12 months	-	-
Over 12 months	-	-
Total	3,085,449	251,397

9. 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 companies for the years ended 31 December 2013 and 2012 are as follow :

	Pricing Policy	Baht	
		For the years ended 31 December	
		2013	2012
Revenue from sales	Market prices	11,934,231	5,444,696
Purchase of raw materials	Market prices	506,387	2,561,954
Selling and administrative expenses	Agreed prices	4,500	4,000
<u>Key management personnel compensation</u>			
Short - term employment benefits		15,122,761	17,965,018
Post - employment benefits		148,043	170,349
Total		15,270,804	18,135,367

As at 31 December 2013 and 2012, the significant outstanding balances of the above transactions are as follows:

		Baht	
	Relationship	2013	2012
<u>Trade accounts receivable – related companies</u>			
QTC - PANCO Co., Ltd. (incorporated in Lao People’s Democratic Republic)	Co – director and Co – shareholder	2,456,717	-
Q.T.C. Services Chiang Mai Co., Ltd.	Family member of the director	628,732	233,528
SMI Metal Work Co., Ltd.	Family member of the director	-	17,869
Total		3,085,449	251,397
<u>Key management personnel compensation</u>			
Liabilities under employee retirement benefits obligation		1,497,873	1,482,019

10. INVENTORIES – NET

	Baht	
	2013	2012
Raw materials	62,716,254	100,193,467
Work in process	21,175,430	11,452,243
Finished goods	65,752,767	57,215,471
Goods in transit	5,230,657	10,512,644
Total	154,875,108	179,373,825
<u>Less</u> Allowance for decline value	(3,524,753)	(3,128,320)
Inventories – net	151,350,355	176,245,505

The Company has movements in allowance for decline value of inventories for the year ended 31 December 2013 as follows :

	Baht
Balance as at 1 January 2013	3,128,320
<u>Add</u> Allowance for decline value of inventories	396,433
Balance as at 31 December 2013	3,524,753

11. RESTRICTED DEPOSITS WITH BANK

As at 31 December 2013, the Company's savings deposit of Baht 0.58 million is restricted for usage from the pledge as collaterals for letters of guarantee issued by a local bank for performance bond.

12. OTHER INVESTMENT

Company's name	Nature of business	(Unit : Baht)			
		Percentage of shareholding		Investment (at cost)	
		2013	2012	2013	2012
MDICP HOLDING CO., LTD.	Providing commercial and industrial training services	0.86	0.86	50,000	50,000

13. PROPERTY, PLANT AND EQUIPMENT – NET

	Baht				
	2012	Increase	Decrease	Transfer In (Out)	2013
Cost					
Land	31,089,980	-	-	-	31,089,980
Land improvement	2,803,391	-	-	-	2,803,391
Buildings	138,695,611	5,067,744	(26,362)	10,819,423	154,556,416
Machine and factory equipment	143,237,772	30,535,752	(1,958,098)	22,079,592	193,895,018
Furniture, fixtures and offices equipment	32,528,546	2,826,037	(858,455)	284,496	34,780,624
Vehicles	27,122,184	3,194,551	(2,391,713)	-	27,925,022
Building in progress	22,000	11,251,838	-	(10,819,423)	454,415
Machine and equipment under installation	15,039,086	36,421,670	-	(22,364,088)	29,096,668
Total	390,538,570	89,297,592	(5,234,628)	-	474,601,534
Accumulated depreciation					
Buildings	22,004,595	8,036,814	(4,758)	-	30,036,651
Machinery and factory equipment	81,455,266	15,962,781	(1,742,292)	-	95,675,755
Furniture, fixtures and offices equipment	14,593,069	5,658,861	(787,240)	-	19,464,690
Vehicles	13,117,674	4,528,222	(2,391,711)	-	15,254,185
Total	131,170,604	34,186,678	(4,926,001)	-	160,431,281
Net book value	259,367,966				314,170,253
Allocation of depreciation for the year :					
Cost of sales and services	15,049,063				20,111,281
Selling and administrative expenses	10,475,260				14,075,397
Total	25,524,323				34,186,678

Land and buildings and a partial of machinery are mortgaged as collaterals for credit facilities with a financial institution as mentioned in Notes 15 and 16.

As at 31 December 2013 and 2012, the costs of fully depreciated assets which are remained in use amounted to Baht 85.30 million and Baht 15.28 million, respectively.

14. COMPUTER SOFTWARE – NET

	Baht		
	2012	Increase	Decrease
Computer software	9,546,687	540,910	-
<u>Less</u> Accumulated amortization	(6,683,916)	(1,763,364)	-
Computer software – net	2,862,771		
Amortization for the year	1,907,937		

15. SHORT – TERM LOANS FROM BANKS

	Baht	
	2013	2012
Liabilities under trust receipt agreements	59,048,052	88,598,757
Promissory notes	15,000,000	48,638,788
Total	74,048,052	137,237,545

As at 31 December 2013 and 2012, the Company has outstanding credit facilities in form of bank overdrafts, promissory note, liabilities under trust receipt agreements, letter of credit, forward exchange contracts, the assignment of collection under customer letters of credit, and others totaling Baht 2,485 million and Baht 1,573 million, respectively, with interest rates ranging from 4.50% - 5.88% per annum and 5.88% - 7.48% per annum, respectively. These credit facilities are collateralized by the mortgages of the Company's land and construction and part of machinery as mentioned in Note 13.

16. LONG – TERM LOANS

	Baht	
	2013	2012
Long - term loans from bank	54,016,859	40,768,859
<u>Less</u> Current portion	(22,932,000)	(14,072,000)
Long - term loans from bank - net	31,084,859	26,696,859

Movements in the long – term loans during the year ended 31 December 2013 are summarized below:

	Baht
Balance as at 1 January 2013	40,768,859
<u>Add</u> Additional borrowings	29,920,000
<u>Less</u> Repayments	(16,672,000)
Balance as at 31 December 2013	54,016,859

These loans are repayable approximately Baht 1.91 million per month. These loans are collateralized by the mortgages of Company's land and construction thereon, and part of machinery as mentioned in Note 13.

17. LIABILITIES UNDER FINANCIAL LEASE AGREEMENTS

	Baht	
	2013	2012
Liabilities under financial lease agreements		
Due within one year	3,430,853	3,488,361
Due later than one year but not over five years	5,374,283	6,495,024
Total	8,805,136	9,983,385
<u>Less</u> Deferred interest	(572,954)	(790,565)
	8,232,182	9,192,820
<u>Less</u> Current portion	(3,075,568)	(3,078,827)
Liabilities under financial lease – net	5,156,614	6,113,993

The Company has financial leases with local leasing companies covering its motor vehicles and equipment for periods of 3 - 4 years.

18. INCOME TAX

	Baht	
	For the years ended 31 December	
	2013	2012
Income before income tax	93,534,936	155,439,759
<u>Add</u> Transactions added back under the provision of the Revenue Code	9,818,747	8,432,941
<u>Less</u> Additional expense deductions	(5,472,457)	(4,918,690)
Taxable income	97,881,225	158,954,010
Income tax in compliance with the Revenue Code		
- at the rate of 20% (2012 : rate of 23%)	19,576,245	36,559,422
Current income tax expense under the Revenue Code	19,576,245	36,559,422
The amount of deferred income tax expense relating to the initial and reversal of temporary differences	(550,907)	483,802
Income tax	19,025,338	37,043,224
Accrued income tax – beginning of year	30,561,299	19,526,408
<u>Add</u> Income tax for the year under the Revenue Code	19,576,245	36,559,422
<u>Less</u> Income tax paid during the year	(39,034,251)	(25,524,531)
Accrued income tax – end of year	11,103,293	30,561,299

Deferred income tax asset/liability as at 31 December 2013 and 2012, which were resulted from temporary differences between those assets/liabilities for income tax purpose and assets/liabilities for accounting purpose are summarized as follow:

	Baht	
	2013	2012
<u>Deferred income tax assets</u>		
From allowance for doubtful accounts	1,091,707	821,523
From allowance for obsolete and decline value of inventories	704,951	625,664
From accumulated depreciation for plant and equipment	243,495	255,242
From provision for warranty expenses	878,809	956,561
From provision for employee benefits obligation	485,711	425,245
Total	3,404,673	3,084,235
<u>Deferred income tax liability</u>		
From carrying value of asset exceeding liability under finance lease	859,563	1,090,032
Net	2,545,110	1,994,203

19. ACCRUED EXPENSES

	Baht	
	2013	2012
Accrued director and management remuneration	6,830,000	7,940,000
Accrued transportation	2,096,068	2,074,643
Others	3,388,279	3,111,482
Total	12,314,347	13,126,125

20. OTHER CURRENT LIABILITIES

	Baht	
	2013	2012
Provision for warranty claim	4,394,043	4,782,804
Construction deposits	2,058,117	919,716
Withholding tax payable	520,752	1,442,040
Others	3,138,154	1,727,125
Total	10,111,066	8,871,685

21. LIABILITIES UNDER EMPLOYEE BENEFITS OBLIGATION

During the years ended 31 December 2013 and 2012, the Company has following movements in employee benefits obligation:

	Baht	
	2013	2012
Beginning balance as at 1 January	2,126,227	1,948,044
Recognized in statement of comprehensive income	302,327	178,183
Employee benefits paid during the year	-	-
Balance as at 31 December	2,428,554	2,126,227

The employee benefits expense were recorded in the statement of comprehensive income for the years ended 31 December 2013 and 2012 as follow:

	Baht	
	2013	2012
Service cost	204,613	203,128
Interest cost	97,714	94,684
Reversal of service cost	-	(112,418)
Reversal of interest cost	-	(7,211)

Principal actuarial assumptions are as follows :

Discount rate	4.44 percent per annum
Future salary average increment rate	6.71 percent per annum
Normal retirement age	60 years
Number of employees	135 persons

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 2012 held on 24 April 2012, the Company declared the payment of dividend from the net profit for the year ended 31 December 2011 to shareholders at Baht 0.19 per share for 200 million common shares, totaling Baht 37.99 million. The dividend was paid on 11 May 2012.

At the Annual General Meeting of Shareholders for the year 2013 held on 23 April 2013, the Company declared the payment of dividend from the net profit for the year ended 31 December 2012 to shareholders at Baht 0.31 per share for 200 million common shares, totaling Baht 62.00 million. The dividend was paid on 15 May 2013.

24. EXPENSES BY NATURE

Significant expenses by nature for the years ended 31 December 2013 and 2012 are as follows :

	Baht	
	2013	2012
Raw materials and supplies used	522,666,230	620,533,321
Changes in finished goods and work in process	(18,260,483)	(1,286,563)
Purchasing of finished goods	440,617	354,797
Salaries, wages and other employee benefits	85,968,679	80,880,908
Depreciation and amortization	35,950,040	27,432,260
Warranty expenses	5,536,283	3,956,797
Repair and maintenance expenses	10,301,619	9,334,587
Commission and sales promotion	9,148,016	7,043,924
Transportation expense	7,441,599	10,032,876

25. 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 2013, the Company has open forward contracts which settlement dates are ranged between 1 month and 6 months as follows :

	Foreign currencies	Contracts rates
USD	1,727,472	31.38 – 32.62
EUR	246,972	45.57 – 42.60

26. FINANCIAL INFORMATION BY SEGMENT

The Company business operations categorized by geophysical nature for years ended 31 December 2013 and 2012 are presented as follows :

(Unit : Thousand Baht)

	For the years ended 31 December							
	2013				2012			
	Sales		Service	Total	Sales		Service	Total
	Domestic	Export			Domestic	Export		
Revenue	623,922	159,958	20,075	803,955	712,462	227,890	19,156	959,508
Costs	(453,632)	(129,055)	(9,733)	(592,420)	503,656	183,744	7,861	695,261
Gross profit	170,290	30,903	10,342	211,535	208,806	44,146	11,295	264,247
Interest income				267				167
Interest expense				(6,942)				(7,726)
Depreciation and amortization				(35,950)				(27,432)
Income before income tax				93,535				155,440
Total assets				735,844				788,968

Major Customer

For the years ended 31 December 2013 and 2012, the Company's revenue came from Government enterprises and a private company amounted to Baht 386 million and Baht 492 million, respectively.

27. COMMITMENTS AND CONTINGENT LIABILITIES

As at 31 December 2013, the Company has obligations under a domestic bank guarantees for performance bonds required in the normal course of businesses approximately Baht 94.60 million. Such letters of guarantee are covered by the mortgages of the Company's land and construction and part of machines as disclosed in Note 13.

28. DISCLOSURE OF FINANCIAL INSTRUMENTS

Financial assets and liabilities carried in the statements of financial position included cash and cash equivalent, accounts receivable, loan from financial institutions, accounts payable, and liabilities financial lease - purchase agreements. The particular recognition methods adopted are disclosed in the individual policy statements associated with each.

Foreign Currency Risk

The Company exposure for foreign currency risk relates primarily to its trade accounts receivable and accounts payable and loans from bank 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.

As at 31 December 2013 and 2012, the Company has assets and liabilities in foreign currency as follows :

(Unit : Baht)			
2013			
	Foreign currencies	Exchange rate	Baht equivalent
<u>Trade accounts receivable in foreign currency</u>			
AUD	588,540	28.9078	17,013,397
USD	508,852	32.6778	16,628,164
<u>Trade accounts payable in foreign currency</u>			
USD	114,361	32.9494	3,768,198
EUR	3,855	45.3223	174,717
<u>Short – term loans from bank in foreign currency</u>			
USD	1,727,472	32.9494	56,919,173
EUR	46,972	45.3223	2,128,879
(Unit : Baht)			
2012			
	Foreign currencies	Exchange rate	Baht equivalent
<u>Trade accounts receivable in foreign currency</u>			
USD	123,333	30.4857	3,759,908
AUD	635,420	31.4849	20,006,135
<u>Trade accounts payable in foreign currency</u>			
USD	2,401	30.7775	73,903
EUR	8,023	40.8603	327,820
<u>Short – term loans from bank in foreign currency</u>			
USD	2,773,344	30.7775	85,356,583
EUR	79,348	40.8603	3,242,173

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 collectability on 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 operation and its cash flows. The Company's exposure to interest rate risk relates primarily to their deposits with bank, loans from bank and liabilities under hire - purchase agreements as follows :

(Unit : Baht)

	31 December 2013				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	94,924,010	-	22,436,218	117,360,228	0.75% - 0.875%
Temporary investment	10,842,674	-	-	10,842,674	Approx. 2.68%
Trade accounts receivable	-	-	129,158,143	129,158,143	-
Short - term loans from bank	74,048,052	-	-	74,048,052	2.63% - 7.48%
Trade accounts payable and other payable	-	-	80,517,538	80,517,538	-
Long - term loans from bank	54,016,859	-	-	54,016,859	5.50% - 7.00%
Liabilities under hire - purchase agreements	-	8,232,182	-	8,232,182	2.40% - 3.55%

(Unit : Baht)

	31 December 2012				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	29,364,320	-	14,173,476	43,537,796	0.75% - 0.875%
Temporary investment	35,291,304	-	-	35,291,304	Approx. 2.66%
Trade accounts receivable	-	-	258,258,498	258,258,498	-
Short - term loans from bank	137,237,545	-	-	137,237,545	6.00% - 7.60%
Trade accounts payable and other payable	-	-	80,750,509	80,750,509	-
Long - term loans from bank	40,768,859	-	-	40,768,859	7.125% - 6.50%
Liabilities under hire - purchase agreements	-	9,192,820	-	9,192,820	2.40% - 3.55%

As of 31 December 2013 and 2012, the financial instrument classified by the periods of time of the statements of financial position date to their maturity date are as follows :

(Unit : Baht)

	31 December 2013			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	117,360,228	-	-	117,360,228
Temporary investment	10,842,674	-	-	10,842,674
Trade accounts receivable	129,158,143	-	-	127,234,664
Short - term loans from bank	74,048,052	-	-	74,048,052
Trade accounts payable and other payable	80,517,538	-	-	80,517,538
Long - term loans from bank	-	22,932,000	31,084,859	54,016,859
Liabilities under hire - purchase agreements	-	3,075,568	5,156,614	8,232,182

(Unit : Baht)

	31 December 2012			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	43,537,796	-	-	43,537,796
Temporary investment	35,291,304	-	-	35,291,304
Trade accounts receivable	258,258,498	-	-	258,258,498
Short - term loans from bank	-	137,237,545	-	137,237,545
Trade accounts payable and other payable	80,750,509	-	-	80,750,509
Long - term loans from bank	-	14,072,000	26,696,859	40,768,859
Liabilities under hire - purchase agreements	-	3,078,827	6,113,993	9,192,820

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

29. EVENTS AFTER THE REPORTING PERIOD

At the meeting on 20 February 2014, the Company's Board of Directors passed a resolution to propose the payment of a dividend of Baht 0.21 per share to the common shareholders, from operating result for the year ended 31 December 2013. The dividend payments must be approved at the Annual General Meeting of the Company's shareholders.

30. APPROVAL OF THE FINANCIAL STATEMENTS

These financial statements have been approved by the Company's Board of Directors on 20 February 2014.