



QTC ENERGY PCL.

QTC Energy Public Company Limited



56-1 ONE REPORT 2022

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Messages from the Chairman of the Board of Directors

Formerly, Thailand and the world have had to encounter with several financial and economic crises. The recent one is caused by COVID-19 pandemic leading to huge damages across the world throughout these 2-3 years. Currently, severity of COVID-19 pandemic has been highly decreased therefore economy starts to be progressed.

QTC Energy Public Company Limited has encountered with various economic crises challenging potential of our directors, executives, and employees who have strived to manage and adjust business strategies to meet with situations. Therefore, the Company has been able to overcome all crises and all crises have already proved that QTC has firm foundation and becomes the strong organization with promptness on operational policies and mechanisms to deal with all possible crises. In addition, the Company has also been able to gain satisfying profits regularly.

For 2023 economic trend, it is expected that Thai economy will be recovered and grown by 3-3.5% from tourism activities of Thai and foreign tourists as well as consumption of private sector. This will drive economy continuously while helping to reduce effects caused by world economic slowdown.

The Company has strived to maintain existing customer base while expanding our business to new customer base in and outside Thailand, adjusting business plan, preparing strategies, searching for new partners to develop our business, looking for opportunities to grow our business, and generate sustainable wealth to our shareholders.

Moreover, the Company's Board of Directors highly emphasizes on Good Corporate Governance as well. In 2022, the Company has obtained the score on Corporate Governance Assessment in excellent level for 8 consecutive years reflecting determination, concrete and definite operation on this matter. Moreover, the Company also aims to maintain standard and quality of Good Corporate Governance strongly and intensively.

The Company's Board of Directors would like to express gratitude to all patrons, stakeholders, and related persons in Thailand and other countries for your consecutive support. The Company would like to ask you to believe that the Company's Board of Directors would manage our Company to grow stably and sustainably.



(Mr. Kirk-krai Jirapaet)

Chairman of the Board of Directors



The Company **has strived to maintain existing customer base** while expanding our business to new customer base in and outside Thailand, adjusting business plan, preparing strategies, searching for new partners to develop our business, looking for opportunities to grow our business, and **generate sustainable wealth to our shareholders.**

Messages from the Chief Executive Officer

For internal management, the Company still emphasizes on personnel development and promotion of best practice on **Environment, Social, and Governance (ESG)**



To All Stakeholders

In 2022, economic situations of the world, Asian region, and Thailand was economically affected by COVID-19 Pandemic that has not been recovered yet as well as affected by the war between Russia and Ukraine causing problems against economic system throughout the world, increase of oil price, increase of production and service costs, fluctuations of Thai Baht per US dollar, and increase of inflation. These elements increased business costs making some entrepreneurs in Thailand and overseas had to slow down business expansion due to concerns on risks affecting to manufacturers in supply chain. In addition, since consumers had to spend money carefully, economic numbers of Thailand were only expanded by 2.6% in 2022.

"QTC" is also another company that has been avoidably affected by both incidents leading to increase of major material costs imported from overseas, for example, silicon and copper, as well as transportation cost and fluctuation of currency exchange rate. Consequently, the Company's financial costs were increased whereas expansion of industrial sector and construction of real estate industry in Thailand and overseas as well as investment of government sector still slow down. As a result, competitive of transformer market, which is the major business of "QTC", is quite high.

However, "QTC" has performed all actions carefully through risk management process with cooperation from employees, profession of management team, and reliability from all stakeholders who are still confident with our brand and services. Year-end turnover (of specific business) showed that income from sales and services was 1,164.57 million baht that was increased from 2021 by 12.14% whereas net profit was reduced from 2021 by 0.69% or net profit of 8.38% per sale volume. For turnover of consolidated Financial Statements, total income was 1,216.45 that was increased from 2021 by 3.79% whereas net profit was reduced from 2021 over than 80% due to update of loss impairment on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in consolidated Financial Statement as well as amortizing deferred tax assets in Financial Statement.

With the war between Russia – Ukraine, there is no signal when it will be stopped and what sanctions would be added by USA and alliances. If this war is still prolonged, it will affect to economy throughout the world unavoidably. Therefore, in 2023, it will be another challenging year of QTC but we still remain our determination to develop transformers that is our major business to have higher electric quality and properties equal or than to those of international standard by focusing on manufacturing products that can reduce consumption of electric energy and emission in order to respond to complete demands of customers. It is expected that the corporate group will remain our strength and growth to be over than 10% from 2022.

For internal management, the Company still emphasizes on personnel development and promotion of best practice on Environment, Social, and Governance (ESG).

Environment (E): It is performed by promoting “Green Couture” in organization through operational process and innovations in order to reduce environmental impacts. The Company sets the goal of the Company to become Carbon Neutrality in 2035 and Net Zero in 2050. Therefore, it is highly necessary for the Company to adjust our behavior and improve our operation process, tools, machines, and vehicles while increasing green energy consumption, etc., in order to achieve our goal and future of new generation with the right to live in good environment.

Social (S): The Company also promotes “Safety Couture” building consecutively. In 2022, number of accidents reduced from 2021 over than 22% due to seriousness in taking operations under safety measures with promotion measures for reducing accidents. The goal of the Company is still Zero Accident and the Company still emphasizes on participation in community development. In 2022, the Company held a seminar activity, “Community Seminar: QTC Meets Community”, that was participated by representatives of community and local government agencies in order to seek for demands that were beneficial for public and society. From mutual consulting, there are some projects that are under supporting capability of “QTC” and most of them are in educational sector. These projects will be mutually established and operated in 2023.

Governance (G): The Company highly promotes and emphasizes on Best Practice. Every executive must be the good model and all employers must be strictly under defined practices that are mutual obligations. All operations must be transparent and accountable for obtaining reliability from all stakeholders. We properly realize that emphasis and actual action taken with 3 dimensions, i.e., ESG: Environment, Social, Governance, along with responsibility will enable the Company to grow sustainably.

Finally, on behalf of the Board of Directors, executives, and employees, we would like to express our gratitude to all shareholders, customers, business partners, general people in communities, and stakeholders in all groups for supporting and encouraging us properly. We would like to promise that we will perform all actions under provided vision, missions, and sustainable development framework as well as strive to develop our processes, tools, machines, and human capital to be steadfast among social and economic changes sustainably and stably.



(Mr. Poonphiphat Tantanasin)

Chief Executive Officer



Financial Highlights

Financial	2020	2021	2021 (Restated)	2022
Revenues from sales and services	1,019.49	1,171.99	1,171.99	1,216.45
Total revenues	1,040.45	1,185.03	1,185.03	1,236.70
Cost of sales and services	(706.47)	(878.37)	(875.42)	(1,068.08)
Gross margin	330.77	305.05	296.57	148.37
Selling and administrative expenses	(146.50)	(145.47)	(189.27)	(147.94)
Profit before interest and income tax	187.48	161.19	106.94	19.21
Net profit	157.53	127.22	88.36	15.84
Comprehensive income for the year	157.68	130.53	91.67	16.74
Net earnings per share	0.462	0.373	0.259	0.046
Dividend per share	0.40	0.20	0.20	0.20*
	(341,092,557)	(341,092,557)	(341,092,557)	(341,092,557)
Total assets	1,935.66	1,986.93	1,885.60	1,847.12
Total liabilities	243.48	250.97	250.97	263.87
Shareholders' equity	1,692.19	1,735.96	1,634.63	1,583.25

Remarks: * Pending for an approval from the 2023 Annual General Meeting of Shareholders

** The corporate group found that value of lands, buildings and equipment, electrical network connection service fee, power purchase agreement, and deferred tax assets was incorrect.

Therefore, errors of last year's Financial Statement were corrected. The corporate group retroactively updated last year's Financial Statement as comparative data for reflecting correctness of those assets' value through updating impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in consolidated Financial Statement as well as amortizing deferred tax assets

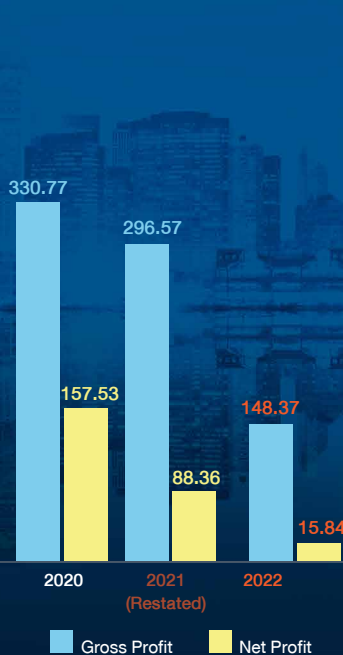
Total Income

(unit: million baht)



Gross Profit / Net Profit

(unit: million baht)



Total Assets, Total Liabilities, Shareholders' Equity

(unit: million baht)



The Board of Directors



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1. **Mr. Kirk-krai Jirapaet**
Chairman of the Board of Directors
2. **Mr. Norachit Sinhaseni**
Director
3. **Mr. Natthaphon Lilawathananun**
Director
4. **Dr. Kamol Takabut**
Director
5. **Mrs. Wasara Chotithammarat**
Director

6. **Mr. Suroj Lamsam**
Director
7. **Mr. Preedee Ngamsantikul**
Director
8. **Dr. Apichart Sramoon**
Director
9. **Mr. Poonphiphat Tantanasin**
Director
10. **Mr. Ruangchai Kritsnakriengkrai**
Director

1.Mr. Krirk-krai Jirapaet

Position	Chairman of the Board of Directors
Age	80 Years
Educational Background	<ul style="list-style-type: none">• Master of Economics, University of Sydney, Australia• Bachelor of Political Science (Honors), Chulalongkorn University
Directorship Training	<ul style="list-style-type: none">• Role of the Chairman Program (RCP), Class 11/2005• Director Certification Program (DCP), Class 61/2005• Audit Committee Program (ACP), Class 8/2005
Work Experience	<ul style="list-style-type: none">• Chairman / Independent Director of Banpu Public Company Limited• Member of the National Reform Council• Minister of Commerce• Member of the Money Policy Committee, Bank of Thailand• Vice-Minister of Tourism and Sports• Advisor to the Prime Minister, Office of the Prime Minister• Permanent Secretary, Ministry of Commerce• Director of the Bank of Thailand
Current Position	<ul style="list-style-type: none">• Chairman of the Board of Directors of QTC Energy (Public) Company Limited• Chairman of Advisors to the Company, Banpu (Public) Company Limited• Chairman / Independent Director of Triple I Logistics (Public) Company Limited• Vice President of the Council of Trustees of the University of the Thai Chamber of Commerce / Chairman of the Executive Directors• Chairman of Thai Garment Development Foundation• Chairman of the Board of Thai Institute of Directors Association (IOD)
Activity with listed companies	QTC Energy (Public) Company Limited / Banpu (Public) Company Limited / Triple I Logistics (Public) Company Limited
Activity with non-listed companies	University of the Thai Chamber of Commerce / Thai Garment Development Foundation / Thai Institute of Directors Association (IOD)
Date of appointment	June 22, 2016
Company's securities holding	None

2. Mr. Norachit Sinhaseni

Position	Director
Age	69 Years
Educational Background	<ul style="list-style-type: none">• Honorary Doctorate Degree of Public Administration in International Relations, Kasem Bundit University• Master of Arts in International Relations, The Fletcher School of Law and Diplomacy, United States, by P. Rew Floyd Scholarship• Bachelor of Law (Honors), Chulalongkorn University• Capital Market Leader Program, Capital Market Academy (CMA 20)• National Defence College (Class 4313)
Directorship Training	<ul style="list-style-type: none">• Director Certification Program (DCP), Class 113/2009• Role of the Chairman Program (RCP), Class 46/2020• Advanced Audit Committee Program (AACP), Class 37/2020• Board Nomination & Compensation Program (BNCP), Class 10/2020

Work Experience

- Member and spokesperson of the Constitution Drafting Commission (CDC)
- Permanent Secretary, Ministry of Foreign Affairs
- Ambassador, Permanent Representative of Thailand to the United Nations in New York
- Deputy Permanent Secretary (Multilateral Affairs)
- Deputy Permanent Secretary (Bilateral Affairs)
- Ambassador of Royal Thai Embassy, Wellington, New Zealand
- Director-General of the Department of East Asian Affairs
- Director-General of the Department of Information and Spokesman of the Ministry of Foreign
- Chief of the Office of the Secretary to the Minister (Surin Pitsuwan)
- Deputy Director-General of the Department of International Organizations
- Deputy Director-General of the Department of East Asian Affairs
- Minister Counsellor, Permanent Mission of Thailand to the United Nations in New York
- Chief of the Office of the Secretary to the Minister (Air Chief Marshal Siddhi Savetsila)
- Third Secretary, Second Secretary and First Secretary, Royal Thai Embassy, Manila
- Chairman of Thailand Foundation
- Member of the Board of Trustees of Prince Mahidol Award Foundation
- Member of the Executive Committee of King Prajadhipok's Institute
- Member of the Board of Tourism Authority of Thailand

Current Position

- Independent Director / Vice Chairman of the Board of Directors/ Chairman of the Nomination Remuneration and Corporate Governance Committee of QTC Energy (Public) Company Limited
- Independent Director / Chairman of the Nomination and Remuneration Committee / Chairman of the Risk Management Committee / Member of the Audit Committee of Central Plaza Hotel (Public) Company Limited
- Law Councilor, Office of the Council of State
- Member of the Thai National Group, Permanent Court of Arbitration in The Hague

Activity with listed companies QTC Energy (Public) Company Limited / Central Plaza Hotel (Public) Company Limited

Activity with non-listed companies Office of the Council of State

Date of appointment July 30, 2020

Company's securities holding None

3. Mr. Natthaphon Lilawathananun

Position	Director
Age	65 Years
Educational Background	<ul style="list-style-type: none">• Master of Business Administration (MBA), Faculty of Commerce and Accountancy, Department of Finance, Chulalongkorn University
Directorship Training	<ul style="list-style-type: none">• Director Accreditation Program (DAP), Class 10/2004• Audit Committee Program (ACP), Class 3/2004
Work Experience	<ul style="list-style-type: none">• Director of Unimit Engineering (Public) Company Limited• Director, Unique Mining Services (Public) Company Limited• Managing Director of Excellent Business Management Company Limited• Managing Director of NBS Research & Consulting Company Limited
Current Position	<ul style="list-style-type: none">• Independent Director and Chairman of the Audit committee of QTC Energy (Public) Company Limited• Director of Unimit Engineering (Public) Company Limited• Managing Director of Excellent Business Management Company Limited• Managing Director of NBS Research & Consulting Company Limited• Managing Director of Excellent Digital Development Company Limited• Managing Director of Jobmyway Recruitment Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited / Unimit Engineering (Public) Company Limited
Activity with non-listed companies	Excellent Business Management Company Limited / NBS Research & Consulting Company Limited / Excellent Digital Development Company Limited / Jobmyway Recruitment Company Limited
Date of appointment	July 28, 2011
Company's securities holding	None

4. Dr. Kamol Takabut

Position	Director
Age	73 Years
Educational Background	<ul style="list-style-type: none">• Doctor of Engineering in Thermodynamiques & Energetique, Faculty of Engineering, PERPINGNAN University, France
Directorship Training	<ul style="list-style-type: none">• Director Certification Program (DCP), Class 67/2005
Work Experience	<ul style="list-style-type: none">• The 5th and 6th President of the Council of Engineers• Member of the Committee of the Energy Conservation Fund, Ministry of Energy• Member of the Arbitration Committee, Ministry of Justice• Director of the Town and Country Planning Board, Ministry of Interior• Coordinating Committee for the Preparation of Basic Nuclear Power Project
Current Position	<ul style="list-style-type: none">• Independent Director/ Member of the Audit committee/ Member of the Nomination Remuneration and Corporate Governance Committee of QTC Energy (Public) Company Limited• Independent Director/ Audit Committee/ Chairman of the Risk Management Committee of Getabec Public Company Limited• Chief Executive Officer of Italian Thai Power Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited / Getabec (Public) Company Limited
Activity with non-listed companies	Italian Thai Power Company Limited
Date of appointment	March 31, 2016
Company's securities holding	None

5. Mrs. Wasara Chotithammarat

Position	Director
Age	58 Years
Educational Background	<ul style="list-style-type: none">• Master of Business Administration, Faculty of Commerce and Accountancy, Thammasat University• Bachelor of Accountancy, Faculty of Commerce and Accountancy, Thammasat University
Directorship Training	<ul style="list-style-type: none">• Director Certification Program (DCP), Class 117/2002• Advanced Audit Committee Program (AACP), Class 25/2017• Ethical Leadership Program (ELP), Class 26/2022• Company Secretary Program (CSP), Class 128/2022
Work Experience	<ul style="list-style-type: none">• Chief Accounting Officer, Summit Group, Summit Auto Seat Industry Company Limited• Director and Chief Financial and Accounting Officer of Team Precision Public Company Limited• Division Controller of Benchmark Electronics (Thailand) Public Company Limited• Corporate Controller of Siam City Cement (Public) Company Limited• Chief Financial Officer of The Cool Company Limited• Accounting Director, Summit Group, Summit Auto body Industry Company Limited
Current Position	<ul style="list-style-type: none">• Independent Director/ Member of the Audit committee/ Member of the Nomination Remuneration and Corporate Governance Committee of QTC Energy (Public) Company Limited• Independent Director / Member of the Audit committee of Lease IT (Public) Company Limited• Accounting & Finance Senior Vice President of KCE Electronics Public Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited/ Lease IT (Public) Company Limited / KCE Electronics Public Company Limited
Activity with non-listed companies	None
Date of appointment	September 13, 2016
Company's securities holding	None

6. Mr. Suroj Lamsam

Position	Director
Age	57 Years
Educational Background	<ul style="list-style-type: none"> Master of Business Administration in Management. Sasin Graduate Institute of Business Administration Master of Arts, Communications, New York University Bachelor of Arts., Marketing and Consumer Studies, Syracuse University, Syracuse New York King in Public Advanced Certificate in Economics Management for Executives 1, Prajadhipok's Institute
Directorship Training	<ul style="list-style-type: none"> Director Accreditation Program, Class 40/2005
Work Experience	<ul style="list-style-type: none"> Director and Senior Executive Vice President of Loxley (Public) Company Limited Director of Loxley Orbit (Public) Company Limited Director of National Innovation Agency
Current Position	<ul style="list-style-type: none"> Director of QTC Energy (Public) Company Limited Chief Executive Officer and President of Loxley (Public) Company Limited President of L Food Solutions Company Limited President of Dole Thailand Company Limited Director of AOT Aviation Security Company Limited Managing Director of LB EV Company Limited Managing Director of L Automotive Company Limited President of The Foodsource Company Limited Director of Siamsamut Warin Company Limited Director of Loxley Joint & Hold Company Limited Director of BP-Castrol (Thailand) Company Limited Director of Car Convenie Company Limited Director of Loxley Intertrade (Guangzhou) Company Limited Chairman of the Board of Loxbit (Public) Company Limited Director of ASM Security Management Company Limited Director of Loxley GTECH Technology Company Limited Director of Loxley Trading Company Limited Director of Loxley Global Company Limited Director of Loxley Mobile Company Limited Managing Director of Loxley Property Development Company Limited Director of Data Mining Company Limited Director of Ekpavee Company Limited Managing Director of Thai Gateway Company Limited Director of Thanakorn Vegetable Oil Company Limited Director of Lam Sam Estate Company Limited Director of Phatra Samphant Company Limited Director of Point Asia Land Development Company Limited Director of Chanaporn Company Limited Director of Ruam Samphant Company Limited Director of Wanatan Company Limited Director of Satera Pattana Company Limited Director of Suruedee Company Limited Director of Kasikornbank Public Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited / Loxley (Public) Company Limited / Loxbit (Public) Company Limited/ Kasikornbank Public Company Limited
Activity with non-listed companies	L Food Solutions Company Limited / Dole Thailand Company Limited / AOT Aviation Security Company Limited / LB EV Company Limited / L Automotive Company Limited / The Foodsource Company Limited / Siamsamut Warin Company Limited / Loxley Joint & Hold Company Limited / BP-Castrol (Thailand) Company Limited / Car Convenie Company Limited / Loxley Intertrade (Guangzhou) Company Limited / ASM Security Management Company Limited / Loxley GTECH Technology Company Limited / Loxley Trading Company Limited / Loxley Global Company Limited / Loxley Mobile Company Limited / Loxley Property Development Company Limited / Data Mining Company Limited / Ekpavee Company Limited / Thai Gateway Company Limited / Thanakorn Vegetable Oil Company Limited / Lam Sam Estate Company Limited / Phatra Samphant Company Limited / Point Asia Land Development Company Limited / Chanaporn Company Limited / Ruam Samphant Company Limited / Wanatan Company Limited / Satera Pattana Company Limited / Suruedee Company Limited
Date of appointment	August 29, 2017
Company's securities holding	None

7. Mr. Preedee Ngamsantikul

Position	Director
Age	47 Years
Educational Background	<ul style="list-style-type: none"> Master of Economics, Faculty of Economics, Srinakharinwirot University Bachelor of Engineering International Program, Sirindhorn International Institute of Technology, Civil Engineering, Thammasat University
Directorship Training	<ul style="list-style-type: none"> Director Accreditation Program (DAP), Class 161/2019
Work Experience	<ul style="list-style-type: none"> Southeast Asia Region Manager of Bekaert Maccaferri Underground Solutions BVBA (BMUS) Southeast Asia Region Manager of BASF Overseas Sales Manager of Southeast Asia Region of Thai Master Builder Company Sales Manager of UGC Sales Manager of Degussa Construction Chemical (Thailand) Company Managing Director of Keeree Solution Company Southeast Asia Region Manager of Promsang Company Limited Chairman of Advisor of ILF Consultant Engineers (Asia) LTD. Former Assistant Managing Director of RNC Engineering Company Limited Field Engineer at Lumpini Station, MRT Project, Joint Venture Company, BCKT, MRTA Initial System Project Underground Structures Civil Engineer of Hopewell (Thailand) Company Structural Engineer of Asia Ice Company Limited
Current Position	<ul style="list-style-type: none"> Director/ Member of the Nomination Remuneration and Corporate Governance Committee of QTC Energy (Public) Company Limited Academic Committee, Concrete Structure of Thailand Concrete Association (TCA) Managing Director of CSE (Thailand) Company Limited Director of iGL Synergy Company Limited Director of Nam Theun 1 Power Company Limited Vice President - International Affair, Thailand Underground and Tunnelling Group, The Engineering Institute of Thailand Regional Advisor of ILF Consulting Engineers (Asia) Limited Managing Director of DD 49 Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited
Activity with non-listed companies	CSE (Thailand) Company Limited / iGL Synergy Company Limited / Nam Theun 1 Power Company Limited / ILF Consulting Engineers (Asia) Limited / DD 49 Company Limited
Date of appointment	June 7, 2019
Company's securities holding	2,450,000 ordinary shares, representing 0.72%

8. Dr. Apichart Sramoon

Position	Director
Age	53 Years
Educational Background	<ul style="list-style-type: none"> Doctor of Engineering (Civil Engineering And Energy), Nagaoka University of Technology (NUT), Japan Master of Soil Engineering, Asian Institute Of Technology (AIT), Thailand Bachelor of Civil Engineering (First Class Honor), King Monkut's University of Technology Thonburi (KMUTT)
Directorship Training	<ul style="list-style-type: none"> Financial Statements for Directors Program, Class 19/2013 Director Accreditation Program (DAP), Class 169/2020
Work Experience	<ul style="list-style-type: none"> Civil Engineer of Intacon Company Limited Structural Engineer of Meinhardt (Thailand) Company Limited Researcher of Nagaoka University of Technology Senior Engineer of TEAM Consulting Engineering and Management (Public) Company Limited Managing Director of Geotechnical & Foundation Engineering Company Limited Vice President of TEAM Consulting Engineering and Management (Public) Company Limited Managing Director of TLT Consultant Company Limited

Current Position	<ul style="list-style-type: none"> • Director of QTC Energy (Public) Company Limited • Chief executive officer of TEAM Consulting Engineering and Management (Public) Company Limited • Chairman of Board of TEAM SQ (Public) Company Limited • Chairman of Board/ Director of Geotechnical & Foundation Engineering Company Limited • Chairman of Board of World Credit Foncier Company Limited • Chairman of Board/ Director of TEAM Construction Management Company Limited • Chairman of Board of World Corporation (Public) Company Limited • Director of NauticAWT Limited • Director of iGL Synergy Company Limited • Director of Nam Theun 1 Power Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited / TEAM Consulting Engineering and Management (Public) Company Limited / World Corporation (Public) Company Limited / TEAM SQ (Public) Company Limited
Activity with non-listed companies	TEAM Construction Management Company Limited / World Credit Foncier Company Limited / Geotechnical & Foundation Engineering Company Limited / NauticAWT Limited / iGL Synergy Company Limited / Nam Theun 1 Power Company Limited
Date of appointment	July 30, 2020
Company's securities holding	42,501,000 ordinary shares, representing 12.46%

9. Mr. Poonphiphat Tantanasin

Position	Director
Age	70 Years
Educational Background	<ul style="list-style-type: none"> • Bachelor's Degree in Electrical Engineering, King Mongkut's Institute of Technology North Bangkok • Capital Market Leader Program, Capital Market Academy (CMA.13)
Directorship Training	<ul style="list-style-type: none"> • Director Certification Program (DCP), Class 117/2009 • Director Accreditation Program (DAP), Class 77/2009 • Financial Statements for Directors (FSD) Program, Class 4/2009 • Role of the Compensation Committee (RCC) Program, Class 20/2015
Work Experience	<ul style="list-style-type: none"> • Managing Director of QTC Transformers Company Limited • Executive Chairman of QTC Transformers Company Limited • Director of QTC Panco Company Limited • President of Thai Electrical & Mechanical Contractors Association
Current Position	<ul style="list-style-type: none"> • Director, Member of Nomination and Remuneration Committee, Chairman of Executive Committee, and Chief Executive Officer of QTC Energy (Public) Company Limited • Director of QTC Global Power Company Limited • Director of Q Solar 1 Company Limited • Director of M-DIC Holding Company Limited • Director of Jarin Apartment Limited Partnership • Director of PPWE Company Limited • Director of Tanasin 2560 Company Limited • Director of Tanasin 2017 Company Limited • Director of Tanasin Holding Company Limited • President of Thai Transformer Association • Expertise of the Council of Engineers • Advisor to the Electrical Subcommittee of the Council of Engineers • Advisor of Engineering Institute of Thailand • Honorary Advisor of Thai Electrical & Mechanical Contractors Association • Director of QTC Marketing Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited
Activity with non-listed companies	M-DIC Holding Company Limited / Jarin Apartment Limited Partnership / PPWE Company Limited / QTC Global Power Company Limited / Q Solar 1 Company Limited / Tanasin 2560 Company Limited / Tanasin 2017 Company Limited / Tanasin Holding Company Limited/ QTC Marketing Company Limited
Date of appointment	July 28, 2011

10. Mr. Ruangchai Kritsnakriengkrai

Position	Director
Age	57 Years
Educational Background	<ul style="list-style-type: none">• Master of Business Economics, School of Development Economics, National Institute of Development Administration• Bachelor of Engineering (Electrical Power Engineering), Year 1989, King Mongkut's Institute of Technology North Bangkok
Directorship Training	<ul style="list-style-type: none">• Director Accreditation Program (DAP), Class 116/2015• Financial Statements for Directors (FSD) Program, Class 27/2015• Director Certification Program (DCP), Class 236/2017• Risk Management Program for Corporate Leaders (RCL), Class 28/2022
Work Experience	<ul style="list-style-type: none">• Deputy Managing Director of QTC Energy (Public) Company Limited• International Sales Manager of QTC Energy (Public) Company Limited• Sales Manager of PPC Asian Insulators Company Limited• OEM Sales Manager of Gates Unita (Thailand) Company Limited• Director of QTC Panco Company Limited
Current Position	<ul style="list-style-type: none">• Director/ Managing Director of QTC Energy (Public) Company Limited• Director of QTC GLOBAL POWER Company Limited• Director of Q Solar 1 Company Limited• Director of PPWE Company Limited• Director of QTC Marketing Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited
Activity with non-listed companies	QTC GLOBAL POWER Company Limited / Q Solar 1 Company Limited/ PPWE Company Limited/ QTC Marketing Company Limited
Date of appointment	September 13, 2016
Company's securities holding	None

MANAGEMENT TEAM



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- 1. **Mr.Poonhiphat Tantanasin**
Chief Executive Officer
- 2. **Mr.Ruangchai Kritsnakriengkrai**
Managing Director
- 3. **Miss Boonpa Ruddist**
Deputy Managing Director,
General Management
- 4. **Mr.Kitti Achariyaboonyong**
Deputy Managing Director, Marketing



Business Operations and Performance

1. Structure and Operation of Company Group

1.1 Policy and Business Operation Overview

Background

QTC Energy (Public) Company Limited, formerly known as Quality Transformer Company Limited, was established on July 19, 1996, with an initial registered capital of 10 million Baht, to operate the business of producing and distributing distribution transformers. In July, 2003, the Company changed its name to Q.T.C. Transformer Company Limited. On August 19, 2010, it was transformed into a public limited company and changed its name to QTC Energy (Public) Company Limited and was listed on MAI Stock Exchange on July 28, 2011. Transferred its securities for trading on the Stock Exchange of Thailand (SET) on July 29, 2021. Mr. Poonphiphat Tanthanasin was the founder of the Company who has over 47 years of work experiences in the transformer manufacturing industry. He has worked with major and leading transformer manufacturers in the country and been responsible for various works, including design, assembly, and production as well as sales and marketing. He has intensive and comprehensive knowledge and expertise in transformers in all areas. In addition, the management team, engineers, and employees are knowledgeable, experienced, and expertise in the transformer business for more than 47 years. They had been trained by leading transformer manufacturers for a long time in Germany and Japan. Such experiences enable them to help the Company to develop high quality transformers that are widely accepted by customers, including state-enterprise electricity agencies, i.e. Metropolitan Electricity Authority, Provincial Electricity Authority, and domestic and international private customers.

Over the past years, the Company has continuously developed transformer products which have been accredited by various standards, such as TIS 384-2543 from Thai Industrial Standards Institute, Ministry of Industry, ISO 9001: 2015 standard for the design, production, and maintenance of distribution transformers, and many other standards. In addition, the Company is able to produce quality transformers according to international standards, thus it can prove the international quality of transformers produced by QTC.

Overview of Business Operation

QTC Energy Public Company Limited engages in the business of manufacturing and distributing transformers according to orders of domestic and international customers (Made to Order) under the “QTC” trademark and the customers’ trademarks. Currently, the Company expands its business which can be divided into the transformer business and the solar business.

Transformer Business

The Company’s transformer products can be divided into the following categories:

1. Distribution Transformer
 - 1.1 Hermetically Sealed Oil Type Distribution Transformer
 - 1.2 Open Type with Conservator
2. Power Transformer
3. Cast Resin Transformer
4. Super Low Loss Transformer (Amorphous Metal Distribution Transformer: AMDT)
5. Special Transformer is designed and manufactured according to customer requirements and applications, such as Earthing Transformer, Unit Substation, Pad mounted, etc.
6. Providing various services to customers, such as scheduled inspection and maintenance of general conditions, repairs and maintenance of transformers, transformer oil filling service, transformer rental service, etc., to support the needs of customers and facilitate them, including customers purchasing QTC transformers and general customers.

Moving Forward with Determination and Vision



Quality of DETAILS

DETAILS are the most important key of our operations and they are in every part of QTC from personnel, thinking methods, working methods, technologies, factories, products, including society and environment.

Vision

"To be a manufacturer, distributor, and service provider of integrated technology with world-class standard in power business with good governance, social and environmental responsibilities."

Mission

1. Being the leader of manufacturing, distributing, and providing services of high-quality integrated technology solutions for businesses in power business
2. Developing products, process, and services to create added value in the value chain
3. Developing human capital to create good and smart people
4. Operating businesses based on good governance principle and paying attention to community, social and environmental responsibilities
5. Building sustainable business growth in long-term to gain confidence and trust from all stakeholders

Work Philosophy

QTC is firmly committed to operating its business based on 3 principles as follows:

1. Ethical, moral, and transparent management
2. Provision of products and services meeting international quality and standards
3. Emphasizing on corporate social and environmental responsibility and human freedom rights

However, the Company reviews its vision and mission annually. In 2023 was revised and approved by the Board of Directors on December 15, 2022 so that the vision and mission is consistent with current economic situations.

Solar Business

1. The Company is the distributor of solar panel for LONGI Solar, which is regarded as the best Tier 1 solar panel with half-cut technology photovoltaic modules that deliver up to 98% efficiency and generate higher amount of power even in low light conditions. In addition, it can generate electricity continuously for more than 25 years, and is the distributor of solar panel for Trina.
2. The Company is the distributor of Huawei Solar Inverter, which is the product that converts direct current (DC) to alternating current (AC) for using with solar panels and battery, including the domestic and international.

The Company established 2 subsidiaries and 1 associated company to operate power plant businesses, namely:

QTC Global Power Company Limited (QTCGP) engages in the business of power generation and other types of energy, established on September 28, 2016, with the registered capital of 501.90 million Baht. Later, QTCGP Company acquired **Q Solar 1 Company Limited (Q Solar 1)**, which engages in the business of solar power generation and was established on December 28, 2009, with the registered capital of 220 million Baht. QTC Global Power Company Limited acquired 100% of shares on September 20, 2017. In addition, QTCGP has also established **QTC Marketing Company Limited (QTCM)**, a subsidiary that engages in the business of distributing transformer, established on November 10, 2021 with a registered capital of 5 million baht, with QTCGP holding 100% of shares.

PPWE Company Limited (PPWE) is the joint venture company engaging in the energy business and established on January 12, 2016, with registered capital of 40 million Baht. QTC Energy Public Company Limited holds 50% of shares and UAC Energy Company Limited holds 50% of shares.

Policy and Long-Term Goals of Business Operation

The Company has the policy and goal to be a world-class manufacturer of high-quality transformers by focusing on the development of the quality and standards of the Company's transformers to produce transformers with high efficiency and build confidence and recognition from domestic and international customers. The Company sets the goal of generating revenues of 2,000 million Baht by 2029. To achieve such goal, the Company focuses on maintaining the existing customer base and expand the new customer base, especially in the ASEAN countries.

The Company has improved the production processes to be more efficient in order to support market expansion and competition and also increased international sales team to penetrate new markets. Regarding the research and development, the Company unceasingly discovers and develops new products to meet customers' needs. Currently, the Company develops and produces Smart Transformer, which is the innovation of transformers, and Super Low Loss Transformer that saves energy and reduce global warming in order to meet the needs of all groups of customers. As a result, the Company has strong potential for market competition.

The Company realizes the stability and sustainability of the organization so it expands the business to the energy business and seeks for domestic and international business opportunities in order to build a strong foundation and prepare to further expand the business. In 2017, the Company started investing in the energy business, which was the alternative power plant, and has continued expanding the business in 2018-2024. Currently, there are many projects that the Company is studying feasibility. In addition, the Company also expanded its business to be the distributor of energy-related products, such as solar panels and inverters, and other products that the Company is looking for future growth opportunities.

Since the Company emphasizes on valuable human resources, we invest in human resources with emphasis on development under Human Capital Guidelines for developing personnel to connect with organizational strategies in order to obtain competitive competency in world market. In 2022, the Company adjusted organizational structure and strategies, for example, adjusted sales process and production process for cost reduction, improved debt collection process to be consistent with current economic condition, situations or crises. With promptness of personnel and technology, the Company gained competitive advantages and built the ultimate satisfaction for our customers on organizational management in order to achieve our goals as mentioned above. The Company attached to the principle of business operation under the concept of "Quality of Details" as well as the principles of Good Governance and Business Ethics for sustainable growth.

Key milestones of the Company in the past 5 years are as follows :

Year 2018

- In January, the Company increased the registered capital of QTC Global Power Company Limited from the original registered capital of 140 million Baht to 700 million Baht.
- In January, the Company established the important foundation (Phase 5) to implement process improvement by applying the Total Quality Management (TQM) system throughout the organization in order to develop the sustainable organization.
- In January, the Company repurchased its shares to Green Earth Power (Thailand) Company Limited to co-invest in the Minbu solar power plant project in Myanmar.
- In June, the Company's use of the green label certification mark for transformer products was considered and approved by Thailand Environment Institute.
- In August, the Company received the Health Promotion Enterprise award, Advanced Level, from Thai Health Promotion Foundation
- In August, the Company was awarded the 3R Award by the Department of Industrial Works.
- In August, the Company received the certificate from the presentation at Thailand Quality Conference on the topic of Kaizen, the process for Kaizen event promotion with the three-fold increase in the effectiveness.
- In September, the Company was awarded the certificate of Standard TGO Guidance of the Carbon Footprint for Organization by Thailand Greenhouse Gas Management Organization (Public Organization).
- In October, the Company received the Business Ethics Standard Test Award 2018 from Thai Chamber of Commerce.
- In December, the Company was awarded the Sustainability Report Award 2018 organized by the CSR Club, Thai Listed Companies Association.

Year 2019

- In January, the Company established the important foundation (Phase 6) to implement process improvement by applying the Total Quality Management (TQM) system throughout the organization in order to develop the sustainable organization.
- In January, the Company entered into the business agreement with DYNAMIC ELECTRICAL SDN. BHD., Malaysia, to become the first and sole dealer of DE BUSDUCT in Thailand.
- In February, the Company was awarded the certificate of Thai Private Sector Collective Action Coalition Against Corruption by CAC.
- In July, the Company received the trophy for passing the project of assessment in the promotion of the preparation of safety, occupational health, and working environment standard system at the Platinum level from the Ministry of Labor.
- In August, the Company decreased the registered capital of QTC Global Power Company Limited from 700 million Baht to 560 million Baht.
- In September, the Company was awarded the certificate of Standard TGO Guidance of the Carbon Footprint for Organization by Thailand Greenhouse Gas Management Organization (Public Organization).
- In October, the Company entered into the business cooperation with Huawei Technology (Thailand) Company Limited to appoint QTC to be a distributor of Huawei Solar Inverter, the solar inverter.
- In October, the Company received the certificate of the use of green label certification marks for “Transformer Products”, that meet quality standards and have less impact on the environment compared to those having the same features, from Thailand Business Council for Sustainable Development.
- In December, the Company received an honorable award of Sustainability Disclosure Recognition (SDC) 2019 from Thaipat Institute.

Year 2020

- In March, the Company entered into the business cooperation with LONGI Solar Technology Company Limited to appoint QTC to be a dealer of solar panel sales and after-sales service.
- In September, the Company receives the certificate of Carbon Footprint Organization (CFO) label from Thailand Greenhouse Gas Management Organization (Public Organization).
- In October, the Company received an excellent score of CG Scorecard from the IOD Institute, which was the testament of transparent and good corporate governance.
- In December, the Company received the Happy Family Award 2020 at the “Excellent” level from Thai Health Promotion Foundation.
- In December, the Company received an honorable award of Sustainability Disclosure Recognition (SDC) 2020 from Thaipat Institute.

Year 2021

- In March, Received a plaque of honor “PERSON OF THE YEAR 2021” in the field of organizational management and development from For Thai Society Foundation.
- In March, Received a plaque of honor “BEST PRACTICE AWARDS 2021” in the field of corporate development for sustainability from For Thai Society Foundation.
- In March, the Company decreased the registered capital of QTC Global Power Company Limited from 560 million Baht to 501.90 million Baht.
- In June, Received a plaque of honor “Elite Reseller Award” from Huawei Technologies (Thailand) Company Limited as the main partner for Huawei Thailand Digital Power Business.
- In July, Transferred its securities for trading on the Stock Exchange of Thailand (SET) in resource industry group, energy and utilities sector.
- In November, Received SET Awards 2021, in the group of Business Excellence, the of category Best Innovative Company Awards 2021 from the Stock Exchange of Thailand.
- In November, Signed a business alliance with UAC Global Public Company Limited to invest in the EV Charging Station project through a joint venture company, PPWE Company Limited.
- In November, Established QTC Marketing Company Limited, established on November 10, 2021 with a registered capital of 5 million baht, engaging in the business of distributing transformer, with QTCGP holding 100% of shares.
- In December, PPWE Company Limited, a joint venture company held by QTC Energy Public Company Limited, holding 50% and UAC Energy Company Limited holding 50%, has increased the registered capital of PPWE from 1 million baht to 40 million baht on December 17, 2021 for investment in the charging station project.
- In December, the Company received an honorable award of Sustainability Disclosure Recognition (SDC) 2021 from Thaipat Institute.

Year 2022

- In March, the Company signed in business cooperation with Huawei Technologies (Thailand) Company Limited as a distributor of solar business products of HUAWEI TECHNOLOGY and Residential Smart PV Inverter, Residential Smart String ESS, Optimizer.
- In May, the Company signed in Memorandum of Understanding made with Bangchak Biofuel Company Limited and SCG Chemicals Public Company Limited under Bio Transformer Oil Project for experimenting, developing, and manufacturing the first bio transformer oil for commercial purpose in Thailand.
- In July, the Company was honored to be certified as a member of Thailand Private Sector Collective Action Coalition Against Corruption (CAC) whereas the Company renewed our membership at the first time in this year.
- In September, the Company received 3Rs Awards and Zero Waste Achievement Awards of 2012 from Department of Industrial Works (DIW).
- In October, the Company received SET Awards 2022 (Business Excellence) for the Best Investor Relations Awards with Market Capitalization not over than 3,000 million baht from the Stock Exchange of Thailand.
- In November, the Company received “Excellence” Award as the Model of Sustainable Organization in Thai Capital Market on Empowerment for Person with Disabilities of 2022 from the Office of the Securities and Exchange Commission under the cooperation with Ministry of Labor, Department of Skill Development, Department of Employment, Department of Empowerment of Persons with Disabilities, Thai Listed Companies Association, and Disabilities Thailand.
- In December, the Company received the Certificate from Declaration of Intention as a member of “Energy Beyond Standards” from Ministry of Energy.
- In December, the Company received 2022 Sustainability Disclosure Award from Thaipat Institute.

1.2 Nature of Business Operation

1.2.1 Revenue Structure

QTC Energy Public Company Limited operates the business on manufacturing, distributing, and providing services on transformers as well as expands our business as the distributor of solar cells, Solar Inverter, and Wallbox brand's EV Charger. The Company also has a subsidiary company and an indirect subsidiary company, i.e., QTC Global Power Company Limited and Q Solar 1 Company Limited for operating the businesses to generate solar energy with the following income structure:

Type of Revenue	Year 2020		Year 2021		Year 2022	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Revenue from sales of transformers	786.41	75.59	792.91	66.95	812.12	65.67
- Revenue from domestic sales of transformers	467.84	44.97	423.47	35.78	477.89	38.64
- Revenue from international sales of transformers	272.09	26.15	317.37	26.78	279.64	22.61
- Revenue from sales of raw materials ¹⁾	4.24	0.41	10.44	0.88	8.62	0.70
- Revenue from Services ²⁾	42.24	4.06	41.63	3.51	45.97	3.72
Revenue from sales of Busduct, Inverter and PV Panel	86.31	8.30	245.58	20.72	356.99	28.87
Revenue from sales of solar power business	146.77	14.11	133.51	11.27	47.34	3.83
Total Revenue from Sales and Services	977.25	93.93	1,130.36	95.39	1,216.45	98.37
Other revenues ³⁾	20.96	2.01	13.04	1.10	20.24	1.64
Total Revenues	1,040.45	100	1,185.04	100	1,236.69	100

Remarks 1) Revenue from the sales of raw materials is generated from the sales of raw materials used as a component in the production of transformers to customers, such as transformer oil, low-voltage terminal lug, bushing gasket set, etc.

2) Revenue from Services is Repair, Maintenance, Testing, Transformer rental and Transport

3) Other revenues include revenues from sales of scraps, gains from exchange rate, interest income, etc.

Nature of Product and Service

1. Transformer

Transformers produced and distributed by the Company are made to order according to the customer's purchase order, where the customer will define required specification, such as high voltage and low voltage, loss, impedance, Vector Group, and Temperature Rise, etc. to enable the Company to design transformers that meet customer requirements. The transformers produced and distributed by the Company to all domestic customers are products under the "QTC" trademark. For international customers, there will be products under the "QTC" trademark and the customer's trademark. However, the major components of a transformer are as follows:

1. **Steel Core** acts as a magnetic circuit for the magnetic flux to induce the high and low voltage in windings. The iron core is made of silicon steel which is cut and stacked to be the core.
2. **High-voltage Winding** serves as the power receiver from the high-voltage transmission line and converts such power energy into magnetic energy to pass the energy to the low-voltage winding. The high-voltage winding is usually made of enameled round copper wires that are wrapped or wound on the low-voltage winding.
3. **Low-voltage Winding** serves as the power distributor from the transformer to the load or any connected devices. Low-voltage wire is made of insulated copper wire or copper foil with a relatively large cross-sectional area, wound on an insulating sheath to fix it on the iron core.
4. **Transformer Tank and Cover** are the component that stores transformer oil and transfers the heat from the inside of the transformer to the outside. The Company applies the production techniques for hermetically sealed transformers. The transformer has a corrugated tank with cooling fins attached to each side of the tank, so the heat is quickly transferred to the outside. The fins are folded from a long steel sheet, resulting in less welds. The likelihood of tank leakage is therefore less than the traditional tank using the radiator fin as a heat sink. The upper area of the tank cover is usually the location where the bushing and protectors of the transformer are installed.
5. **Bushing** is the part to receive or distribute current of the transformer. The input and output wires are connected to the bushing. Inside the bushing, there is a conductor that conducts electricity into the winding. The bushing is insulated to prevent electric leakage to the transformer tank.
6. **Transformer Oil** is the oil with the property of good electrical insulation and high purity. It is used as electrical insulation inside the transformer and induce the heat from the winding in the transformer to the tank for ventilating to the external air.
7. **Tap** is the device that changes the turn ratios of the winding, allowing the voltage ratio of the transformer to be changed as required.
8. **Other protective devices**, such as oil level gauge, thermometer, pressure relief valve, etc., which are used for measurement in the transformer. When there is any abnormality, it will send the signal to control the switchgear to protect the transformer from severe damages.

Transformers produced and distributed by the Company can be categorized as follows:

1. Distribution Transformer

Distribution transformer is the device that converts the high voltage from the distribution system of the Metropolitan Electricity Authority or the Provincial Electricity Authority transmitted through the distribution line, where the voltage level is not more than 36 KV, and lowers the voltage to the level that meets the needs of the power user, such as industrial plants, houses, residences, and high-rise buildings, etc. It can be classified into 2 types as follows:

1.1 Hermetically Sealed Oil Type Distribution Transformer

With the power rating of 3,000 kVA, this type of transformer is an oil-insulated transformer to prevent short circuit in the transformer and transfer the heat from the winding in the transformer to the outside of the transformer. The transformer tank is hermetically sealed to prevent air from entering into the transformer and contacting with oil inside it. Therefore, this type of transformer has good property of moisture protection, which cause the transformer oil deterioration easily. It also helps maintain the insulation condition of the transformer oil to last longer, extend its lifespan, and reduce the cost of transformer maintenance as well. Most of this type of transformer is ideal for outdoor installation.





1.2 Open Type with Conservator

With the power rating of 5,000 kVA, it is the conventional transformer which is commonly used for a long time. It uses the transformer oil as an insulator and a heat sink, which is similar to the hermetically sealed oil type distribution transformer. However, there is a conservator installed to support the expansion of the transformer oil during the use. There is air inlet and outlet. At the end of the tube, there is a capsule containing silica gel, a substance that helps to absorb moisture from the air before entering into the transformer. The transformer oil of this type of transformer must be regularly inspected every 6-12 months.

2. Power Transformer



A power transformer is a transformer used to reduce the electricity voltage transmitted from the power generation source through the transmission line before transmitting the electric current to the distribution line for further transmission to users. The power transformers produced and distributed by the Company have the power rating ranging from 5,000-30,000 kilovolt amperes (KVA) and the maximum voltage of 72 KV.

3. Cast Resin Transformer



Dry type cast resin transformers are suitable for indoor installation as it does not use insulating oil. High voltage windings are casted in Epoxy Resin insulator that is resistant to moisture, dust, and the environment. Projects using dry type cast resin transformers are high-rise buildings, residential buildings or condominiums, hospitals or shopping centers with limited areas so they require transformers that can be installed in the buildings. In addition, the Company invested in the availability of products and personnel to provide services to customers and distribute dry type cast resin transformers tested by international standards to ensure customer confidence.

4. Super Low Loss Transformer (Amorphous Metal Distribution Transformer : AMDT)

Amorphous transformer is a transformer that uses the material of amorphous to produce the transformer core instead of silicon steel. The advantage of such material change is that it can reduce the No-Load Loss, which is only one-third of the silicon steel core. This will help users of amorphous transformers to save electricity costs. If the number of amorphous power transformers are used to replace the transformers with silicon iron core, it means saving a lot of electricity at the national level. It also indirectly contributes to the reduction of global warming by reducing greenhouse gas emissions caused by the power generation of the power plants.



SAVE THE WORLD



SAVE YOUR MONEY



SUPER LOW LOSS TRANSFORMERS BY QTC

5. Special Transformer

The Company will design and manufacture according to the applications and specifications required by customers, such as Earthing Transformer, Dry-Type Class F&H, Unit Substation, Pad Mounted, etc.



Earthing Transformer



Dry-Type Class F&H



Unit Substation



Pad Mounted

Other than the production of transformers, the Company also provides other products as follows:

1. **Smart Monitoring Box** : It is a smart accessory designed to monitor the function of transformers with a sensor that tracks important variables, such as the current in the windings, measure the temperature of windings and oil, and detects the unbalance that may adversely affect the transformer. It can be installed with all models of QTC transformers.
2. **Solar Inverter** : It is a product that converts direct current (DC) to alternating current (AC) from solar panels. QTC is appointed to be the distributor by Huawei Technology (Thailand) Company Limited. The product is sold under the brand of Huawei.
3. **PV Panel** : It is a product that converts solar energy to electric energy for Solar Roof, Solar Farm and Solar Floating. QTC is appointed to be the distributor by LONGI Solar Technology Company Limited. The product is sold under the brand of LONGI. And from Trina Solar Co., Ltd. The product is sold under the brand of Trina.
4. **Solar Battery** : It is a kind of battery used for storing electric charge generated from solar energy (solar cells) and consuming stored electricity with electric appliances.



2 Services

The Company provides a 24-hour service relating to transformers by a team of engineers and technicians with knowledge, expertise, and experiences in order to support the needs and facilitate customers, including customers purchasing QTC transformers and general customers. In the event of QTC transformers, the Company will provide the contact details on the side of every transformer for customers in the case of emergency. The services relating to transformers provided by the Company to customers are as follows:

- Transformer installation service
- Scheduled inspection and maintenance service
- Transformer repair and maintenance service
- Oil filling and filtration service for all sizes and all brands of transformers
- Transformer rental service
- Transformer testing service
- Consulting services on transformers and electrical systems
- Steel cutting and coil winding service
- OEM service for transformer tanks



Consultancy



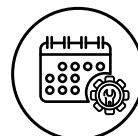
Installation



Testing



Repair and
Maintenance



Scheduled
Maintenance



Transformer
Rental

Research and Development

The Company always pays attention to the product research and development to obtain good quality of products that meet customer needs and competitiveness. The Company's research and development in recent years has been able to develop quality products to compete all global markets, including improve more efficient production processes. In 2022, the Company's total budget was more than 6.2 million Baht as follows:

1. Project of Solar Rooftop Installation 140kW	6,773,320	Baht
2. Project of EV Fast Charger	1,000,000	Baht
3. Project of Boi-Transformer Oil	500,000	Baht
Total	8,773,320	Baht

Tendency of Energy Business and Competitive Condition of Transformer and Solar Businesses

Tendency of World Energy Business and Global Warming

According to effects of COVID-19 pandemic from 2020 to the mid of 2022, energy consumption rate tended to be reduced throughout the world leading to economic recession. Consequently, government sector had to borrow some money to enhance financial liquidity of people, consumption businesses, and industrial businesses in Thailand leading to inflation throughout the world. However, after gradual recovery from COVID-19 pandemic, energy consumption suddenly increased. Simultaneously, the war between Russia and Ukraine occurred in 2022 has been continued leading to the lack of energy throughout the world and increase of energy costs.

Moreover, consecutively occurred environmental impacts also cause global warming making the world to realize on changing natural disasters causing extensive damages. With realization on global warming in 2021, the 26th Session of the Conference of the Parties (COP26) was held. This conference connected with Paris Agreement with the crucial goal to control global average temperature not be higher than 2 degrees Celsius and target to not over than 1.5 degrees Celsius compared to that before Industrial Revolution. In former COP since Paris Agreement was enforced, it was found that what had been performed by 197 member countries was not enough to control global average temperature as targeted.

Tendency of Energy Business in Thailand and COP26

In COP26, Thailand declared intention to reduce greenhouse gases emission with the World Community under the goals defined in Thailand's Long-term Low Greenhouse Gas Emission Development Strategies (LT-LEDS) as well as declared the goal on Carbon Neutrality before 2065 by establishing the following operational measures for achieving the goals on Carbon Neutrality and Net Zero GHG Emission:

1. Improve efficiency on energy consumption / adjust technologies, for example, Electric Vehicles (EV), Carbon Capture and Storage (CCS), Carbon Capture Utilization and Storage (CCUS), Bio-Energy with CCS (BECCS)
2. Increase proportions of renewable energy consumption to generate electricity and heat.
3. Improve efficiency on electrical energy consumption.
4. Develop infrastructure to support technological transformation through 4D1E Policy

Tendency of Domestic Transformer Business

Although domestic economy has been gradually recovered since the mid of 2022 upon the world's economy, time spending was still required for adjusting to New Normal. Since electric power consumption was not increased immediately, transformer business tended to be the same throughout the year. However, at the end of the year, government sector had some policies and measures to achieve the goals on Carbon Neutrality and Net Zero GHG Emission therefore many projects were established, for example, Electric Vehicles Support Project by reducing excise tax and import tax leading to expansion of charging stations. This would be possibility to use more transformers in the future. Moreover, Project for Purchasing Electricity from Renewable Energy from the end of 2023 – 2029 will make energy business grow consecutively in the next 7 years.

Tendency of Oversea Transformer Business

From effects of COVID-19 pandemic, there was economic recession throughout the world but this condition started to be better. In 2022, there was the lack of containers for exportation and importation but this condition tended to be better as well. However, with higher energy costs, sea freight costs were also increased and international freight required advance planning throughout 2022.

With business partnership with the large partner in Japan that was growing from Solar Farm installation projects in Australia with expansion of mining industry, especially rare earth used in battery manufacturing process for electric vehicles with tendency of consecutive and rapid growth, overall delivery amount of 2022 was close to that of 2021. In addition, there were also a huge number of purchase orders that would be Backlog that will be delivered in 2023.

Competitive Condition of Domestic Transformer Business

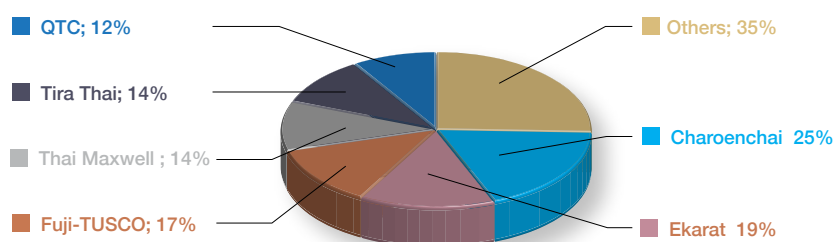
The transformer market can be divided into power transformers and distribution transformers. In the past, total transformer sales of the Company were sales of distribution transformers. There are about 25-30 manufacturers in the distribution transformer market, comprising small manufacturers focusing on price strategy rather than quality, and medium to large manufacturers focusing on products meeting the quality standards. Therefore, each group of manufacturers will have different customer groups. The Company is regarded as a large manufacturer of high-quality transformers that can provide services to both public and private sectors. The Company's products are certified by TIS 384-2543. The Company is capable of producing transformers in accordance with various international standards, including IEEE, JIS, AS, and special requirements of each industry. In addition, its products also passed the short-circuit withstand test from CESI, Italy, and KEMA, the Netherlands. As a result, the Company's products have been recognized for its quality from both domestic and international customers and the quality is improved continuously. This is to enhance the competitiveness of the Company to be comparable or superior to other major manufacturers. Other than this group, it will be a small manufacturer mainly focusing on cost-oriented customers regardless of product quality, which is considered to be a different market from the Company's products.

It is difficult to enter into the business of a new manufacturer and to develop and improve the transformer production process to obtain quality products according to international standards because it requires the high cost of investment in machinery. Importantly, it also relies on knowledge and advanced production technology, including personnel with good skills and expertise in production. Therefore, the competition in the domestic market is to compete with 6-7 manufacturers with high technology and the capability in the production of high-quality transformers. All of them need to develop production technology in order to be able to produce high-quality transformers that are recognized by customers. The Company manages production costs for maximum efficiency with the main objective of increasing competitiveness continuously and sustainably. In addition to the product development, the Company also focuses on building good relationships with all customer groups in order to maintain and continuously expand our customer base. It can be said that we are the organization that pays attention to all steps in detail according to the Company's slogan "Quality of Details".

Currently, we are the first and sole manufacturer and distributor of energy-saving transformers "Super Low Loss Transformer G.2" in Thailand. The product has been certified by the Metropolitan Electricity Authority as an innovative transformer that can reduce Loss in metal core (Loss) by more than 80% and its payback period is within the period 3-5 years. It also passed the short-circuit withstand test from CESI, Italy, so customers can be confident in products and services that are superior to conventional transformers. It can be said that QTC is the first energy-saving transformer technology leader in Thailand.

Domestic Market Shares

In 2021, the overview of the total market value was still close to that of the year 2020. Each manufacturer has the market share as follows:



Remark : Fuji-Tusco calculates its market share by combining the sales of power transformers and distribution transformers.

Tendency of Solar Business

With consecutive growth in energy business, especially green energy, our solar business has consecutively grown for 3 consecutive years with tendency of continuous growth through our distributorship of 2 types of major products including:

1. Solar Inverter, Solar Battery for Residential under HUAWEI brand from China;
2. PV Panel under LONGI and TRINA brands from China.

With the policy to support the important measures on operations for Carbon Neutrality and Net Zero GHG Emission as well as tendency of higher electricity fee due to increase of Ft, industrial sector and households become interested in investing in installation of solar energy for generating electricity. With capacity on sales and marketing management, the Company was able to be grown by 45% compared to 2021. The Company made the plan to grow continuously by increasing products for distributorship for fulfilling products in every customer group as well as expanded customer base in all regions throughout Thailand for ensuring our sustainable growth.

2.1 Competitive Strategy

1. Product Quality

The Company has the policy focusing on improving the quality of transformers to meet international standards, starting from the design to the selection of materials used in the production. Regular inspection on the quality of the materials purchased are regularly performed. The Company's transformers are designed by a complete computerized system, which enhances the capability to control any losses precisely, and engineers with long experiences in specialized design. In addition, the Company applies the state-of-the-art technologies in the production of transformers, which have been well developed and improved. In addition, main machines used in the production are imported from Germany and the product quality is inspected and controlled at every stage of production until the final stage before delivering the products to the customers. All abovementioned operations of the Company aim to ensure that the manufactured products meet the standards and requirements of the customers. It can be seen from the fact that the Company has been certified by ISO 9001: 2015 for its quality and the Company's all sizes of transformers have been certified for industrial products according to TIS 384-2543, including all electrical systems with the demands available in the market. In addition, the Company's all sizes of transformers have been tested and certified for short-circuit withstand from CESI, Italy, and the transformer with 167 KVA is certified by KEMA, the Netherlands, for the short-circuit withstand. Both institutions are world-renowned testing laboratories that can greatly verify the quality and the strength of the windings and the internal structures of the transformers.



2. Rapidness and Reliability of Product Delivery

On-time delivery is another important factor that customers consider when making a purchase order from each manufacturer. Mostly, buyers will determine a clear and definite deadline for goods delivery, especially customers generating and distributing electricity in the state-enterprise sector or customers who are project contractors. If the Company is unable to deliver the products within the specified period, it will affect the customer's projects to be delayed and the Company may pay penalties depending on the agreement between the Company and each customer. Therefore, it is the main policy of the Company to deliver products on time in order to create customer satisfaction, which will help the Company gain reliability from customers. As a result, customers will continue using the services of the Company or introduce new customers to the Company.

3. Effective Production Cost Management

The Company pays attention to the production cost management, which is the major expenditure affecting its profitability and competitiveness. This includes the selection of materials by an expert team selecting manufacturers and/or suppliers of materials who must pass the inspection of the production process to ensure the quality standards of materials and reduce the loss of production resulting from the use of non-conforming materials. In addition, the Company has implemented an ERP system in planning the purchase of materials, which will help control the quantity of materials to be at the appropriate and sufficient level to meet the demand of the production of the products, because the ERP system will link information from all departments by receiving purchase orders from customers. The system will then process such purchase order information in order to plan the production and the purchase of materials.

In addition, the Company has developed production processes and production technology that will help reduce production costs. In the meantime, the Company still maintains the quality of the products very well, for example:

- Application of Wound Core Technology for Iron Core Production: Application of such technology will reduce the consumption amount of silicon steel and the loss of silicon steel, resulting in the decrease in lower overall production costs.
- Seeking for alternative materials to increase options and effectively manage the Company's cost management, such as using copper foil in replace of paper-wrapped flat wire as a material for winding low-voltage coils, etc.

However, the selection of material will mainly depend on the properties of the transformers as specified by the customer.

4. Provision of Personnel with Experience and Expertise in Transformer Industry

As the Company has a team of executives, engineers, and employees with knowledge, experiences, and expertise for over 47 years in the transformer industry who has been trained by leading international transformer manufacturers in Germany and Japan for a long time, the Company is able to develop design technologies and improve the production process for high efficiency with state-of-the-art machines and reduce the production processes. This will result in the decrease in production costs of the Company and increase its competitiveness with other competitors in the industry very well. Moreover, the Company's sales team has experiences in sales and marketing, so they intensively understand customer needs and transformer market situations and are able to establish different strategies that are suitable for each situation.

5. Cooperation with Business Partners and Creation of Good Relationship with Distributors

In 2022, the Company's revenue from transformer sales was approximately 17.80% of the revenue from the total sales. It derived from sales through domestic and international distributors. As at December 31, 2022, the Company had 5 domestic distributors and 8 international distributors in 4 countries, namely Malaysia, Australia, South Africa, and Italy. Consequently, the Company focuses on maintaining and developing good relationships with distributor continuously, including the cooperation between the Company and distributors to exchange information for using in the development and improvement of the quality of the Company's products and services unceasingly. As a result, the Company is able to develop products to meet the needs of customers very well.

6. After-Sales Service

The Company's after-sales service is provided by technicians who have expertise in transformers. They are available to provide consultation and advices on any solutions for customers 24 hours a day. Such service does not only give customers an impression, but also makes the Company aware of problems and defects caused by the products directly from the customer. In addition, such defects can be applied to improve and develop the Company's products to have quality and fully meet the needs of customers. Since the Company's transformer products are of high quality, they are the testament to the reliability of the products with 2 years quality guarantee.

2.2. Type of Customer

The Company's customers can be categorized into 2 main groups as follows:

1. Domestic Customer

The Company's domestic customer can be classified into 4 types as follows:

1.1 Government and state-enterprise customer

The government and state-enterprise customer group consists of main customers who are state-enterprise electricity generators and distributors, such as the Provincial Electricity Authority (PEA), the Metropolitan Electricity Authority (MEA), the Electricity Generating Authority of Thailand (EGAT), and other government and state-enterprise customers, such as the Ministry of Public Health, Department of Public Works and Town and Country Planning, the Royal Irrigation Department, etc.

1.2 Project contractor

This group of customers is a project contractor ranging from small contractors to large contractors. This type of customer includes Power Line Engineering (Public) Company Limited, Italian Thai Development (Public) Company Limited, Demco (Public) Company Limited, etc.

1.3 Distributor

The distributor will purchase the Company's products to resell to customers (End User). The Company has 6 domestic distributors. Each distributor is responsible for selling transformers and providing services in the specified area, which will help the Company perform the marketing and provide services thoroughly that cover more areas.

1.4 Project owner or industrial plant

This type of customer will purchase the Company's transformers for using in plants or buildings, such as Advance Paper Mill Company Limited, True Universal Convergence Company Limited, and Betagro (Public) Company Limited, etc.

2. International Customer

2.1 Distributor

Currently, the Company has 8 international distributors covering sales of transformers in more than 30 countries. Most of the Company's export revenue derived from the sales through distributors, representing 15.91%.

2.2 Other customers

Other customer groups include project contractors, trading firms purchasing transformers from the Company for reselling to customers (End User) in any industries, such as customers in the paper industry, petrochemical industry, palm oil industry, textile industry electronics industry, etc.

Table of Proportion of Revenue from Sales of Transformers Classified by Type of Customer

Type of Customer	Year 2020		Year 2021		Year 2022	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Revenue from domestic sales						
(1) Government agencies and state enterprises	207.15	28.00	115.07	15.53	150.68	19.89
(2) Distributor	12.17	1.64	15.53	2.10	14.31	1.89
(3) Private sector	248.52	33.59	292.87	39.53	312.89	41.30
Total revenue from domestic sales	467.84	63.23	423.47	57.16	477.88	63.08
Revenue from international sales						
(1) Distributor	116.77	15.78	94.91	12.81	120.49	15.91
(2) Private sector	155.32	20.99	222.46	30.03	159.16	21.01
Total revenue from international sales	272.09	36.77	317.37	42.84	279.65	36.92
Total revenue from sales	739.94	100.00	740.84	100.00	757.53	100.00

2.3 Pricing Policy

The Company has the policy to determine the appropriate selling price based on the Cost Plus Margin which varies according to the type of customer. The competitive situation of each domestic and international market is taken into account. Regarding the acceptance of the Company's products of each customer group, it will be determined by the quality of the product and the efficient after-sales services.

2.4 Sales and Distribution Channels

Details of the distribution channels of the Company can be divided as follows:

1. Sales by means of Auction

The project auction by means of bidding is the main distribution channel for customers who are state-enterprise electricity generators and distributors. The bidding process starts from the purchase of bidding form. Afterwards, the Company will study and analyze the details of the transformers in order to prepare documents and calculate the price offered in the submission of bidding envelope. Documents used for submitting the bidding envelope are divided into 2 parts, which are the document specifying the qualifications of the bidder and the technical document. The Company is only eligible to participate in the bid after passing the preliminary qualification. To submit a bidding envelope, the Company must deposit a Bid Bond which its value is generally around 5-10% of the value of the bid project. When the Company wins the auction, a sales and purchase contract must be made in the specified form and period. The performance bond shall be deposited, which its value is generally 10% of the value of the bid project.

2. Sales through Distributors

To appoint domestic and international distributors, the Company considers the business expertise, market potential, local experiences, financial position, and readiness of distributors. The written agreement of distributor shall be made. Distributor is responsible for performing the marketing for the distribution of the Company's transformers in clearly designated sales areas and providing services and solutions to customers purchasing the Company's transformers.

As at December 31, 2022, the Company had 5 domestic distributors and 8 international distributors covering sales areas in more than 30 countries.

3. Direct Sales to Customers

The Company's marketing officers and / or sales officers will contact the customer directly. This distribution channel relies on the relationship of executives to build the distribution channel continuously in order to present and provide information about the products to the customers and allow customers to visit the Company's factories. Customers in this channel include project contractors, project architect, or customers who are direct end users, such as industrial plants, etc.

3 Production Sector

3.1 Production

The Company's factory is located at No. 149 Moo 2, Pluak Daeng-Huai Prap Road, Map Yang Phon Sub-district, Pluak Daeng District, Rayong Province, on an area of 32 Rai. Most of the transformers are made to order based on customers' requirements. The Company has the policy to manufacture transformers to meet customers' requirements by mainly focusing on quality and standards. State-of-the-art design and manufacturing technologies are applied, including main machines used in production, such as steel slitting machine, steel cutting machine, coil winding machine, heating oven, etc. These machines are imported from Germany and leading countries. Transformer testing process is in accordance with international standards and is controlled by a computer system to increase competitiveness and support the expansion of the business in the future.

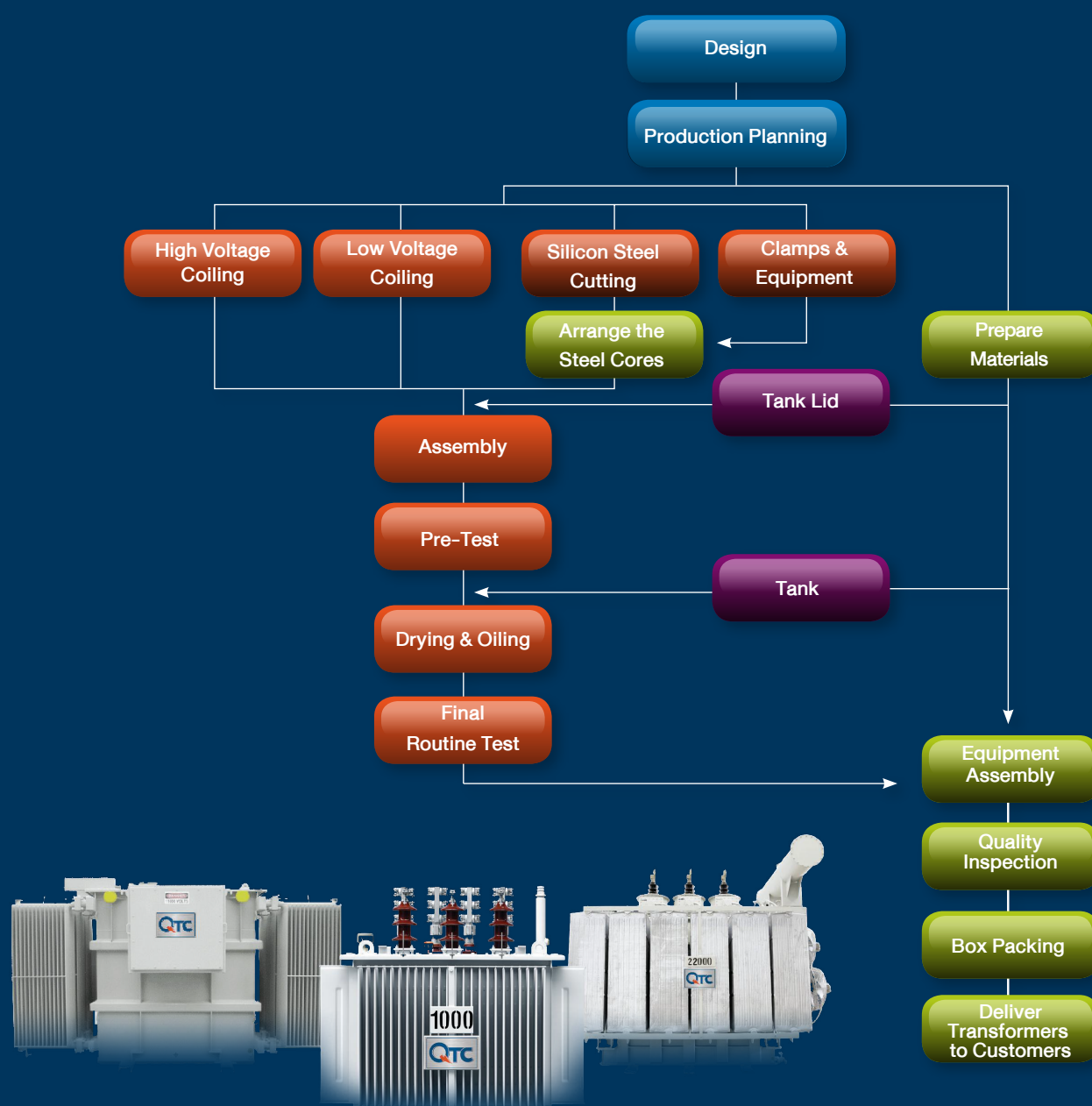
In 2022, the Company is still committed to applying the TQM system to improve production processes and production planning continuously. The main goal is to reduce the production period in order to increase production volumes and adjust production processes to create a line balance and reduce losses, such as waiting time, and overproduction, etc. However, the Company focuses on the full and efficient use of capacity and begins to use the production order system and the real-time production hour reports to connect to the information from the Company's ERP system and use such information to manage and monitor operations in the production process. In addition, it can submit information, such as production volume, working time, to the ERP system to reduce errors from reporting, reduce redundancy, and reduce paper usage.

3.2 Capacity

	2018	2019	2020	2021	2022
Capacity of Plants (KVA)	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
Power Generation Volume (KVA)	1,490,595	1,206,278	1,218,528	1,256,785	1,099,393
Capacity Utilization Rate (%)	82.81	67.02	67.70	69.82	61.08

In 2022, the Company's power generation volume increased by 12.52% from the year 2021.

3.3 Production and Production Process



The Company's distribution transformer production process is as follows:

1. Design

The Company's transformers are made to order based on customers' purchase orders. The transformers are designed by using a complete and state-of-the-art computer program with high accuracy and qualified and capable engineers with extensive design experience to ensure that the results meet the customers' specifications and purpose of use. It can be displayed as an outline drawing immediately.

2. Production Planning and Equipment Preparation

The customer's transformer purchase order information will be entered into the ERP system and used to plan the purchase of materials and equipment, including the production. Regarding the planning, the production plan will be updated so that the products can be manufactured and delivered on time as required by customers. This requires close cooperation among the Sales Department, the Production Department, and the Procurement Department.

3. Silicon Steel Cutting and Steel Core Arrangement

The Company uses a silicon steel cutting machine from Germany which is controlled by a computer system, making it possible to cut steel quickly and precisely. The computer will calculate the drilling locations of the steel core and cut the steel at the same time, so the cut silicon steel core still retains its full electrical properties. The silicon sheet will then be cut to shape and sent to the steel arranging section. For the steel arrangement, the steel pieces will be placed in overlapping levels (Step-Lap) using a stacking table. Such step-lap method results in no-load loss and the reduction of exciting current of the steel cores, which will reduce the transformer's noise level and costs for the loss values.

4. Low Voltage and High Voltage Coil Winding

The Company uses copper foil as the material used for winding the low-voltage coil instead of using the conventional paper-insulated flat wires. As a result, the transformer provides the maximum resistance to power surges and short circuits because the copper foil has better current distribution properties. In addition, the long layer method is applied to wind the high-voltage coil by using the High Voltage Winding Machine that can control the tension and the coil arrangement 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 transformer.

5. Assembly of Coils and Steel Cores

This step takes place when the coils are assembled to the steel cores. The low-voltage coil is assembled and attached to the steel core and the high-voltage coil is placed on top of the outer part of the low-voltage coil. Afterwards, the upper yoke is assembled and the tank cover, bushing, and tap changer are installed, and the internal wiring is then connected according to the designed drawing.

6. Pre-Test

Once the steel core and the low-voltage and high-voltage coils are assembled in the tank, the Testing Department will then perform the pre-test of transformers as follows:

- Measurement of Winding Resistance
- Measurement of Turn Ratio
- Inspection of Polarity or Vector Group
- Megger Test

7. Drying and Oil Filling

For the drying to remove moisture from transformers, the Company uses a modern vacuum oven controlled by a computer system from Germany. Furthermore, the Company is the only company in Southeast Asia that uses Electric Low Frequency Heating technology to remove moisture from the transformer by directly delivering low-frequency currents to the coils of the transformer under the vacuum condition, 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 to the inside, but it is unable to remove moisture from the innermost part. In addition, the Company also applies technology to fill the transformer oil in a vacuum oven, allowing the oil to efficiently infiltrate the insulation system. It can prevent 100% of moisture from coming in to contact with the oil inside the transformer, which effectively extends the transformer's lifespan.

8. Routine Test

After going through all procedures, all transformers will be required to go through the routine test. The Company's testing equipment is controlled by the computer system and calibrated regularly for precision. As a result, the test results are accurate and precise and can be reported immediately. The testing list consists of:

- Measurement of winding resistance
- Measurement of voltage ratio and check of phase displacement
- Measurement of short circuit impedance and load loss
- Measurement of no-load loss and current
- Separate source AC withstand voltage test
- Short-duration induced AC withstand voltage test
- Measurement of insulation resistance
- Oil dielectric test
- Leakage test

3.4 Procurement of Materials

The main materials used in the manufacturing of the Company's transformers are silicon steel, enameled round wires, transformer tank unit, copper foil, and transformer oil. The Company purchases such materials from both domestic and international manufacturers and/or suppliers. Accordingly, the Company has the policy to purchase materials by considering the following factors.

1. Quality of materials

Since the Company's main policy emphasizes on the product quality, the Company focuses on the procurement of quality materials from potential manufacturers or suppliers that can fully and punctually deliver quality materials according to specifications. Accordingly, the Company prepares an approved vendor list for screening qualified manufacturers and suppliers. Moreover, the Company has the process to test the quality of materials and visits and inspects factories of new manufacturers before approving them to be the manufacturers or suppliers of the Company. The Company also reviews the evaluation results every 6 months based on the quality and the record of material deliveries. Additionally, the Quality Assurance Unit (QA) conducts a random inspection of materials every time a vendor delivers materials in order to ensure the quality of materials used in the production process of the Company.

2. Material Delivery Period

The delivery period for domestic purchases of materials is generally 15-30 days, depending on the type of materials. Meanwhile, in purchasing raw materials from abroad, the company has to spare for transportation time, as the crisis of container shortages and the decline in the number of shipping vessels have affected the delivery time of raw materials by 15-30 days, depending on the country of purchase. Therefore, in most cases, if it is general material or domestic manufacturers or suppliers can supply materials with similar quality to those offered by international manufacturers or suppliers or meet the quality requirements of the Company, e.g., enameled round wires, paper-wrapped flat wire, enameled flat wires, and other transformer accessories, the Company will purchase such materials from domestic sources because the delivery period and it is more convenient and efficient to manage the inventory.

3. Price of Material and Trend of Material Price

In 2022, raw material prices have continued to rise, especially silicon steel, copper as well as hot-rolled and cold-rolled steel used for body fabrication are commodities with prices that fluctuate based on prices in the global market. Therefore, regarding each lot of material purchase, the Company will consider the quantity of materials to be purchased and suitable delivery period. The Company closely monitors changes and trends of material prices to effectively manage its costs.

4. Exchange Rate

As the Company purchases 18% of all materials from foreign countries, the Company closely monitors changes in the exchange rates of important financial currencies and appropriately enters into a FX forward contract to hedge any risks from foreign exchange rate fluctuation.

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

The Company has the policy to procure materials from several manufacturers or suppliers. For each type of materials, especially silicon steel, enameled round wires, copper foil, and transformer oil, the Company purchases them from only 2-3 main manufacturers or suppliers because each manufacturer and supplier has specified minimum purchase orders based on prices and delivery period of the material.

Table of Proportion of Domestic and International Material Purchases

	Year 2020		Year 2021		Year 2022	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Domestic Material Purchases	305.78	76.9	417.71	67.91	389.40	82%
International Material Purchases	91.84	23.1	197.41	32.09	85.05	18%
Total Material Purchases	397.62	100	615.13	100	474.91	100

The Company's main materials are detailed as follows:

1. Silicon Steel

Silicon steel is an important material of transformers, accounting for 21.18% and 25.06% of the total material purchase value in 2021 and 2022, respectively. The Company mainly imports silicon steel from the Republic of South Korea and some is from Japan and China. These materials are ordered and purchased in advance on a quarterly basis. However, since there is a few manufacturers of high-quality silicon steel used for manufacturing transformers, the quantity of silicon steel manufactured is limited. Therefore, the Company has to manage the procurement sufficiently to meet the needs of usage and successfully manufacture transformers for customers on schedule.

2. Enameled Round Wires

Enameled round wires are materials used for winding high-voltage coils or high-voltage wires. Its function is to receive electrical energy from high-voltage transmission lines and convert it into magnetic energy circulating inside a steel core in order to transfer energy to the low-voltage coils. Such materials are purchased from domestic manufacturers that offer quality similar to or equivalent to materials imported from foreign countries but take a shorter delivery period. As a result, the Company can manage inventories more effectively.

3. Transformer Tank Unit

By 2022, the company's new body manufacturing plant continues to be in full capacity and added laser cutting machine cutter for replacing plasma steel cutter machine could cut steel with more thickness. It improves steel cutting edge quality, reduces grinding process, removes cutting blur. Jig Fixture and Robot are installed for body assembly before welding, replacing the use of staff, helping to control the same size of every assembled tank, allowing continuous welding by Robot, without interruption from programming. In addition, automatic body paint coating machines are being installed to control the coating evenness quality and also to reduce the time spent on the worker's chemical exposure, which is a dangerous job. It is expected to be available by the first quarter of 2022. The addition of such automated machines allows for continuity of body production, eliminating unnecessary steps, reducing wait times, enabling faster body production, increasing body production capacity, reducing ordering the transformer body from outside, reducing production costs, and meeting the need for transformers with short delivery times, and enabling quality control according to customers' requirements, resulting in increased competitiveness. However, there are also orders from a few domestic manufacturers depending on the nature and quantity of work, price and delivery time.

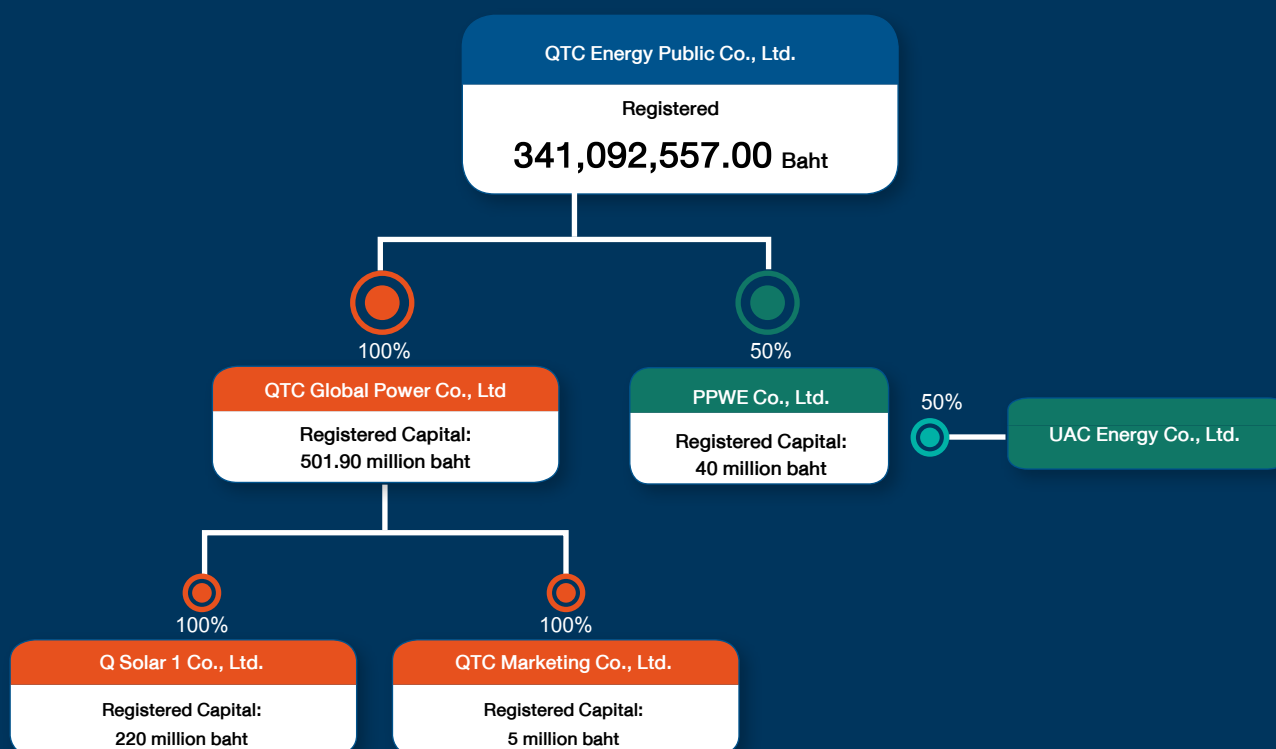
4. Transformer Oil

Transformer oil is specially produced for use in transformers and has good insulation properties. Its function is to remove heat from the inside of the transformer to the outside for ventilation. Regarding the purchase of transformer oil, the production plans are taken into account. The purchases are made at least 3 months in advance from domestic manufacturers and suppliers in order to prevent shortages of materials. The Procurement Department regularly monitors changes of oil prices in the global market to effectively manage the purchase of transformer oil.

5. Copper Foil

Copper foil is the raw material used for winding low-voltage coils or low-voltage wires. Its function is to distribute electricity from the transformer to load or connected devices. The Company purchases copper foil from both domestic and international manufacturers. With the joint development of capable domestic manufacturers, the Company is able to purchase such material from domestic manufacturers that meet international standards which helps the Company effectively manage material with appropriate quantity.

Shareholding Structure of Company Group



The Company has 1 subsidiary and 1 associated company, namely:

1. QTC Global Power Company Limited, engaging in the business of generating electricity and other types of energy, established on September 28, 2016, with the registered capital of 501.90 million Baht

QTC Global Power Company Limited (Head Office)
2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road,
Huamark, Bangkok, Bangkok, 10240
Tel: 02-3793089-92
Fax: 02-379-3097

 - 1.1 Q Solar 1 Company Limited, a subsidiary of QTC Global Power Company Limited, engaging in the business of generating solar power, established on December 28, 2009, with the registered capital of 220 million Baht

Q Solar 1 Company Limited (Branch 00001)
102, Moo 5, Bo Thong Sub-district, Kabin Buri District, Prachinburi, 25110
Tel: 02-107-0015
 - 1.2 QTC Marketing Company Limited (QTCM) a subsidiary of QTC Global Power Company Limited, engaging in the business of distributing transformer, established on November 10, 2021 with a registered capital of 5 million baht.

QTC Marketing Company Limited
2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road,
Huamark, Bangkok, Bangkok, 10240
Tel: 02-3793089-92
2. Associated company is PPWE Company Limited, engaging in the business of generating power, established on January 12, 2016, with the registered capital of 40 million Baht. The Company holds 49.98% of shares and UAC Energy Company Limited holds 49.98% of shares.

PPWE Company Limited (Head Office)
2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road,
Huamark, Bangkok, Bangkok, 10240
Tel: 02-3793089-92
Fax: 02-379-3097

Operation Allocation Policy and Investment Policy of Company Group

The Company has a policy to operate its business for sustainable growth in order to create the highest returns for all groups of stakeholders. The Company has expanded its business to cover all types of energy. The parent company mainly engages in the business of manufacturing and distributing transformers and related equipment. The subsidiary operates the power plant business to generate stable and sustainable revenues.

The Company has a policy to invest in businesses that will support and benefit the Company's business operations or businesses in an industry with a growing trend. The Company will mainly consider the rate of return received from the investment. However, the Company will comply with the regulations and notifications of the Capital Market Supervisory Board and the Stock Exchange of Thailand, including related laws. The Company will consider dispatching directors to be a representative to jointly formulate policies and/or assigning a representative to be an executive to join the management. Such consideration will depend on the appropriateness and necessity in each case.

Amount of Registered Capital and Paid-up Capital

Location of Head Office	: 2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road, Huamark, Bangkok, 10240
Location of Factory	: 149 Moo 2, Pluak Daeng-Huai Prap Road, Map Yang Phon Sub-district, Pluak Daeng District, Rayong, 21140
Company Registration Number	: 0107553000158
Registered Capital	: 341,092,557 Baht
Paid-up Capital (Ordinary Share)	: 341,092,557 Baht

Shareholder Structure and Dividend Payout Policy

The Company's top ten major shareholders as at December 26, 2022, which is the book closing date, are detailed as follows:

Top Ten Major Shareholders as at December 26, 2022			
No.	List of Shareholders	Number of Shares (Shares)	Shareholding Proportion (%)
1	1.1 Mr. Litsamy Latsavong	42,500,000	12.46
	1.2 Mr. Phoukhaokham Pravoxay	40,000,000	11.73
	A Group of Foreign Investor have shares totally	82,500,000	24.19
2	Tantanasin Group		
	2.1 Miss Sasikarn Tantanasin	54,317,855	15.92
	2.2 Mr. Patcharapong Tantanasin	1,056,800	0.31
	2.3 Mr. Poonphiphat Tantanasin	598,600	0.18
	Tantanasin Group have shares totally	55,973,255	16.41
3	Mr. Aphichat Samul	42,501,000	12.46
4	Mr. Teerapol Noppaharampha	20,000,000	5.86
5	LOXLEY PUBLIC COMPANY LIMITED	17,019,702	4.99
6	Thai NVDR Co., Ltd.	12,821,900	3.76
7	Miss Lertluck Ulist	12,340,000	3.62
8	Mr. Peeranat Tantipoj	9,000,000	2.64
9	Mr. Thiradech Cheraprakobchai	5,764,900	1.69
10	Mr. Adisak Kajornvuthidej	5,444,200	1.60
	Other Shareholders	77,727,600	22.79
	Total	341,092,557	100.00

Dividend Payout Policy

The Company has the policy to pay dividends of no less than 50% of the net profit according to separate financial statements after the deduction of corporate income taxes and the allocation of legal reserve each year. However, the Company may consider paying dividends which are different from the specified policy, depending on its operating results, financial liquidity, economic situations, and necessity to use working capital for the Company's business management and business expansion.

The subsidiary has the policy to pay dividends of no less than 90% of net profit after tax and legal reserve. The Board of Directors will consider the dividend payment by mainly taking into account the benefits for shareholders, such as saving money for future investments or repayment of loans or using it as working capital within the Company or considering the investment plans for business expansion of the Company.

Dividend Payment for the Past 3 Years

Details of dividend payment	2019	2020	2021
1. Net profit (Loss profit) (Baht)	122,178,972	178,133,880	94,246,615
2. Retained earnings (Deficits) (Baht)	54,606,015	120,053,038	126,822,928
3. Number of the company's issued shares	341,092,557	341,092,557	341,092,557
4. Amount of dividend per share			
• Interim Dividends (Baht/Shares)	0.15	0.15	-
Amount of the money (Baht)	51,163,883.55	51,163,883.55	-
• Annual Dividends (Baht/Shares)	non-payment	0.25	0.25
Amount of the money (Baht)	-	85,273,139.25	68,218,511.40
5. Total amount of dividends paid (Baht)	51,163,883.55	136,437,022.80	68,218,511.40
6. Percentage of the annual net profit (%)	93.70	71.03	72.38



2. Risk Management

2.1 Risk Management Policy and Plan

QTC Energy (Public) Company Limited is aware of the importance of good corporate management in order to drive the organization to the growth and business expansion with stability, maintain a stable financial position, and generate appropriate returns to the shareholders. As a result, the Company deems appropriate to implement a risk management system with operational frameworks and risk management procedures that are in accordance with the rules of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), which is an international standard, so that related persons have good understanding on risk management principles and apply them appropriately.

1. Ensuring that the employees at all levels shall be responsible for risk management and be aware of the risks inherent in operations in their sections and the organization and also focus on the sufficient and appropriate risk management in any aspects
2. Ensuring that all departments are responsible for assessing risks, defining risk indicators and preventive guidelines to mitigate risks or potential losses, regularly monitoring and evaluating risk management performance, including preparing risk reports according to the operational framework and risk management procedures.
3. The organizational risk management process is set out in accordance with good standards in line with international practice in order to effectively manage risks that may affect the company's operations, develop and make risk management operations throughout the organization in the same direction. The risk management system is applied as part of the decision making, strategic planning, plans and operations of the company, including focusing on achieving the set forth objectives, goals, visions, missions and strategies.
4. Ensuring when employees acknowledge or become aware of risks that may affect the Company, they must immediately report such risks to the relevant parties in order to further perform risk management.
5. Promoting, supporting, and providing knowledge and understanding on risk management processes and guidelines to executives and employees continuously in order to cultivate habits and awareness of personnel at all levels to realize the importance and the participation in the risk management of the organization to become the part of the culture leading to Value Creation
6. A review of this policy is required annually and any changes must be submitted to the Audit Committee for consideration and proposed to the Board of Directors for approval.

For more information, please visit the website, <https://qtc-energy.com/th/risk-management/>.

2.2 Risk Factors on Company's Business Operation

The Company is aware of any risk and considers and monitors the impacts of situations that possibly create risks to the Company's business operations at intervals. This is to ensure thorough and effective risk management. The Company established the Risk Management Committee and a working group in which high-level executives are involved to analyze any risk factors and assess potential risks in order to seek for adequate risk prevention or management. Furthermore, the Risk Management Committee reports the risk to the Audit Committee and the Board of Directors for acknowledgement and consideration at least every three months. The risks that are significantly influential to the Company can be summarized as follows:

1. Strategic Risk

Risk Issues	Measures and Performances
<p>Dependence on Major Customers in Transformer Business</p>	<p>This is because most income of the transformer business derives from government auctions which involve with political instability, so it affects the government expenditure budget and there are many competitors in the market which is an uncontrollable factor. The Company establishes measures to control and mitigate risks as follows:</p> <ul style="list-style-type: none"> • Providing departments and persons directly responsible for government sales work with clear roles and duties • Improving production standards and management processes to reduce costs under international quality standards with responsibility • Expanding the international market with OEM manufacturing; Currently, there are 2 countries, Australia and Japan (The brand name cannot be referred because it is a trade secret). • Appointing overseas distributors to distribute products under the brand of QTC in order to increase distribution channels • Developing the energy-saving transformer product (Super Low Loss) and Smart Transformer to make the difference and offer a new alternative to customers • Expanding customer base for transformer maintenance services • Increase sales of green electric energy product group (as the distributor) • Restructure organization to respond to various demands of customers more efficiently. <p>For 2022 operations, net profit earned from operations (of specific business) was 8.38%. See “Financial Report” and Sustainable Report in “Economics” for more information.</p>
<p>Investment in Other Businesses</p>	<p>The Company establishes the following risk preventive measures to diversify risks for investment in the energy business that are related to the transformer business through the operation of QTC Global Power Company Limited (QTCGP), a subsidiary. In addition, the energy business is the business in which most of QTC personnel do not have expertise.</p> <ul style="list-style-type: none"> • Employing additional executives and teams with specialized knowledge to manage QTCGP • Employing an external specialized consultant to study the details of the project to be invested, covering economic, social, and environmental aspects <p>For 2022 operations, The Company operated EV Charging Station Project with PPWE consisted of 4 stations:</p> <ul style="list-style-type: none"> • 2 stations were under process. • 2 stations were already opened, i.e., Caltex Sri Palang Nong Sung Gas Station and Caltex Wipat Rungrueng Gas Station. However, according to the problems of current system, they were temporary closed for maintenance.

2. Financial Risk

Risk Issues	Measures and Performances
<p>Fluctuation of Foreign Exchange Rate and Fluctuation of Material Prices</p>	<p>Regarding the production of transformers, it is necessary to import main materials from foreign countries, accounting for 60% of the value of raw materials used per year. The transformer exports accounted for 20-30% of the sales. The foreign exchange rate and the prices of materials, such as copper, silicon steel, fluctuate in line with the global economic situations and important global situations. As a result, the Company establishes risk preventive measures as follows:</p> <ul style="list-style-type: none"> • Policy on Forward Contract • Closely monitoring changes in prices of main materials, such as copper, silicon steel, and transformer oil, and make a reservation for the purchase of materials in advance if there is a commercial advantage <p>For 2022 operations, Bath depreciation had been consecutively occurred since the beginning of the year due to COVID-19 Pandemic. However, bath appreciation was occurred at the end of the year therefore the Company could earn profit from currency exchange rate in the amount of 2.48 million baht and profit from currency exchange rate-Forward Contract ion the amount of 0.23 million baht.</p>
<p>Risk from Debtor Management</p>	<p>Due to the current commercial competition, credit is required to be provided to customers for a competitive advantage. In the meantime, if the customer obtaining the credit from the Company lacks financial discipline and fails to comply with debt settlement agreements, it will cause an outstanding debt. As a result, the Company is unable to receive money on time as specified, affecting the financial liquidity management. The Company therefore establishes the control and preventive measures as follows:</p> <ul style="list-style-type: none"> • Reserved allowance for doubtful accounts (as accounting expense recorded under administrative expenses) or measure expected credit loss through Simplified Approach during duration of indebtedness and recognize losses from recognition of account receivables and contract assets. • Establishing the clear rules for assessing the credit provision for customers; • In the case that the customer does not meet the credit provision criteria, products must be sold in cash. • Had the policy on debt acceleration and collection of outstanding debts that were over than 1 year by making contract on debt payment by installments. <p>For 2022 operations, The company was able to control collection period to be 60 days that were consecutively reduced from 2021 and 2020. Net amount of debts of account receivables (before deducting Expected Credit Loss) in 2022 was 205.55 million baht that was increased from 2021, 166.43 million baht, by 23.51%. The amount of debts of debtors with outstanding payment over than 1 year was increased from 2021 in the amount of 7.76 million baht and Expected Credit Loss was increased from 2021 in the amount of 1.58 million baht.</p> <p>According to economic condition affected by COVID-19 pandemic, it affected to liquidity of best customers hindering payment of short-term debts. In addition, debtors with outstanding payment over than 1 year were unable to pay for debts by installments as defined in the agreements made with the Company. Moreover, number of debtors with outstanding payment over than 1 year was increased in 2022 due to effects of economic condition and some debtors had to close down their businesses.</p> <p>However, the company still accelerated debt collection from debtors with outstanding payment over than 1 year until the Company was able to collect those debts in 2022 in the amount of 2.58 million baht.</p>

3. Operational Risk

Risk Issues	Measures and Performances
Employee Health & Safety	<p>Employee working conditions are related to use of instruments, machinery, chemicals and work procedures. In addition, the factory coexisted with the community for over 20 years. Accidents may occur with effects on employees and communities. Therefore, the Company specified the following preventive measures:</p> <ul style="list-style-type: none"> • Safety management with ISO 45001 standards. • Appropriate work safety and PPE standard specifications and periodic machine maintenance. • Electrical system and building examination and certification by outside experts. • Automatic fire alarm system installation. • Fire suppression and fire evacuation drills. • Safety awareness building with KYT activities. • Safety week activities to provide knowledge and raise awareness among employees and communities. • Safety committees (SCs) elected by employee representatives consider work safety guidelines. • Health promotion projects to reduce, abstain and quit smoking and drinking along with vaccination benefits based on epidemic situations. <p>For 2022 operations, The number of accidents decreased from 2021 by 28%, but did not meet the Zero Accident goal. Operation details and preventive measures can be found in the Sustainable Report - "Safety and Health Issues of Employees".</p>
Departures of Engineers and Skilled Technicians in Significant Positions	<p>Because the factory is located in an industrial zone with significant labor competition from the level of manual laborers to professional employees, the Company outlined the following control and prevention measures:</p> <ul style="list-style-type: none"> • Appropriate employee wage and benefit restructuring by comparing with the same industry. • Modify assessment systems and pay fair wages. • Individual personnel development along IDP career paths. • Prepare key KM of the Company and create an online center of learning. • Create organization happiness following the Happy 8 guideline. <p>For 2022 operations, Turnover rate of skillful employees was 1.53% and turnover rate of all employees was 11.24% that was decreased from 2021 by 8.45%.</p>
Dependence on Main Executives in Business Operations	<p>The Company's management is performed mostly by leaders with special experience in transformers, which is part of the product's brand that creates confidence among stakeholders. Any changes in the future may have effects on confidence of key stakeholders such as shareholders and employees. Therefore, the Company has the following preventive measures:</p> <ul style="list-style-type: none"> • Succession plan preparations and successor selection. • Promotion of leadership and successor skill development along the career path. • Marketing promotion using product brands and factory standards to lead. <p>For 2022 operations, The Company sent personnel in important levels to participate in some training for developing necessary skills, knowledge, and abilities under the guidelines for succession plan. See more details in "Career path Development & Succession Plan" of Sustainable Report.</p>

Risk Issues	Measures and Performances
Hazardous Waste and Scrap Material Management	<p>In the manufacturing process and transformer service provision, the Company has scrap materials from manufacturing and hazardous waste requiring controlled disposal in compliance with Ministry of Industry notifications. Disposal is performed through disposal companies that follow methods specified by the Department of Industrial Works. However, the Company may have risks from disposal companies' irresponsibility and failure to comply with conditions, causing environmental impacts. Therefore, the Company specified the following preventive measures:</p> <ul style="list-style-type: none"> • The Company petitioned for approval to register disposal companies from the Department of Industrial Works by type of waste. • Teams evaluate areas and disposal methods in disposal companies' areas. • The Company controls transportation and containment to prevent spills and leakages before leaving the factory. • The Company uses the 3Rs principle to sort waste that can be sold and waste that cannot be sold. • The Company organizes the Zero Landfill project to deliver landfill waste to power plants. <p>For 2022 operations, the Company was able to bring 100% of landfill waste into the electricity generation process with 100% zero landfill and no complaints on environmental impact from the process of managing hazardous waste and leftover materials from production. Performance can be followed-up from Sustainability Report 2022 under "Waste and Leftover Materials from Production".</p>

4. Compliance Risk

Risk Issues	Measures and Performances
Violation of Law	<p>The transformer manufacturing business is an industrial factory that manufactures, repairs, distributes and provides services for domestic and foreign government agencies and private organizations. Therefore, the Company must comply with many laws and specifications. Laws or specifications change with time. To prevent business mistakes, the Company specified the following preventive measures:</p> <ul style="list-style-type: none"> • The Company specified persons responsible for monitoring, collecting and assessing consistency of laws and trade specifications from appropriate channels such as the Royal Thai Government Gazette and notifications. • The Company prepared work steps, assessed consistency of the law and specifications as practice guidelines covering the entire organization. • The Document Control unit prepared a registry of associated laws and trade specifications in addition to reporting to the Risk Management Committee on a quarterly basis. <p>For 2022 operations, There was no issue of violation of the law, but only the issue of reconciliation, which was a list of legal revisions and a period of time for legal action and has a support plan.</p>

Risk Issues	Measures and Performances
Corruption	<p>The transformer manufacturing business is an industrial factory with manufacturing, repair, distribution and services. The Company's work must be under specifications and laws. In addition, the Company contacts, coordinates, pays fees, pays taxes and trades with government agencies, which may create gaps for corruption. The Company specified the following control and prevention measures:</p> <ul style="list-style-type: none"> • The Company specified anti-corruption policies and related guidelines to be used in the Company and every subsidiary. • The Company trains and educates employees by specifying necessary courses in trainings. Employees are required to pass training (100%) and have understanding assessment results higher than 80%. • The Company became a member of the Thailand Collective Action against Corruption (CAC). <p>For 2022 operations, There was no event or complaint or whistleblowing on any offence.</p>
Human Rights and Personal Data Protection	<p>Nature of business of QTC Energy was consisted of several subsidiaries and business activities consisted of production sector, reselling, and investment in several projects. Each business activity could build business value chain from upstream to midstream and downstream with many stakeholders in this value chain. With organization's vision representing environmental and social responsibilities with Good Governance and demand to lead organization to World Class, the Company emphasized on social issues that were being interested and concerned by people throughout the world, i.e., "human rights" and "personal data protection". The Company evaluated on risks and effects thoroughly with establishment of the following control and preventive measures:</p> <ul style="list-style-type: none"> • Declare Human Rights Policy and Personal Data Protection Policy • Establish the guidelines that were consistent with Human Rights Policy and Personal Data Protection Policy with strict enforcement. • Provide trainings to related employees and stakeholders. • Inspect Human Rights Due Diligence (HRDD) in business value chain based on United Nations Guiding Principles on Business and Human Rights with risk assessment and effects on human rights in order to protect the Company from being accused to participate in any infringement that was possibly occurred in the event that the Company had already perceived or should be perceive that any business partner infringed human rights conveying that the Company indirectly participate in infringement against human rights. <p>For operations in 2022, there was no violation against any human rights and no leakage of personal information. See more details in Sustainable Report- "Employment and Human Rights" and "Personal Data Protection Act: PDPA"</p>

5. Business continuity management risk

Risk Issues	Measures and Performances
Emergencies	<p>Emergencies are risks from disasters such as flooding at the Bangkok main office, fires at the main office or the Rayong factory or any subsidiary. The Company laid down the following preventive measures and emergency preparations:</p> <ul style="list-style-type: none"> • The Company prepares fire prevention and suppression plans and holds drills every year. • The Company prepares data recovery plans and practices plans on an annual basis. • The Company purchases insurance policies with coverage of risks. <p>For 2022 operations, The Company had no emergencies with effects causing business interruptions in the Company and subsidiaries. Furthermore, the Company followed measures strictly and consistently.</p>

Risk Issues	Measures and Performances
Cyber Threats	<p>Cyber threats are potential security threats to business operations and damage critical business data. The Company has established an information policy and prepared risk prevention measures with conciseness and prudence, educated employees and prepared a contingency plan in case of an emergency.</p> <p>For 2022 operations, Employee comprehension is tested. Phishing mail is sent out to catch trapped employees and get them retrained. Implementation is 100% complete. During 2022, there was no phishing mail from outside that could access the system.</p>
The COVID-19 Pandemic	<p>Activities in the business of the Company and subsidiaries range from sales, procurement, production, delivery, marketing communication, customer support, meetings with internal and external agencies, etc. These activities have need for face-to-face communication or coordination with outside persons or groups such as customers, deliverers, contractors, mass media, etc., There may be a chance of contracting COVID-19. Therefore, the company has comprehensive preventive and corrective measures as follows.</p> <ul style="list-style-type: none"> • The Company created the COVID-19 Crisis Management Committee with the Managing Director as the Chairman and specified necessary crisis management roles and duties. • The Company prepared infection prevention measures with coverage of all stakeholder groups in the Company and every subsidiary by considering advisories from the Department of Disease Control, the Central COVID-19 Operation Center and the Provincial COVID-19 Operation Center to screen, use face masks, use social distancing, work at home, etc. The Company made specifications in a manual. • The Company communicated and created understanding among employees along with providing knowledge about COVID-19 • Encourage employees to get vaccinated against COVID-19 thoroughly by providing additional alternative vaccines • The Company prepared measures to support employees such as by helping with lunch costs, distributing face masks, hand sanitizer gel, providing transportation for employees from home to the work place in the case of employees who use public transportation and paying for internet costs of employees who work from home because employees were impacted by preventive measures specified by the Company, which may lead to limitation of employee rights. • The Company communicated and created understanding with customers, suppliers, contractors and outside persons regarding the Company's infection prevention measures along with providing support in using communication technology in place of face-to-face meetings. • The Company added more marketing communication content in online media to reach every customer group rather than holding face-to-face meetings. • The Company prepared emergency plans to cover every work process if the Company needs to stop the business temporarily. • A practical manual during the COVID-19 crisis can be downloaded at https://qtc-energy.com/th/risk-management/ <p>For 2022 operations, The number of employees with COVID-19 infection was increased but there was no severe case. The company was able to control the situation efficiently and COVID-19 Crisis Management Committee was already terminated and switched this risky crisis to be normal condition in November 2022. Practices must meet with defined standard.</p>

3. Driving Business towards Sustainability

Business sustainability does not only depend on the competitiveness and profitability of a business, but there are also other related factors inevitably, such as customer expectations changing in line with globalization, awareness of the connection between the investors' financial operating results and performances emphasizing on environment, society, and governance (ESG), expectations of stakeholders in the society on product brands to demonstrate their corporate social and environmental responsibility with sincere respect for human rights, expectation of employees in the organization on the organization to perform fair labor treatment, realize the value of labor, and have good ethics, etc. These are important factors that challenges the survival of a sustainable business.

QTC realizes the risks and opportunities arising from those changing factors and thus focuses on the development of the organization towards sustainability by integrating and driving economic processes along with environmental and social responsibility and the good governance under effective risk management. Driving organization towards sustainability of QTC was reported in the 2022 Sustainability Report.



<https://investor.qtc-energy.com/th/downloads/sustainability-reports>

4. Management Discussion and Analysis (MD&A)



1 Summary of Audit Report

- (A) The financial statements for the year 2020 were audited by Mr. Narin Juramongkon, Certified Public Accountant No. 8593, from Grant Thornton Company Limited.

The auditor audited the Company's financial statement and expressed the opinion that the Company's statement of financial position as at December 31, 2020, and its operating results for the year then ended present fairly, in all material respects, in accordance with Thai Financial Reporting Standards.

- (B) The financial statements for the year 2021 were audited by Miss Kanyanat Sriratchatchaval, Certified Public Accountant No. 6549, from Grant Thornton Company Limited.

The auditor audited the Company's financial statement and expressed the opinion that the Company's statement of financial position as at December 31, 2021, and its operating results for the year then ended present fairly, in all material respects, in accordance with Thai Financial Reporting Standards.

- (C) The financial statements for the year 2022 were audited by Ms. Rosaporn Decharkom, Certified Public Accountant No. 5659, from EY Office Limited.

The auditor audited the Company's financial statement and expressed the opinion that the Company's statement of financial position as at December 31, 2022, and its operating results for the year then ended present fairly, in all material respects, in accordance with Thai Financial Reporting Standards.

2 Table of Summary of Financial Position and Operating Results

Statement of Financial Position

	Year 2020 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement - Restated)		Year 2022 (Consolidated Financial Statement)	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Assets								
Current Assets								
Cash and Cash Equivalents	152.32	7.87	347.43	17.49	347.43	18.43	611.79	33.12
Temporary Investments	613.20	31.68	350.00	17.62	350.00	18.56	0.18	0.01
Trade Receivables								
- General Receivables – Net	179.68	9.28	159.54	8.03	159.54	8.46	190.63	10.32
- Related Companies Other Receivables	1.31	0.07	-	-	-	-	-	-
General Receivables								
- Other Receivables	0.64	0.03	0.60	0.03	0.60	0.03	1.22	0.07
- Related Companies	0.45	0.02	-	-	-	-	-	-
Inventory– Net	166.54	8.60	322.21	16.22	322.21	17.09	347.05	18.79
VAT Refundable	20.63	1.07	36.22	1.82	36.22	1.92	41.03	2.22
Prepaid Expenses	6.31	0.33	4.23	0.21	4.23	0.22	8.92	0.48
Other Current Assets	15.06	0.78	11.78	0.59	11.78	0.62	13.45	0.73
Total Current Assets	1,156.14	59.73	1,232.01	62.01	1,232.01	65.34	1,214.27	65.74
Non-Current Assets								
Restricted Bank Deposits	0.10	0.01	0.10	0.01	0.10	0.01	3.10	0.17
Loans Provided to Related Companies – Net	-	-	-	-	-	-	-	-
Investments in Associated Companies – Net	-	-	7.36	0.37	7.36	0.39	6.85	0.37
Property, Plant and Equipment - Net	633.32	32.72	616.75	31.04	544.84	28.89	517.80	28.03
Rights of Use Assets - Net	13.11	0.68	11.84	0.60	11.84	0.63	10.47	0.57
Computer Software Power Grid Connection Service	5.96	0.31	5.52	0.28	5.52	0.29	4.28	0.23
Fees – Net	3.60	0.19	3.27	0.16	2.50	0.13	2.21	0.12
Electricity Sales Contract – Net	92.06	4.76	83.64	4.21	63.06	3.34	55.55	3.01
Deferred Income Tax Assets	17.32	0.89	13.94	0.70	5.87	0.31	5.32	0.29
Non-Current Assets	14.05	0.73	12.50	0.63	12.50	0.66	27.27	1.48
Total Non-Current Assets	779.52	40.27	754.92	37.99	653.59	34.66	632.85	34.26
Total Assets	1,935.66	100.00	1,986.93	100.00	1,885.60	100.00	1,847.12	100.00
Liabilities and Shareholders' Equity								
Current Liabilities								
Trade Payables	104.83	5.42	121.24	6.10	121.24	6.43	167.02	9.04
Other Payables	12.57	0.65	19.98	1.01	19.98	1.06	6.12	0.33
Hire-purchase payables due								
Within 1 year	4.19	0.22	3.78	0.19	3.78	0.20	4.54	0.25
Employee Benefit Obligation Liabilities	1.21	0.06	0.17	0.01	0.17	0.01	1.14	0.06
Income Tax Payable	14.19	0.73	12.29	0.62	12.29	0.65	-	-
Accrued Expenses	18.08	0.93	18.45	0.93	18.45	0.98	17.10	0.93
Security Deposits for Goods Received	42.24	2.18	14.99	0.75	14.99	0.79	19.42	1.05
Other Current Liabilities	21.86	1.13	31.84	1.60	31.84	1.69	12.89	0.70
Total Current Liabilities	219.17	11.32	222.74	11.21	222.74	11.81	228.23	12.36

Statement of Financial Position (continued)

	Year 2020 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement - Restated)		Year 2022 (Consolidated Financial Statement)	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
<i>Non-Current Liabilities</i>								
Long-Term Loans – Net	-	-	-	-	-	-	-	-
Payables under Hire Purchase Contract – Net	7.59	0.39	6.45	0.32	6.45	0.34	4.52	0.24
Employee Benefit Obligation Liabilities								
Employee	16.72	0.86	16.31	0.82	16.31	0.86	15.75	0.85
Other non-current liabilities			5.47	0.28	5.47	0.29	15.37	0.83
<i>Total Non-Current Liabilities</i>	24.31	1.25	28.23	1.42	28.23	1.50	35.64	1.93
Total Liabilities	243.48	12.57	250.97	12.63	250.97	13.31	263.87	14.29
<u>Shareholders' Equity</u>								
Capital Stock								
Registered Capital	341.09	17.62	341.09	17.17	341.09	18.09	341.09	18.47
Issued and Paid-up Capital	341.09	17.62	341.09	17.17	341.09	18.09	341.09	18.47
Premium on Ordinary Shares	1,178.87	60.90	1,136.57	57.20	1,136.57	60.28	1,136.57	61.53
Share premium on business combination	-	-	42.30	2.13	42.30	2.24	42.30	2.29
Retained Earnings								
Allocated – Legal Reserve	31.78	1.64	34.11	1.72	34.11	1.81	34.11	1.85
Unallocated	141.72	7.32	181.89	9.15	80.56	4.27	29.18	1.58
Other Components of Shareholders' Equity	(2.88)	(0.15)	-	-	-	-	-	-
Total Shareholders' Equity of the Company	1,690.58	87.33	1,735.96	87.37	1,634.63	86.69	1,583.25	85.71
Noncontrolling interest in Subsidiaries	1.60	0.08	-	-	-	-	-	-
Total Shareholders' Equity	1,692.18	87.41	1,735.96	87.37	1,634.63	86.69	1,583.25	85.71
Total Liabilities and Shareholders' Equity	1,935.66	100.00	1,986.93	100.00	1,885.60	100.00	1,847.12	100.00

Comprehensive Income Statement

	Year 2020 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement - Restated)		Year 2022 (Consolidated Financial Statement)	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Revenue								
Revenue from Sale	977.25	93.93	1,130.36	95.39	1,130.36	95.39	1,170.49	94.65
Revenue from Service	42.24	4.06	41.63	3.51	41.63	3.51	45.97	3.72
Other Revenues	20.96	2.01	13.04	1.10	13.04	1.10	20.24	1.64
Total Revenues	1,040.45	100	1,185.03	100	1,185.03	100	1,236.70	100
Costs and Expenses								
Cost of Sales	(676.22)	(64.99)	(854.43)	(72.10)	(851.48)	(71.85)	(1,041.21)	(84.19)
Cost of Services	(30.25)	(2.91)	(23.94)	(2.02)	(23.94)	(2.02)	(26.86)	(2.17)
Selling and Administrative Expenses	(146.50)	(14.08)	(145.47)	(12.28)	(189.27)	(15.97)	(147.94)	(11.96)
Total Expenses	(852.97)	(81.98)	(1,023.84)	(86.40)	(1,064.69)	(89.84)	(1,216.01)	(98.32)
Profit (loss) Before Finance Cost and Income Tax	187.48	18.02	161.19	13.60	120.34	10.16	20.69	1.67
Finance Cost	(2.33)	(0.22)	(1.26)	(0.11)	(1.26)	(0.11)	(0.97)	(0.08)
Corporate Income Tax	(27.44)	(2.64)	(20.57)	(1.74)	(18.58)	(1.57)	(3.37)	(0.27)
Profit (Loss) Shares of Associated Companies under the Equity Method	(0.18)	(0.02)	(12.14)	(1.02)	(12.14)	(1.02)	(0.51)	(0.04)
Losses of Discontinued Operations	-	-	-	-	-	-	-	-
Net Profit (Loss) for the Year	157.53	15.14	127.22	10.73	88.36	7.46	15.84	1.28
Other Comprehensive Profits (Losses) for the Year								
Actuarial Losses	0.54	0.05	0.43	0.04	0.43	0.04	0.90	0.07
Exchange Differences on Translating Financial Statement	(0.39)	(0.04)	2.88	0.24	2.88	0.24	-	-
Total Comprehensive Profits (Losses) for the Year	0.15	0.01	3.31	0.28	3.31	0.28	0.90	0.07
Basic Earnings (Loss) per Share								
Net Profit (Baht per Share)	157.68	15.15	130.53	11.01	91.67	7.74	16.74	1.35
Basic Earnings (Loss) per Share								
Net Profit (Baht per Share)	0.462	-	0.373	-	0.259	-	0.046	-
Par Value (Baht)	1.00		1.00		1.00		1.00	

Statement of Cash Flow

(Unit: Million Baht)	Year 2020 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement - Restated)	Year 2022 (Consolidated Financial Statement)
<u>Cash Flow from Operating Activities</u>				
Net Profit before Income Tax	184.97	147.79	106.94	19.21
Adjustments to reconcile net profit to cash derived from operating activities				
Depreciation and Amortization	81.15	82.16	79.21	81.65
Allowance for Doubtful Accounts	(0.20)	(3.69)	(3.69)	1.58
Allowance for (Reversal of Allowances) Obsolete Inventory	1.86	0.60	0.60	1.04
Profit (Loss) from Disposal of Assets	(1.23)	(1.39)	(1.39)	(1.22)
Loss from Amortization of Assets	0.48	-	-	-
Amortize uncollectible bad debts	-	-	-	-
Profit (Loss) from Disposal of Intangible Assets	0.02	0.99	0.99	-
Unrealized Loss (Profit) from Exchange Rate	0.02	0.54	0.54	3.02
Profit from Unrealized Investment Adjustment	(1.25)	-	-	-
Profit from Sale of Temporary Investments	(1.97)	(1.80)	(1.80)	-
Reverse lease debt on contract termination	-	(0.58)	(0.58)	-
Share of Loss of Associated Companies under Equity Method	-	12.14	12.14	0.50
Allowance for Employee Benefit Obligations	1.67	1.53	1.53	1.32
Allowance for Impairment of Loans provided to Associated Companies	-	-	-	-
Allowance for Impairment of Assets (Reversing Entries)	(0.10)	(10.90)	(10.90)	-
Gain on dissolution of a subsidiary	-	(1.61)	(1.61)	-
Amortize right-of-use assets	-	0.71	0.71	-
There were some losses from impairment loss on lands, buildings and equipment, electric network connection service fee and power purchase agreement.	-	-	43.80	-
Interest Expenses	2.33	1.26	1.26	0.97
Cash Received from Operations before Changes in Operating Assets and Liabilities	267.75	227.75	227.75	108.07
Decrease (Increase) in Operating Assets				
Trade accounts receivable and contract assets	(59.14)	23.75	25.06	(35.64)
Trade Receivables – Related Companies	(0.26)	1.31	-	-
Trade Receivables – General Receivables	0.29	0.04	0.49	(0.62)
Other Receivables – Subsidiaries	(0.25)	0.45	-	-
Inventory	30.10	(156.26)	(156.26)	(25.89)
VAT Refundable	5.91	(15.60)	(15.60)	(4.81)
Prepaid Expenses	1.69	2.08	2.08	(4.68)
Other Current Assets	(1.88)	3.40	3.40	2.62
Other Non-Current Assets	(4.26)	1.56	1.56	(14.77)
Decrease (Increase) in Operating Liabilities				
Trade Payables	60.98	15.96	15.96	45.72
Other Payables	-	-	-	(21.25)
General Traders	5.12	(6.70)	(6.70)	-
Related Companies	0.33	(0.31)	(0.31)	-
Accrued Expenses	(2.74)	0.37	0.37	(1.35)
Security Deposit for Goods Received	33.13	(27.25)	(27.25)	4.44
Other Current Liabilities	(0.45)	(10.12)	(10.12)	0.97
Non-Current liabilities	-	-	-	9.90
Liabilities Paid under Employee Benefit Obligations	-	(2.79)	(2.79)	-

Statement of Cash Flow (Continued)

(Unit: Million Baht)	Year 2020 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement - Restated)	Year 2022 (Consolidated Financial Statement)
Cash Received from Operating Activities	336.32	57.64	57.64	62.71
Tax Paid	(16.97)	(18.36)	(18.36)	(20.93)
Interest Paid	(2.00)	(0.92)	(0.92)	(0.97)
Net Cash Provided by (Used in) Operating Activities	317.35	38.36	38.36	40.81
<u>Cash Flow from Investing Activities</u>				
Decrease (Increase) in Restricted Bank Deposits	21.50	-	-	(3.00)
Decrease (Increase) in Temporary Investment	(92.50)	265.00	-	-
Decrease (increase) in other current financial assets	-	-	245.49	349.82
Increase in Short-Term Loans – Associated Companies	0.10	10.90	10.90	-
Increase in Investments in Associated Companies	-	(19.50)	-	-
Cash Received from Disposal of Assets	1.25	1.76	1.76	-
Cash Received from Disposal of Intangible Assets	-	-	-	-
Payment for Purchase of Other Fixed Assets	(39.63)	(30.93)	(30.93)	(30.47)
Purchase of Computer Software	(3.02)	(2.70)	(2.69)	(0.21)
Net Cash Provided by (Used in) Investing Activities	(112.30)	224.53	224.53	316.14
<u>Cash Flow from Financing Activities</u>				
Increase (Decrease) in Overdraft and Short-Term Loans from Financial Institutes)	(77.04)	-	-	-
Long-term Loans from Banks	-	-	-	-
Repayment of Long-term Loans from Banks	(24.30)	-	-	-
Repayment of Liabilities Under Hire Purchase Contracts	(3.97)	(4.75)	(4.75)	(4.71)
Cash Received from Newly Issued Shares	-	-	-	-
Payment for Noncontrolling Newly Issued Shares Received by Subsidiaries	-	-	-	-
Cash Received from Exercise of Warrants	-	-	-	-
Cash Dividend Paid	(91.16)	(65.05)	(65.05)	(87.88)
Net Cash Provided by (Used in) Financing Activities	(196.47)	(69.80)	(69.80)	(92.59)
Difference from Translation of Foreign Currency Financial Statement of Subsidiaries	(0.49)	2.02	2.02	-
Increase (Decrease) in Cash and Cash Equivalents – Net	8.09	195.11	195.11	264.36
Cash and Cash Equivalents as at January 1	144.23	152.32	152.32	347.43
Cash and Cash Equivalents as at December 31	152.32	347.43	347.43	611.79

3 Table of Summary of Significant Financial Ratio

Item		Year 2020 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement - Restated)	Year 2022 (Consolidated Financial Statement)
<u>Liquidity Ratio</u>					
Liquidity Ratio	(Times)	5.28	5.53	5.53	5.32
Quick Ratio	(Times)	4.32	3.85	3.85	3.52
Cash Flow Liquidity Ratio	(Times)	1.51	0.17	0.17	0.18
Account Receivable Turnover Ratio	(Times)	5.51	5.91	5.91	6.10
Average Collection Period	(Days)	66.41	61.80	61.80	59.81
Inventory Turnover	(Times)	3.58	3.39	3.38	3.04
Average Inventory Period	(Days)	102.15	107.57	107.95	120.20
Payable Turnover Ratio	(Times)	5.46	5.49	5.49	3.38
Payment Period	(Days)	67.00	66.47	66.47	108.12
Cash Cycle	(Days)	101.57	102.89	103.27	71.88
<u>Profitability Ratio</u>					
Gross Profit Margin	(%)	30.70	25.05	25.30	12.20
Operating Profit Margin	(%)	18.39	13.75	10.27	1.70
Other Profit Margin	(%)	1.79	0.86	0.86	1.56
Cash to Profit Ratio	(%)	201.45	30.16	43.42	257.70
Net Profit Margin	(%)	15.14	10.74	7.46	1.28
Return on Equity	(%)	9.46	7.42	5.41	0.98
<u>Operating Efficiency Ratio</u>					
Returns on Assets	(%)	8.31	6.49	4.70	0.85
Returns on Fixed Assets	(%)	36.09	32.55	28.61	17.81
Asset Turnover	(Times)	0.55	0.60	0.63	0.66
<u>Financial Policy Ratio</u>					
Debt to Equity Ratio	(Times)	0.14	0.14	0.15	0.17
Interest Coverage Ratio	(Times)	115.29	193.28	158.49	105.55
Debt Service Coverage Ratio	(Times)	1.23	0.31	0.31	0.28
Dividend Payout Ratio	(%)	57.87	51.14	73.63	554.97

Management Discussion and Analysis

1 Overview of Past Performances

Regarding the energy business, the Company expanded investments to the energy business through a subsidiary, QTC Global Power Company Limited. In 2017, QTC Global Power Company Limited purchased shares from Green Earth Power (Thailand) Company Limited with the investment ratio of 15% in order to invest in a solar power plant in Myanmar which is in the process of development. Furthermore, the Company purchased all shares in L Solar 1 Company Limited in order to invest in the 8-Megawatt Solar Power Plant Project in Kabinburi, Prachinburi, which commenced operations to generate and distribute electricity at full capacity.

The transformer manufacturing and distribution business is a business related to and involved with electricity generation and electricity consumption needs because transformers are used to adjust and lower voltages from generating sources to the level of power users' needs, such as industrial plants, residential housings, and high-rise buildings, etc. Therefore, the business's trends are in the same direction as electricity consumption needs, which increase continuously. As a result, EGAT which is responsible for all electricity generation and transmission systems in Thailand, including the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA) which are responsible for distributing electricity to power users, are necessary to improve and expand the power distribution system to be consistent with Thailand's electricity generation development plan, causing transformer needs to increase.

In 2020, the Company earned revenues from transformers and transformer repair and maintenance services, including electricity sales and sales of solar panels in the total amount of 1,019.49 million baht, or a growth rate of 5.63% from the year 2019. In the meantime, the gross profit in 2020 amounted to 313.03 million Baht, decreased by 10.55% from the year 2019, due to the price competition in the domestic transformer business.

In 2020, the Company's net profit from operations amounted to 157.53 million Baht. In 2019, the Company had a profit of 198.40 million Baht, decreased by 20.60%. The reason was the decreasing gross profit margin caused by the price competition in the domestic transformer business. Regarding the service and electricity sales businesses, the Company maintained the gross margin, which did not affect the decrease in net profit, including improved and developed work systems and human resources for effective performances. As a result, selling and administrative expenses and finance costs decreased from the year 2019.

As the Company greatly focuses on the quality of the transformers manufactured, the Company's transformer products are accredited for meeting the standards of various institutes, such as TIS 384-2543 from the Thai Industrial Standards Institute, Ministry of Industry, ISO 9001:2015 standards for distribution transformer design, production, and maintenance. In addition, the Company received a certificate for test laboratory capabilities meeting TIS 17025-2548 standards (ISO/IEC 17025:2005). Furthermore, the Company is able to manufacture transformers to meet international quality standards, which is the proof of international-level quality and customer recognition.

In 2021, The company has a net operating profit of 127.22 million baht. While in 2020, the profit was 157.53 million baht, a decrease of 19.24 percent. The decrease in net profit was due to lower gross margins. The price competition of the domestic transformer business led to a higher proportion of production costs compared to sales. However, for the service and electricity distribution business, the company has maintained its gross margin without any decrease in net profit.

Selling and administrative expenses dropped only 0.70% from 2020 as the 184.57% growth in the solar business resulted in a 15.15% increase in selling expenses. This is a very small percentage increase when compared to the sales growth in the solar business. However, the Group still has a policy to control administrative expenses as before. Finance costs decreased from 2020 at a rate of 45.92%.

In 2022, there was an accounting milestone affecting to financial numbers, i.e., the corporate group found that value of lands, buildings and equipment, electrical network connection service fee, power purchase agreement, and deferred tax assets was incorrect.

Therefore, errors of last year's Financial Statement were corrected. The corporate group retroactively updated last year's Financial Statement as comparative data for reflecting correctness of those assets' value through updating impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in consolidated Financial Statement as well as amortizing deferred tax assets. Consequently, there were losses caused by impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in the amount of 43.80 million baht affecting to 2021 income statement (updated) and consolidated statement of financial position at December 31st, 2021 (updated) in the amount of 101 million baht.

In 2022, the Company earned net profit from operations in the amount of 15.84 million baht whereas profit of 2021 was 88.36 million baht (updated) that was reduced by 82.08% due to income from production and distribution of electricity caused by expiration of Adder Agreement under Thai government policy from November 2021. Income of this part in 2021 was 93.15 million baht.

For Gross Profit Margin, it was decreased from 2021 (updated) by 50% due to price competition in domestic transformer business group.

For management expenses, they were decreased from 2021 by 11.37% with consecutive reduction whereas the Management still had the policy to control management expenses for the ultimate benefit based on current economic condition.

(A) Revenues

The Company's total revenues were 1,040.45 million Baht, 1,185.03 million Baht, and 1,236.70 million Baht in 2020, 2021, and 2022, respectively. Revenues in 2022 was divided into revenue from transformer sales in the amount of 757.53 million Baht, revenue from electricity sales in the amount of 47.34 million Baht, revenue from service in the amount of 45.97 million Baht, revenue from the sales of solar panels in the amount of 356.99 million Baht, Income earned from materials selling was 8.62 million baht, and other revenues in the amount of 20.24 million Baht. Details of revenues from transformer sales can be summarized as follows:

Revenues from Transformer Sales

Type of Customer	Year 2020			Year 2021			Year 2022		
	Million Baht	Proportion (%)	Growth (%)	Million Baht	Proportion (%)	Growth (%)	Million Baht	Proportion (%)	Growth (%)
Government Agencies and State Enterprises	207.15	27.99	(23.71)	115.07	15.53	(44.45)	150.68	19.89	30.95
Distributor	128.94	17.43	10.90	110.44	14.91	(14.35)	134.80	17.80	22.06
Private Sector	403.84	54.58	2.87	515.33	69.56	27.61	472.05	62.31	(8.40)
Total Revenue from Sales	739.94	100	(5.18)	740.84	100	0.12	757.53	100	2.25

In 2020, the Company's revenues from sales of transformer were 739.94 million Baht, decreased by 5.18% from the year 2019. Revenues from transformer sales to government agencies and state enterprises decreased from 271.52 million Baht in 2019 to 207.15 million Baht in 2020, representing a decrease of 23.71%. This was caused by revenues from government agencies and state enterprises which slowed down their investments in any projects. Revenues from domestic and international sales of transformer in the private and export sectors increased from 392.56 million Baht in 2019 to 403.84 million Baht in 2020, representing an increase of 2.87%, as a result from the strategic marketing with an aim and emphasis on the sales in the private sector.

In 2021, The company's transformer sales revenue was 740.84 million baht, an increase of 0.12% from the year 2020. Transformer sales for government agencies and state enterprises decreased from 207.15 million baht in 2020 to 115.07 million baht in 2021, representing a 44.45% decreasing due to the slowdown in infrastructure investment policies of government agencies and state enterprises. Transformer sales for private sector and export sector both at home and abroad increased from 403.84 million baht in 2020 to 515.33 million baht in 2021, representing a 27.61% increasing due to the company's continued focus on private sector sales both at home and abroad to reduce dependence on large customers.

In 2022, the Company earned income from selling transformers in the amount of 757.53 million baht that was increased from 2021 by 2.25%. Income earned from selling transformers to government agencies and state enterprise from 115.07 million baht in 2021 to be 150.68 million baht in 2022 calculated to be 30.95% due to investment policy in infrastructure of government agencies and state enterprise with expansion. For income earned from selling transformers to private sector and exportation sector in Thailand and other countries, it was reduced from 515.33 million baht in 2021 to be 472.05 million baht in 2022 calculated to be 8.40% due to slowing down of investment in private sector and effects of COVID-19 pandemic on slowing down of investment throughout the world.

Revenues from Services

The Company's revenues from services during the year 2020 – 2022 amounted to 42.24 million Baht, 41.63 million Baht, and 45.97 million Baht, respectively. Revenues from services can be divided into: (1) revenues from transformer repairs, (2) revenues from providing transformer inspection and maintenance services, (3) revenues from transportation, and (4) revenues from transformer leases and other revenues. However, if revenues from services in 2022 is considered, they consist of revenues from transformer repairs in the amount of 16.50 million Baht, accounting for 35.89% of revenues from services, revenues from providing transformer inspection and maintenance services in the amount of 2.88 million Baht, accounting for 6.26% of revenues from services, revenues from transportation in the amount of 0.06 million Baht, accounting for 0.13% of revenues from services, revenues from transformer leases in the amount of 0.59 million Baht, accounting for 1.28% of revenues from services, and revenues from other services in the amount of 25.94 million Baht, accounting for 56.43% of revenues from services.

Other Revenues

The Company's other revenues consist of revenues from sales of scraps, gain on foreign exchange, interest received, returns from short-term investments, etc. During the year 2020 – 2022, the Company had other revenues in the amount of 20.96 million Baht, 13.04 million Baht, and 20.24 million Baht, respectively. In 2022, other revenues consisted of revenues from sales of scraps in the amount of 7.24 million Baht, revenues from short-term investments in the amount of 2.91 million Baht, gain on foreign exchange in the amount of 2.71 million Baht, profits from disposal of fixed assets in the amount of 1.24 million Baht, and other revenues in the amount of 6.14 million Baht.

(B) Cost and Expenses

The Company's main expenses consist of cost of sales and cost of service, selling and administrative expenses, and interest expenses. During the year 2020 – 2022, the Company's total expenses amounted to 855.30 million Baht, 1,065.95 million Baht(Restated), and 1,216.98 million Baht, respectively. The details are as follows:

Cost of Sales and Services and Gross Profit

The Company's cost of sales and services is considered the Company's main expenses. The Company's cost of sales and services were 706.47 million Baht in 2020, 875.42 million Baht in 2021(Restated), and 1,068.08 million Baht in 2022, accounting for 82.60%, 84.44%, and 87.76% of the total expenses, respectively.

If the cost of sales and services is compared with the revenues from sales and services, the Company's such proportion accounts for 69.30%, 74.69% and 87.80% of the revenues from sales and services, respectively, or representing the gross profit margin of 30.70%, 25.30% and 12.20%, respectively. The factors affecting the Company's gross profit margin are as follows:

1. With regard to customer mix in each year, the Company's customers can be divided into 3 main types, consisting of: (1) government agencies and state enterprises, (2) distributors, and (3) private customers. Sales of transformer to such 3 types of customers has different gross profit margin. In 2020, customers in the group of government agencies and state enterprise still had the highest gross profit margin due to large purchase orders, causing the cost per unit to be lower than the production of transformer for other types of customers, followed by customers in the group of overseas distributors.

In 2020, the proportion of transformer sales to government agencies and state enterprises decreased from 34.79% in 2019 to 27.99% in 2020 due to the slowdown of policies on investment in infrastructure of government agencies and state enterprises. In the meantime, the domestic and international sales of transformer in the private sector increased from 50.31% in 2019 to 54.58% in 2020, causing the gross profit margin to decrease from 36.25% in 2019 to 30.70% in 2020.

In 2021, the proportion of transformer sales to government agencies and state enterprises decreased from 27.99% in 2020 to 44.45% in 2021 due to the slowdown of policies on investment in infrastructure of government agencies and state enterprises. In the meantime, the domestic and international sales of transformer in the private sector increased from 54.58% in 2020 to 27.61% in 2021, causing the gross profit margin to decrease from 30.70% in 2020 to 25.05% in 2021.

In 2022, proportion of transformers sold to government agencies and state enterprise was reduced by 44.45% in 2021 but it was increased by 30.95% in 2022 due to investment policy in infrastructure of government agencies and state enterprise with expansion. Simultaneously, sale volume of transformer to private sector in Thailand and other countries was increased by 27.61% in 2021 but decreased by 8.40% in 2022. Consequently, Gross Profit Margin was reduced from 25.30% (Restated) in 2021 to be 12.20% in 2022.

2. Regarding the material costs, especially main materials, such as silicon steel, enameled round wires, and copper foils, there are few producers and the prices are adjusted according to the supply and demand in the global market. Therefore, material prices fluctuate significantly. In 2017, the price of silicon steel decreased by 10–25%. Meanwhile, the price of enameled round wires and copper foils increased in 2018, accounting for 12–19%.

In 2020, the cost of materials and supplies used amounted to 502.71 million Baht, increased from 418.76 million Baht in 2019, representing an increase of 20.05%. These costs included the cost of solar panel products amounting to 71.73 million Baht, while the cost of materials in 2020 remained at the same level as that of the year 2019.

In 2021, the cost of materials and supplies used amounted to 675.33 million Baht, increased from 502.71 million Baht in 2020, representing an increase of 34.33%. This is because it is a raw material prepared for production and delivery in Q1 of 2022, while the cost of materials in 2021 remained at the same level as that of the year 2020.

In 2022, costs of materials and consumables were 851.63 million that were increased from 741.67 million baht in 2021 (updated) by 14.82% due to increase of income earned from sales from 2021 in the rate of 3.55%. In addition, Thailand's costs of import of materials were also higher plus with higher costs of materials in Thailand due to fluctuation of currency exchange rate.

Selling and Administrative Expenses

The Company's selling and administrative expenses were 146.50 million Baht in 2020, 189.27 million Baht in 2021 (Restated), and 145.47 million Baht in 2022, accounting for 14.08%, 15.97% and 11.96% of the total revenues, respectively.

In 2020, the Company's selling and administrative expenses were 146.50 million Baht, accounting for 4.36%, decreased from the year 2019. This was because the Company still had the policy to improve and develop work processes and the potential of personnel to achieve efficient operations in all areas. This results in the decrease in non-profit expenses or expenses incurred from operational errors.

In 2021, the Company's selling and administrative expenses were 145.47 million Baht, accounting for 0.70%, decreased from the year 2020. This was because the Company still had the policy to improve and develop work processes and the potential of personnel to achieve efficient operations in all areas. This results in the decrease in non-profit expenses or expenses incurred from operational errors. In addition, selling and administrative expenses slightly dropped, partly due to the increased sales expenses. This is due to solar business revenue growth of 184.57% from 2020, while sales expenses increased only 15.12%.

In 2022, there was a crucial event which the corporate group found that value of lands, buildings and equipment, electrical network connection service fee, power purchase agreement, and deferred tax assets was incorrect.

Therefore, errors of last year's Financial Statement were corrected. The corporate group retroactively updated last year's Financial Statement as comparative data for reflecting correctness of those assets' value through updating impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in consolidated Financial Statement as well as amortizing deferred tax assets.

In 2022, the Company had expenses on sales and management in the amount of 147.94 million baht that was decreased from 2021 (Restated) by 21.84% due to update of impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in the amount of 43.80 million baht. Simultaneously, the Company still had the policy to improve and develop operational process and personnel's potential to obtain efficient operations in all dimensions leading to reduction of unprofitable expenses or expenses caused by operational errors. For sales expenses in 2022, they were increased from 2021 in the rate of 9.60% due to the growth of income of solar business from 2021 in the rate of 45.37%.

Interest Expenses

During the year 2020 – 2022, the Company interest expenses amounted to 2.33 million Baht, 1.26 million Baht, and 0.97 million Baht, respectively. It can be seen that the interest expenses decreased significantly due to the efficient financial management in 2022, resulting in the cash inflow that could be used to as a working capital. Consequently, the Company did not have to borrow short-term loans from financial institutions to be used to as a working capital.

(C) Net Profit

According to the abovementioned performances, during the year 2020 – 2022, the Company had net profit amounting to 157.53 million Baht, net profit amounting to 88.36 million Baht (Restated), and net profit amounting to 15.84 million Baht, respectively, accounting for the net profit of 15.14%, 7.46%, and 1.28%, respectively.

If the net profit in the past year is considered, it can be seen that the Company's net profit tends to increase or decrease which fluctuates according to the Company's revenues, depending on the proportion of revenues from sales of products of customers with high gross profit margin. In addition, the Company also controls selling and administrative expenses to be in the proportion of about 15-20% of sales, so the selling and administrative expenses will not affect the net profit.

In 2020, the Company had the net profit of 157.53 million Baht, decreased from the year 2019 amounting to 198.40 million Baht, due to the decrease in the gross profit by 10.55% in 2020 from the year 2019. This was because the price competition of the transformer business in the domestic private sector, resulting in the decreasing gross profit. In the meantime, the selling and administrative expenses in 2020 decreased by 4.35% from the year 2019 and the finance costs in 2020 also decreased by 73.73% from the year 2019.

In 2021, the Company had the net profit of 127.22 million Baht, decreased from the year 2020 amounting to 157.53 million Baht, due to the decrease in the gross profit by 6.20% in 2021 from the year 2020. This was because the price competition of the transformer business in the domestic private sector, resulting in the decreasing gross profit. In the meantime, the selling and administrative expenses in 2021 decreased by 0.70% from the year 2020 and the finance costs in 2021 also decreased by 45.92% from the year 2020.

In 2022, the Company earned net profit in the amount of 15.84 million baht that was decreased from 88.36 million baht in 2021 due to income from production and distribution of electricity caused by expiration of Adder Agreement under Thai government policy from November 2021. Income of this part in 2021 was 93.15 million baht but it was disappeared in 2022. Moreover, according to price competition in private sector of domestic transformer business, Gross Profit Margin was decreased from 2021 with the rate of 25.30% to be 12.20% in 2022.

Return on Equity

When the return on equity is considered, it can be seen that it will be adjusted in the same direction as the increase of net profits. The Company's returns on equity during the year 2020-2022 were 9.46%, 5.41%(Restated), and 0.98%, respectively. The Company's return on equity decreased, when compared with that of the year 2021, because the Company's performance in 2022 had the decreasing net profit. The main reason was the due to income from production and distribution of electricity caused by expiration of Adder Agreement under Thai government policy from November 2021. Income of this part in 2021 was 93.15 million baht.

2 Financial Position

(A) Assets

As at the end of the year 2020–2022, the Company's total assets amounted to 1,935.66 million Baht, 1,885.60 million Baht (Restated), and 1,847.12 million Baht, respectively. The Company's significant assets consist of property, plant, and equipment, trade receivables, inventory, and temporary investments. In 2022, the ratio of such significant assets to total assets were at 62.31%. The details of significant assets of the Company can be summarized as follows:

Trade Receivables

The Company's separate financial statements showed trade receivable before allowance for doubtful accounts amounting to 187.13 million Baht at the end of the year 2020, 166.43 million baht at the end of the year 2021, and 205.55 million baht at the end of the year 2022, representing 10.04%, 8.87% and 10.74% of the total assets (separate financial statements), respectively.

At the end of 2022, account receivables were increased from 2021 by 23.51% whereas the duration of indebtedness of account receivables that was “not over than 3 months” was increased by 143.78% compared to 2021. The duration of indebtedness of account receivables that was over than 12 months was increased from 2021 by 29.03%.

The company also emphasized on debt collection management by complying with Credit Policy strictly and adjusted strategies to suit with current economic situations that were hard to collect debts due to lack of liquidity of customers caused by economic problems affected from COVID-19 pandemic. As a result, the Company had the average collection period of 66.41 days for the year 2020, 61.80 days for the year 2021, and 59.81 days for the year 2022.

Overdue Period	As at December 31, 2020		As at December 31, 2021		As at December 31, 2022	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Undue	145.24	77.61	109.69	65.91	95.51	46.47
Overdue						
Not exceeding 3 months	6.41	3.43	23.64	14.21	57.64	28.04
3-6 months	-	-	5.86	3.52	15.34	7.46
6-12 months	6.14	3.28	0.52	0.31	2.58	1.26
Exceeding 12 months	29.34	15.68	26.72	16.06	34.48	16.77
Trade Receivable Before Allowance for Doubtful Accounts	187.13	100	166.43	100	205.55	100
Less: Allowance for Doubtful Accounts	(32.88)		(23.44)		(25.02)	
Trade Receivable - Net	154.25		142.99		180.53	

According to the above table, the Company's undue trade receivables as at the end of the year 2020–2022 were at the rate of 77.61%, 65.91%, and 46.47% of the trade receivables before allowance for doubtful accounts, respectively. When considering on duration of indebtedness, it was found that most account receivables had duration of indebtedness as “not due” with proportion of 46.47%. In 2022, debt with higher proportion was debt with duration of indebtedness not over than 3 months due to economic condition caused by COVID-19 pandemic leading to lack of liquidity of customers.

As at the end of the year 2020–2022, the Company's ratios of overdue trade receivables for more than 1 year were 15.68%, 16.06% and 16.77% of the trade receivable before allowance for doubtful accounts, respectively. In 2022, number of debtors with outstanding payment over than 1 year was increased from 2021 by 29.04% due to inabilities of debtors to pay for debts by installments as defined in settlement agreement. In 2022, outstanding debts with outstanding duration over than 1 year could be collected in the amount of 2.58 million baht due to preparation for supporting purchasing orders that would be delivered in the 1st quarter of 2023.

The Company performed the impairment assessment of trade receivables in accordance with Financial Reporting Standard No. 9 under the Simplified Approach to measure the expected credit loss over the account receivable aging of all debtors. As a result, the allowance for doubtful accounts in 2020 and 2022 was set in the amount of 32.88 million Baht, 23.44 million Baht and 25.02 million Baht, respectively.

Inventory

At the end of the year 2020 – 2022, the Company's inventory before allowance for deteriorating inventories and diminution in value of inventories dropped by 173.69 million Baht, 329.95 million Baht, and 355.84 million Baht, respectively. The highest number of the component of inventories during the year 2020 – 2022 was finished goods, accounting for 47.67%, 36.41%, and 67.77% of the total inventory, respectively. These are the finished goods based on the purchase order pending for delivery to the customers.

	As at December 31, 2020		As at December 31, 2021		As at December 31, 2022	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Materials	69.53	40.03	150.32	45.56	102.75	28.88
Work in Progress	21.30	12.26	52.91	16.04	20.88	5.87
Finished Goods	82.80	47.67	120.12	36.41	230.48	64.77
Goods in Transit	0.06	0.03	6.60	2.00	1.72	0.48
Total Inventory	173.69	100	329.95	100	355.83	100
Less: Allowance for deteriorating inventories and diminution in value of inventories	(7.15)		(7.74)		(8.78)	
Inventory – Net	166.54		322.21		347.05	

The ratios of finished goods to inventory at the end of the year 2020-2022 were 47.67%, 36.41%, and 64.77%, respectively, while the average inventory periods were 102.15 days, 107.95 days (Restated), 120.20 days, respectively. It can be seen that the average inventory period in 2022 increased by 12.25 days from the year 2021. This was due to an increase in production raw materials to deliver transformers according to orders received in the 1st quarter of 2023.

In 2022, the Company's inventory before allowance for deteriorating inventories and allowance for diminution in value of inventories were 355.84 million Baht, increased from 329.95 million Baht at the end of the year 2021. Inventory before deducting such allowances consisted of material in the amount of 102.75 million Baht, decreased from 150.32 million Baht at the end of the year 2021, accounting for 31.65%, work in progress in the amount of 20.88 million Baht, decreased from 52.91 million Baht at the end of the year 2021, accounting for 60.54%, and finished goods in the amount of 230.48 million Baht, increased from 120.12 million Baht at the end of the year 2021, accounting for 91.88%, due to preparation for supporting purchasing orders that would be delivered in the 1st quarter of 2023.

Property, Plant, and Equipment

The Company's net property, plant, and equipment at the end of the year 2020-2022 amounted to 633.32 million Baht, 544.84 million Baht (Restated), and 517.80 million Baht, respectively, accounting for a ratio to total assets of 32.72%, 28.89%, and 28.03%, respectively.

In 2020, the Company's net property, plant, and equipment decreased by 32.69 million Baht due to the disposal of some assets and the diminution in value of fixed assets according to the accounting policy.

In 2021, the company had lower net quantity of lands, buildings and equipment by 88.48 million baht due to incorrect value of lands, buildings and equipment, electrical network connection service fee, power purchase agreement, and deferred tax assets. Therefore, errors of last year's Financial Statement were corrected. The corporate group retroactively updated last year's Financial Statement as comparative data for reflecting correctness of those assets' value through updating impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in consolidated Financial Statement as well as amortizing deferred tax assets.

In 2022, the company had lower net quantity of lands, buildings and equipment by 27.074 million baht because fixed assets were sold and value of fixed assets was reduced according to Accounting Policy.

(B) Liquidity

Cash Flow

In 2020, the Company's net cash flow provided by operating activities amounted to 317.35 million Baht, increased from the year 2019, due to the cash management covering trade receivables, inventory, and trade payables and the consequence of effective management of trade receivables, resulting in financial liquidity. The Company's net cash flow used in investing activities dropped to 112.30 million Baht and the Company's net cash flow provided by financing activities declined to 196.47 million Baht, causing the Company's cash flow to increase by 8.08 million Baht.

In 2021, The company had net operating cash flow of 38.36 million baht, a decrease from 2020 due to an increase in inventories from 2020 by 156.26 million baht, which are products awaiting delivery in the first quarter of 2022 and are raw materials awaiting production and delivery in 2022. The company's cash flow for investing activities increased by 224.53 million baht and net cash flow from financing activities decreased by 69.80 million baht, resulting in an increase in cash flow of 195.11 million baht.

In 2022, the company earned net cash flow from operations in the amount of 40.81 million baht that was increased from 2021. It was cash obtained from increased investment and reduction of other current assets. The company still had increased cash flow from operations in the amount of 40.81 million baht and net cash flow earned from financing activities of the company was reduced by 92.59 million baht. Consequently, cash flow was increased by 195.11 million baht.

(Unit: Million Baht)	Year 2020	Year 2021	Year 2022
Net cash provided by (used in) operating activities	317.35	38.36	40.81
Net cash provided by (used in) investing activities	(112.30)	224.53	316.14
Net cash provided by (used in) financing activities	(196.47)	(69.80)	(92.59)
Increase (Decrease) in Net Cash and Cash Equivalents	8.08	195.11	264.36

Liquidity Ratio

At the end of 2020-2022, the company's liquidity ratios were 5.28 times, 5.53 times, and 5.32 times, respectively, and the quick liquidity ratios were 4.32 times, 3.85 times, and 3.52 times, respectively. The quick liquidity ratios had a large difference from the liquidity ratios because the company has managed accounts receivable and cash flow management to ensure liquidity, including controlling the repayment period to be in line with debt settlement. However, the decrease in the quick turnover ratio was caused by the decrease in the inventory turnover ratio. In 2022, the inventory turnover rate was 3.04 times, a decrease of 3.38 times from 2021, bringing the turnover time to 120.20 days, while 2021 was 107.95 days.

The Company's cash cycles during the year 2020-2022 were 101.57 days, 103.27 days, and 71.88 days, respectively. The Company's average collection period during the year 2020-2022 were 66.41 days, 61.80 days, and 59.81 days, respectively.

In 2020, the Company's collection period decreased from the year 2019. In 2020, the Company's collection period was 66.41 days while it was 83.81 days in 2019. This resulted from the strict compliance with the credit policy in order to supervise the on-time repayment of customers and assess the customers' financial capacity before delivery of goods. The Company emphasized on offering credit with shorter periods or making payments before delivery of goods. In addition, the trade receivables management was reviewed to be in line with the current situations without affecting the sales of products and services.

In 2021, the Company's collection period decreased from the year 2020. In 2021, the Company's collection period was 61.80 days while it was 66.41 days in 2020. This resulted from the strict compliance with the credit policy in order to supervise the on-time repayment of customers and assess the customers' financial capacity before delivery of goods. The Company emphasized on offering credit with shorter periods or making payments before delivery of goods. In addition, the trade receivables management was reviewed to be in line with the current situations without affecting the sales of products and services.

In 2022, the Company's collection period decreased from the year 2021. In 2022, the Company's collection period was 59.81 days while it was 61.80 days in 2021. This resulted from the strict compliance with the credit policy in order to supervise the on-time repayment of customers and assess the customers' financial capacity before delivery of goods. The Company emphasized on offering credit with shorter periods or making payments before delivery of goods.

In addition, the trade receivables management was reviewed to be in line with the current situations without affecting the sales of products and services.

		Year 2020	Year 2021	Year 2021 (Restated)	Year 2022
Liquidity Ratio	(Times)	5.28	5.53	5.53	5.32
Quick Ratio	(Times)	4.32	3.85	3.85	3.52
Average Collection Period	(Days)	66.41	61.80	61.80	59.81
Average Inventory Period	(Days)	102.15	107.57	107.95	120.20
Payment Period	(Days)	67	66.47	66.47	108.12
Cash Cycle	(Days)	101.57	102.89	103.27	71.88

(C) Sources of Capital

Liabilities

At the end of the year 2020 – 2022, the Company's total liabilities amounted to 243.48 million Baht, 250.97 million Baht, and 263.87 million Baht, respectively. Total liabilities in 2022 increased by 5.14% from the year 2021.

The Company's current liabilities were 219.17, 222.74, and 228.23, respectively. When calculating as the ratio to total liabilities, at the end of the year 2020-2022, it amounted to 90.02%, 88.75, and 86.49%, respectively. Significant current liabilities were trade payables, accounting for 63.30 of the total liabilities at the end of the year 2022. The remaining current liabilities were current income tax payable, accrued expenses, prepaid income from customers, and other current liabilities.

Shareholders' Equity

At the end of the year 2020, the Company's shareholders' equity amounted to 1,692.19 million Baht, increased by 53.36 million Baht from the end of the year 2019, due to the annual net profit of 157.53 million Baht in 2020.

In 2022, there was an accounting milestone affecting to financial numbers, i.e., the corporate group found that value of lands, buildings and equipment, electrical network connection service fee, power purchase agreement, and deferred tax assets was incorrect.

Therefore, errors of last year's Financial Statement were corrected. The corporate group retroactively updated last year's Financial Statement as comparative data for reflecting correctness of those assets' value through updating impairment loss on lands, buildings and equipment, electrical network connection service fee and power purchase agreement in consolidated Financial Statement as well as amortizing deferred tax assets.

At the end of 2021 (updated), the company had equity in the amount of 1,634.63 million baht that was increased from the end of 2020 in the amount of 4.91 million baht because annual net profit of 2021 was 88.36 million baht (after updating).

At the end of 2022, the company had equity in the amount of 1,583.25 million baht that was decreased from the end of 2021 in the amount of 51.38 million baht because annual net profit of 2021 was 15.84 million baht.

Suitability of Capital Structure

The Company had the debt to equity ratio of 0.41 times in 2017, 0.33 times in 2018 and 0.33 times in 2018. In 2017, the debt to equity ratio dropped because the Company increased its registered capital by 650 million Baht in the fourth quarter. It was the specific capital increase for using in the investment in energy projects.

In 2020, the debt to equity decreased from the year 2019 because the trade receivables and inventory was managed during the year, resulting in the continuous cash inflows. This created liquidity which resulted in no short-term loans. As at December 31, 2020, there was no short-term loans and long-term loans.

In 2021, the debt-to-equity ratio is unchanged from 2020, which was 0.14 times.

In 2022, debt to equity ratio was 0.17 time.

3. Factors and Major Influences Possibly Affecting Future Performances and Financial Position

Regarding the impact from the uncertainty of bidding results, as customers in the group of the government and state-enterprises electricity generators and distributors, such as the Metropolitan Electricity Authority and the Provincial Electricity Authority, will procure transformers by means of bidding, the revenue from sales of the Company may be more uncertain, depending on the bidding capabilities. Furthermore, it also mainly depends on the economic situations and the budget of each agency, which will affect the period when such agencies will open the biddings. In the past, the Company's revenues from sales of transformer to this group of customers amounted to 20–30% of the total revenues from sales, which was a relatively high ratio. Nevertheless, the Company and its executives has conducted business for a long time, so they have good relationships with MEA and PEA and also gained trust in the quality of transformers. Furthermore, the Company is one of the few manufacturers capable of manufacturing high-quality transformers that meet the requirements of both agencies. Therefore, executives believe that the Company has sufficient potential to sell transformers to MEA and PEA continuously in the long term. Moreover, the Company makes efforts to expand the market to foreign customers by appointing more overseas agents every year.

4. Audit Fee

In the fiscal year ended December 31, 2022, the Company paid audit fees to the Company's auditor, EY Office Limited, in the amount of 1,600,000.00 Baht. Other than such remuneration, the Company had no other service fees to pay to the auditor, the audit firm of auditor, and individuals or businesses relating to the auditor or the audit firm of auditor.



5. General Information and Other Significant Information

5.1 General Information

Company Information

Company Name	: QTC Energy (Public) Company Limited
Type of Business	: Business of manufacturing and distributing transformers and providing services relating to transformers
Location of Head Office	: 2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road, Huamark, Bangkapi, Bangkok 10240
Location of Factory	: 149, Moo.2, Mabyangporn Sub-District, Pluakdaeng District, Rayong, 21140
Company Registration No	: 0107553000158
Registered Capital	: 341,092,557.00 Baht
Paid-up Capital (Ordinary shares)	: 341,092,557.00 Baht
Website	: www.qtc-energy.com
Investor Relations	: 0-2379-3089 ext. 241
Telephone	: 0-2379-3089-92
Facsimile	: 02-379-3097

Securities Registrar

Company Name	: Thailand Securities Depository Company Limited
Location of Office	: 92, Stock Exchange of Thailand Building, Ratchadapisek Road, Dindeng, Bangkok 10400
Telephone	: 0-2009-9000
Facsimile	: 0-2009-9991

Auditor

Name of Auditor	: Ms. Rosaporn Decharkom, Certified Public Accountant No. 5659.
Company Name	: EY Office Limited
Location of Office	: 33 rd Floor, Lake Rajada Office Complex, 193/136-137 Rajadapisek Road, Klongtoey, Bangkok 10110.
Telephone	: 0-2264- 9090
Facsimile	: 0-2264- 0789

Legal Advisor

Company Name	: CMT Counsellor Company Limited
Location of Office	: 75, Soi Phueng Mi 11, Sukhumvit Road, Bangchak, Phra Khanong, Bangkok, 10260
Telephone	: 081-836-7236
Facsimile	: -

5.2 Other Significant Information

-N/A-

5.3 Legal Dispute

-N/A-

5.4 Secondary Market

-N/A-

5.5 Regular Contact Financial Institution

-N/A-

Corporate Governance



6. Corporate Governance

The Company has established 5 sections of good corporate governance policy and guidelines as follows:

- Section 1 Rights of Shareholders
- Section 2 Equitable Treatment of Shareholders
- Section 3 Role of Stakeholders
- Section 4 Disclosure and Transparency
- Section 5 Responsibilities of the Board of Directors

The Company reviews the good corporate governance policy annually. In 2022, the Board of Directors' meeting 7/2022 held on December 15, 2022, has considered and reviewed good corporate governance policy. The corporate governance policy of the Company is available on the website:

<https://investor.qtc-energy.com/en/corporate-governance/corporate-governance-policy>

The code of conduct is available on the website:

<https://investor.qtc-energy.com/en/corporate-governance/cg-report-and-download>

The Company has the anti-corruption policy and guideline stipulating that the Company shall not demand, accept, pay, and do business with any individuals and juristic persons relating to corruption, which have been approved by the Board of Directors and published on the website of the Company, <https://investor.qtc-energy.com/en/corporate-governance/cg-report-and-download>.

The Company has participated in Thai Private Sector Collective Action Against Corruption (CAC) Project and also received a certificate of membership of Thai Private Sector Collective Action Against Corruption (CAC)



The Company establishes the corporate governance guidelines as follows:

Section 1 The Rights of Shareholders

The Company is aware of and focuses on the basic rights of shareholders, including institutional shareholders, such as rights to purchase, sell, or transfer shares, rights to receive shares of the business, rights to obtain sufficient news and information about the business, rights to participate in meetings to exercise rights to vote at shareholders' meetings to appoint or remove directors, appoint auditors, and other issues affecting the Company, such as allocation of dividends, establishment or amendment of regulations, memorandums of association, and articles of association, capital decrease or increase, etc.

Apart from the abovementioned basic rights, the Company also performs any acts that promote and facilitate the exercise of shareholders' rights as follows:

- The Company shall submit the letter of invitation to meeting to shareholders at least 22 days before the meeting date. Such letter of invitation to meeting was submitted on March 10, 2022. The letter contains date, time, venue, and agenda of the meeting, rules used in the meeting, voting procedures, including supporting data regarding issues requiring resolutions at the meeting. Such information had also been published on the Company's website in Thai and English version for 31 days from March 1, 2022, so shareholders were given a sufficient amount of time to study information regarding the meeting in advance before receiving information in the form of documents from the Company.
- The Company defined the guidelines for agendas of the annual general meeting of shareholders in accordance with the principles of good corporate governance as follows:
 - Agenda 1 To consider and adopt the minutes of general meeting of shareholders
 - Agenda 2 To consider and acknowledge the Company's operating results for the previous year
 - Agenda 3 To consider and approve the Company's financial statements for the fiscal year ended December 31 in the previous year
 - Agenda 4 To consider and approve the allocation of profits from operations for the previous year
 - Agenda 5 To consider and elect directors to replace those who retire by rotation
 - Agenda 6 To consider and approve the remuneration of directors
 - Agenda 7 To consider and appoint auditors and determine annual audit fees
 - Agenda 8 Other matters, by offering opportunities to shareholders to inquire any key issues
- In the event that a shareholder is unable to attend a meeting, the Company offers opportunities to shareholders to authorize an independent director or any individual to attend the meeting on his/her behalf by using Proxy Form A, Form B, or Form C submitted by the Company together with the letter of invitation to meeting.
- Shareholders are given opportunities to send questions on agendas of shareholders' meeting to the Board of Directors at least 31 days prior to the meeting date through the Company's website or e-mail of Investor Relations by notifying through the Stock Exchange of Thailand's news system on March 1, 2022.
- Shareholders are given opportunities to fully and independently ask questions and express opinions and suggestions. The details are recorded in the minutes of shareholders' meeting.
- The Company fully facilitates shareholders to exercise their rights to attend meetings and cast votes. The Company will hold the meeting on working days at hotels in Bangkok and its vicinity where transportation is convenient for shareholders travelling to attend the meetings. In the past, the meetings were held at the hotel near to MRT. In addition, a duty stamp is provided to the shareholders' proxies.
- All directors and top executives shall attend the meeting and answer questions raised at the shareholder's meetings.
- After the meeting adjourned, the Company shall publish the voting results for each agenda of the general meeting of shareholders on the date following the meeting, which was April 1, 2022. The results were also notified through the Stock

Exchange of Thailand's news system and on the Company's website. The Company shall prepare the minutes of meeting containing accurate and complete information which is disclosed on the Company's website within 14 days from the meeting date, so shareholders are able to check it. In 2022, it was published on the website on April 18, 2022.

- The Company applies technologies to the shareholders' meetings in terms of shareholder registration, vote counting, and vote results display, so the meeting can proceed quickly, accurately, and precisely.

Section 2 The Equitable Treatment of Shareholders

The Company has the policy for practicing and protecting the rights of all shareholders equally and fairly, including executive shareholders and non-executive shareholders, Thai shareholders or foreign shareholders, major shareholders or minor shareholders, and institutional shareholders. Shareholders are entitled to equal basic rights.

- The Company allows shareholders who are unable to attend meetings in person to authorize an independent director or any individual as a proxy to attend the meeting on their behalf.
- The Company allows shareholders to propose matters to be included in the meeting agendas and nominate persons to be elected as a director at the shareholders' meeting in advance according to the rules set by the Company. Details are published on the Company's website, <http://www.qtc-energy.com>. Such matters shall be submitted to the Company at least 92 days in advance before the date of shareholders' meeting from September 1, 2022 to December 1, 2022.
- In 2022, there were no additional meeting agendas that were not notified the shareholders in advance, particularly agendas that were important and required time to study information before making decisions by shareholders.
- The Board of Directors offers opportunities to shareholders to exercise the right to appoint individual directors and encourages the use of a ballot to ensure the transparent and verifiable voting.
- The Board of Directors establishes the preventive measures for insider trading of related parties, including directors, executives, employees, and workers as well as spouses and minor children of such individuals relating to information. In addition, the Board of Directors also determines the penalties on disclosure of the Company's information or the exploitation of the Company's information for personal gain according to the policy on insider trading prevention.
- The Company provides knowledge to its directors and executives on the duty and responsibility for reporting their shareholdings in the Company as well as their spouses and minor children, and the changes in shareholdings to the Securities and Exchange pursuant to Section 59 and the penalty provision of the Securities and Exchange Act, B.E. 2535 (1992).

Section 3 The Role of Stakeholders

The Company focuses on the rights of stakeholders and fairly treats all related parties. The details are as follows:

- **Employees:** The Company is aware of the importance of all employees who will take part in driving the Company to develop its business to the future. Therefore, the Company emphasizes on the continuous development of capabilities, knowledge, and skills of employees, considers appropriate remunerations based on knowledge and capacity of each employee, and also maintains work environments by considering quality of life and occupational safety. However, the Company treats all employees equally and fairly.
- **Business Partners and Creditors:** The Company treats business partners who are suppliers and financial creditors fairly and equally without taking advantages by strictly complying with the trading conditions and/or mutual agreements in order to improve the business relationship that will create benefits for both parties. In addition, the Company establishes the Code of Conduct and Guidelines for QTC's business partners so that they can comply with. The Company submits the handbook of practices for all business partners which is published on the Company's website, <https://investor.qtc-energy.com/en/corporate-governance/cg-report-and-download>.
- **Customers:** The Company pays attention to customers and takes responsibility for customers by focusing on production of high-quality standardized products and responding to the needs of customers while maintaining customer confidentiality. In addition, the Company also focuses on the appropriate and fair pricing for products sold to customers.

- **Competitors:** The Company complies with the rules of good competition and stipulated laws, maintains the norms of codes of conduct for competition, and avoids any fraudulent methods which would destroy competitors.
- **Community and Society:** The Company conducts its business by mainly considering environmental impact. The Company emphasizes on continuously fostering awareness of social and community responsibility and improving the quality of life of everyone in the community and society, including promoting activities creating benefits to the public without performing any illegal acts or acts against the laws.
- The Company establishes the compensation measures, which are included in the Company's Code of Conduct, in the case where stakeholders are suffered from the Company's violation of the stakeholder's legal rights.
- The Company declares that directors, executives, and employees who acknowledge important inside information possibly affecting the change in securities trading prices shall refrain from trading the Company's securities for a period of 1 month before the disclosure of operating results or such inside information to the public.
- The Company establishes the clear procedures in the case that there is a person whistleblowing any illegal acts, accuracy of financial reporting, defective internal control system, or misconduct. These matters can be reported via letter and e-mail to the Audit Committee of the Company. Furthermore, the Company also establishes measures to protect the whistleblowers' rights.
- To lead to serious action, the Company establishes the handbook on ethics as a part of discipline that the directors, executives, and employees at all levels are required to strictly comply with. Any violations or non-compliance shall be subject to disciplinary action according to the regulations on human resources management.
- The Company establishes the policy on conflicts of interest in the handbook on ethics in order to prevent the exploitation for personal gain.

Section 4 Disclosure and Transparency

The Board of Directors pays attention to the correct, complete, and transparent information disclosure, including reports on financial data and general information, according to the rules of the SEC and the Stock Exchange of Thailand, as well as the significant information affecting the Company's securities' prices which may have an impact on the decision-making process of the Company's investors and stakeholders. To allow all parties relating to the Company to obtain information equally, information of the Company is disclosed to the shareholders and the public via the channel and media for data dissemination of the Stock Exchange of Thailand and on the Company's website, <http://www.qtc-energy.com>.

The Board of Directors is aware of its responsibilities and firmly committed to strictly overseeing the compliance with laws, rules, and regulations relating to information disclosure and transparency as follows:

- The Company publishes information in line with the specified criteria through channels of the SET and the Annual Registration Statement (Form 56-1 One Report). Such information is also published on the Company's website in both Thai and English versions with regular information updates.
- The Board of Directors reports the results of compliance with corporate governance policy through the Annual Registration Statement (Form 56-1 One Report) and on the Company's website.
- The Board of Directors prepares the report on the Board of Directors' responsibilities for financial reporting which is presented together with the auditor's report and also prepares the report on corporate governance of the Audit Committee included in the Annual Report (Annual Registration Statement, Form 56-1 One Report).
- The Board of Directors discloses the list, roles and duties of the Board and sub-committees, number of meetings, and number of meetings attended by each director in each year through the Annual Registration Statement (Form 56-1 One Report).
- The Company discloses information through the Annual Registration Statement (Form 56-1 One Report).
- To ensure the compliance with the Capital Market Supervisory Board's Notification on Rules, Conditions, and Procedures for Information Disclosure regarding Financial Position and Operating Results of the Company, information in the following areas is disclosed: Part 1 consists of; (1) Structure and Operation of Company Group, (2) Risk Management, (3) Driving Business towards Sustainability, (4) Management Discussion and Analysis, (5) General Information and Other Significant Information;

Part 2 consists of; (6) Corporate Governance Policy, (7) Corporate Governance Structure and Significant Information on Board of Directors, Sub-Committees, Executives, Employees, and Others, (8) Report on Key Performances of Corporate Governance, (9) Internal Control and Connected Transaction. Part 3 Financial Reports

- The Board of Directors and executives report shareholdings and the changes in shareholdings according to the rules stipulated by the Office of the Securities and Exchange Commission.
- The first four directors and executives ranking from the Chief Executive Officer are responsible for submitting a report on their stake holdings and the stake holdings of related parties to the Chairman of the Board and the Chairman of the Audit Committee and disclosing information to all directors according to the Securities and Exchange Act B.E. 2551 (2008). The Board of Directors establishes the policy to designate employees at the executive level, deputy managing manager, and assistant managing director to submit the report on their stake holdings and the stake holdings of related parties to the Audit Committee in order to ensure the transparency and fairness in business operations. It shall be reported to the Audit Committee annually.
- The Board of Directors ensures the maintenance of the effective internal control system in order to provide reasonable assurance that accounting information is recorded accurately, completely, and sufficiently to maintain the Company's assets, and to acknowledge the weaknesses to prevent corruption or significant misconduct. The Board of Directors appoints the Audit Committee, comprised non-executive directors responsible for auditing financial reports, connected transactions, and internal control system. The Audit Committee will directly report to the Board of Directors.
- The Company establishes the investor relation section to be responsible for communicating with external individuals, including shareholders, institutional investors, general investors, analysts, and related public sector as follows:
 1. Disclosing important information to the public
 2. Thoroughly publishing information to the public
 3. Clarifying rumors or news
 4. Promotional disclosure of unreasonable information
 5. Accurate, sufficient, timely, equal, transparent, and fair insider trading
 6. Performing operations when the securities trading of listed companies differs from the market's normal conditions

For convenience, the Section can be contacted through the following channels:

Telephone: (66)2379 3089 ext. 241

Facsimile : (66)2379 3099 Email: ir@qtc-energy.com

Website: <http://investor.qtc-energy.com>

In addition, the Company authorizes the Chief Executive Officer or the Managing Director to provide such information.

- The Company appoints contact persons who are authorized to provide coordinate with the SET for information disclosure as follows:
 1. Disclosing information based on situations, such as asset acquisition/disposal transactions, related transactions, shareholders' meeting schedules, changes in directors and auditors, relocation of head office, minutes of the shareholders' meetings, investment projects, dividend payments/ dividend payment omission, etc., which are performed by the Managing Director
 2. Disclosing information based on accounting period, such as annual financial statements and quarterly financial statements, Annual Registration Statement (Form 56-1 One Report), which are performed by the Managing Director
- Regarding the provision of general news on corporate management, the Chairman of the Board of Executive or the Managing Director is responsible for providing news and information on corporate management to the mass media.
- Contact persons are assigned to coordinate with other related agencies as follows:
 1. The company secretary is assigned to coordinate with Thailand Securities Depository Company Limited.
 2. The company secretary is assigned to coordinate with the Office of the Securities and Exchange Commission.

Section 5 Responsibilities of the Board of Directors

The Company focuses on showing the duties and responsibilities of the Board of Directors in order to maintain the interests of stakeholders and shareholders, such as establishment of annual strategies for business operations, review of such strategies semi-annually, performances monitoring, and ensuring transparent business operations to create added value and sustainability to the Company. The Company continues performing the following actions:

1. The Board of Directors consists of qualified persons with knowledge, capability, and experience at the executive level from various organizations. As a result, they are able to apply experiences, knowledge, and capability to effectively develop and establish the Company's policies and business directions which create the highest benefits to the Company and shareholders. The Board of Directors plays a significant role in establishing corporate policies and business overview and also supervising, inspecting, and monitoring the Management's performances and evaluating the Company's performances according to the specified plans.
2. The Company establishes the policy to separate the position of the Chairman of the Board and the Chief Executive Officer. These positions shall be held by different persons in order to prevent any one person from holding absolute power in any specific matter. The Board of Directors will determine the scope of the power and responsibilities and select persons to hold such position.
3. The number of companies in which each director holds office shall be in compliance with good corporate governance principles. Each director shall hold directorship positions in no more than 3 listed companies.
4. The Chief Executive Officer, the Managing Director, and top executives of the Company are entitled to hold directorship positions in no more than 3 companies with a prior approval of the Board of Directors.
5. Each independent director shall hold the position of an independent director for no more than 9 consecutive years, unless there is a reason or necessity
6. The Board of Directors shall appoint a new director to serve for the remaining term of office of the former director with an approval of the Board of Directors.
7. The Board of Directors discloses information on office holding in other companies to the shareholder in the Annual Registration Statement (Form 56-1 One Report)
8. The Company has the policy for non-executive directors to hold their own meetings for discussing any problems concerning management that are in the limelight without the participation of the Management at least once per year. In 2022, such meeting was held once on March 17, 2022.
9. The Board of Directors cooperates with the Management to determine the Company's vision, mission, strategies, goals, business plans, and budgets. The Company schedules the reviews of its vision, mission, strategies, goals, business plans, and budgets annually.
10. Regarding the roles, duties and responsibilities of the Board of Directors, the Company assigns directors to comply with the Code of Best Practices according to SET's guidelines. Directors shall understand and be aware of their roles, duties, and responsibilities, perform such duties in compliance with the laws, Company's objectives, and Articles of Association as well as shareholders' resolutions with integrity and honesty, and mainly consider the interests of the Company and its shareholders. Director's roles, duties and responsibilities are as follows:
 1. Holding an annual general meeting of shareholders within 4 months from the end of the Company's accounting period
 2. Holding a Board of Directors' meeting at least once every 3 months
 3. Providing the reliable accounting system, financial reporting, and accounting audits, supervising efficient and effective internal control system, internal audit, and risk management
 4. Preparing the Company's balance sheets and statements of income at the end of the Company's accounting period, which must be audited by an auditor and presented to the shareholders' meeting for consideration and approval
 5. Determining the Company's policies and business directions, monitoring and supervising the Management to perform operations according to the specified policies effectively and efficiently in order to maximize economic value

for the business and shareholders' wealth. Furthermore, the scope of the Board of Directors' duties includes the supervision to ensure that the Company complies with laws on securities and exchange, notifications of the Capital Market Supervisory Board, and regulations of the Stock Exchange of Thailand, such as connected transactions, and acquisition or disposal of significant assets, or laws relating to the Company's businesses

6. Considering, reviewing, auditing, and approving plans of business expansion, large-scale investment projects, and participation in investments with other business operators proposed by the executives
7. Consistently monitoring performances to be in accordance with plans and budgets
8. Considering and designating the management structures with authority to appoint the Board of Executives, Managing Directors, and other sub-committees as deemed appropriate, such as the Audit Committee, the Nomination Committee, the Remuneration Committee, etc., including determining the scopes of authority and duties of the Board of Executives, Managing Director, and any appointed sub-committees

However, the authorization under the scope of authority and duties shall not be in a manner that will enable the Board of Executives, Managing Director, and any sub-committees to consider and approve transactions possibly having conflicts, interests, or other types of conflicts of interest made with the Company or its subsidiaries (if any), unless it is the transaction approved under the policy and criteria completely considered and approved by the Board of Directors.

9. The Board of Directors may authorize a director or several directors or any individuals to perform any actions on behalf of the Board of Directors under the control of the Board of Directors or may authorize such persons to have authority as deemed appropriate within the period deemed fit by the Board of Directors. The Board of Directors may cancel, withdraw, change, or revise such authorization as deemed appropriate. However, such authorization shall not be in a manner that will enable such persons to consider and approve transactions in which they or persons possibly having conflicts, interests, or other types of conflicts of interest will make with the Company or its subsidiaries, unless it is the approval of normal business transactions and it is in line with general trade conditions or policies and criteria completely considered and approved by the Board of Directors under the specified rules, conditions, and procedures regarding connected transactions and acquisition or disposal of significant assets of listed company pursuant to the notifications of the Capital Market Supervisory Board and / or the Stock Exchange of Thailand and/ or any other notifications of related agencies.
10. The Board of Directors prepares the corporate governance policy in writing and performs the evaluation of the compliance with policies and the review of policies at least once a year. The Board of Directors also promotes the preparation of written Code of Conduct so that all directors, executives, and employees understand the ethical standards applied by the Company to its business operations, monitor the compliance with such Code of Conduct, and establish the risk management policy and the quarterly evaluation of risk management effectiveness. In addition, the Board of Directors also monitors the implementation of the Company's strategies.

5.1 Development of Directors and Executives

1. The Board of Directors has the policy to support and provide trainings and knowledge on the Company's corporate governance system to related parties, including directors, members of the Audit Committee, executives, and company secretary, to ensure the continuous performance improvement, such as training courses of Thai Institute of Directors Association (IOD).
2. The Company prepares documents and information that are beneficial to new directors and provides the handbook on business characteristics and guidelines for business operations of the Company to new directors.
3. The Company has the plan to select personnel who will be responsible for important management positions at all levels in an appropriate and transparent manner to ensure that the Company recruits professional executives with management capability independently from the major shareholders or any other individuals. The Board of Directors will consider and review such plan annually. Executives who are assigned to be a successor will be developed according to the Individual Development Plan to be ready for further promotion in the future.

Orientation for New Directors

The Board of Directors schedules the orientation for all new directors in order to build knowledge and understanding about the business, including any operations of the Company in order to be ready for the performance of their duties. The Company has the policy to promote new knowledge and attitudes for all directors to learn the corporate governance, industrial situations, technology businesses, and new innovations so that directors are able to effectively take over their respective duties as soon as possible. The Company Secretary will provide coordination in any issues as follows:

1. Matters Required Acknowledgement: Business structure, director structure, scope of authority and duty, laws required acknowledgement
2. General Business Knowledge: Guidelines on operations, policies, and visit for production process
3. Meeting with the Board of Directors to inquire in-depth data on business operations

In 2022, the shareholders meeting have not appointed new directors, so the company did not orientation for new directors.

Knowledge Development

The Board of Directors has the policy to support and provide trainings and knowledge on the Company's corporate governance system to related parties, including directors, members of the Audit Committee, members of the Nomination, Remuneration, and Corporate Governance Committee, members of the Risk Management Committee, and company secretary, to ensure the continuous performance improvement as arranged by the Stock Exchange of Thailand, the Office of the Securities and Exchange Commission, and training courses of Thai Institute of Directors Association (IOD). It also encourages the Board to have knowledge on administration from any institutes. In 2022, there were directors attending trainings and seminars as follows:

Name-Surname	Training Course	Institute
1. Mrs. Wasara Chotithammarat	1. Ethical Leadership Program (ELP)	IOD
2. Mr. Ruangchai Kritsnakriengkrai	1. Hot Issue for Directors	IOD
	2. Risk Management Program for Corporate Leaders (RCL)	IOD

In addition, the Company revised documents and information that are beneficial to new directors and provided the handbook on business characteristics and guidelines for business operations of the Company to new directors. The Nomination, Remuneration and Corporate Governance Committee is also assigned to follow up the preparation of succession plans for Managing Director, Deputy Managing Director, Assistant Managing Director and executives. Hence, the executives who are assigned to be a successor will be developed according to the Individual Development Plan to be ready for further promotion in the future.

5.2 Preparation of Succession Plan

To assure that the Company has directors with sufficient knowledge and capability to perform their respective duties, the Board of Directors establishes the top executive development plan by assigning the Nomination, Remuneration, and Corporate Governance Committee to prepare the succession plan for the positions of Managing Director, Deputy Managing Director, Assistant Managing Director and Department Manager. Knowledge, capability, and experience required for each position shall be considered to select executives with specified qualifications and ability to succeed each position. Furthermore, the Human Resources Department is assigned to monitor trainings and knowledge and ability development of successors for the positions of Managing Director, Deputy Managing Director, Assistant Managing Director and Department Manager.

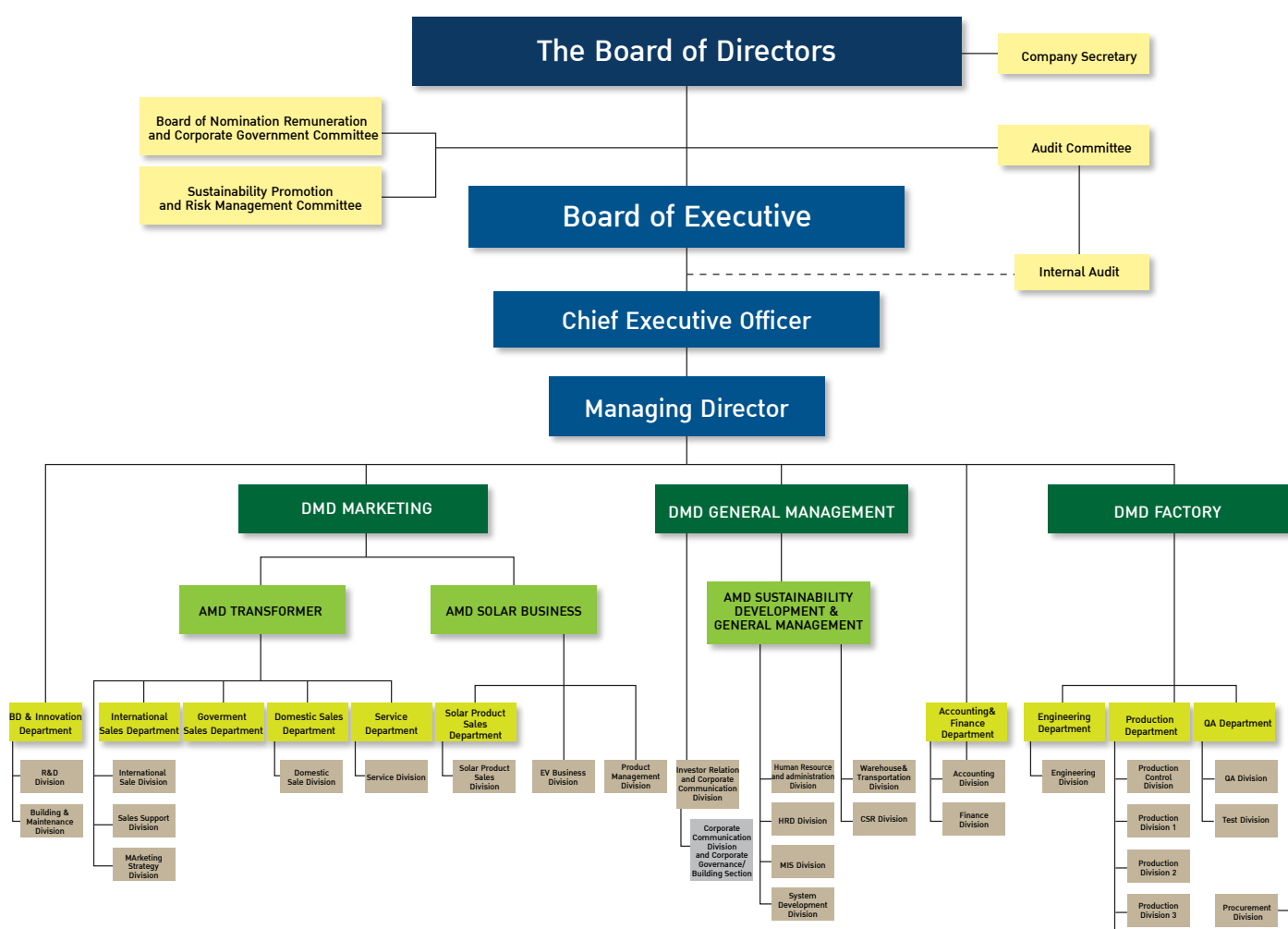
5.3 Stake Holding Reporting

The Company assigns the directors, executive directors, and executives to report their own interests and those of related persons when they commence to hold the position or when there is any change of information. In addition, they have to revise information annually according to rules and methods of stake holding reporting of the Company's directors and executives specified by the Board of Directors. In 2022, the Company required the board of directors, executive directors, and executives to submit the reports on stake holding to the company secretary to compile and prepare a summary of reports to the Audit Committee and the Board of Directors. Such matter was presented to the Board of Directors at the Meeting No. 7/2022 on December 15, 2022.

7. Corporate Governance Structure and Significant Information on Board of Directors, Sub-Committees, Executives, Employees, and Others

7.1 Structure of Corporate Governance

As at December 15, 2022, the Company's structure of corporate governance is as follows:



7.2 Information of Board of Directors

Structure and Composition of Board of Directors Regarding the Board of Directors, the number of directors shall be suitable for the size of the business. There are 10 directors, consisting of 2 executive directors and 8 non-executive directors. There are 5 independent directors and all of them are independent from the Management and major shareholders of the Company.

Independent directors account for 50% of the Board of Directors, consisting of:

1. Mr. Krirk-Krai Jirapaet
2. Mr. Natthaphon Lilawattananun
3. Mr. Norachit Sinhaseni
4. Dr. Kamol Takabut
5. Mrs. Wasara Chotithammarat

Board of Directors

The Company's Board of Directors consists of 10 members as follows:

Name-Surname	Position
1. Mr. Krirk-Krai Jirapaet	Chairman of the Board and Independent Director
2. Mr. Norachit Sinhaseni	Independent Director, Vice Chairman of the Board of Directors and Chairman of the Nomination Remuneration and Corporate Governance Committee
3. Mr. Natthaphon Lilawattananun	Independent Director and Chairman of the Audit Committee
4. Mrs. Wasara Chotithammarat	Independent Director, Member of the Nomination Remuneration and Corporate Governance Committee and Member of the Audit Committee
5. Dr. Kamol Takabut	Independent Director, Member of the Nomination Remuneration and Corporate Governance Committee and Member of the Audit Committee
6. Mr. Suroj Lamsam	Director
7. Mr. Preedee Ngamsantikul	Director and Member of the Nomination Remuneration and Corporate Governance Committee
8. Dr. Apichart Sramoon	Director
9. Mr. Poonphiphat Tantanasin	Director and Member of the Nomination Remuneration and Corporate Governance Committee
10. Mr. Ruangchai Kritsnakriengkrai	Director

Remarks: 1. Mr. Phairoj Boonpun directors retire by rotation, on 31 March 2022.

2. Mr. Pornthep Panyarachun resigned from position of director on 1 June 2022.

Miss Pakanat Tungtrakool is the Company secretary appointed by the 12/2020 meeting of the board of directors on December 17, 2020

Directors Authorized to Sign and Bind the Company

Mr. Poonphiphat Tantanasin affixes his signature together with Mr. Ruangchai Kritsnakriengkrai or Mr. Preedee Ngamsantikul and affixes the company seal. The information of the directors and controlling persons of the Company is shown in Attachment 1.

Scope of Authority and Duties of Board of Directors

1. The Board of Directors has the authority, duty and responsibility to manage the Company according to the laws, objectives, and Articles of Association of the Company, including legal resolutions of the shareholders' meeting with integrity and honesty and shall maintain the Company's interests.
2. The Board of Directors shall organize the annual general meeting of shareholder within 4 months from the end of the Company's accounting period.
3. The Board of Directors shall arrange the Board of Directors' meeting at least once every 3 months.

4. The Board of Directors shall provide the reliable accounting systems, financial reporting, and audit, including efficient and effective internal control systems, internal audit, and risk management.
5. The Board of Directors shall prepare the Company's balance sheets and the statement of income at the end of the Company's accounting period, which must be audited by an auditor and presented to the shareholders' meeting for consideration and approval.
6. The Board of Directors shall set the Company's goals, guidelines, policies, business plans, and budgets and also monitor and supervise the administration and management of the Management to be in line with specified policies, action plans, and budgets efficiently and effectively.
7. Furthermore, the scope of the Board of Directors' duties includes the supervision to ensure that the Company abides by laws on securities and exchange, notifications of the Capital Market Supervisory Board, regulations of the Stock Exchange of Thailand, such as connected transactions, acquisition or disposal of significant assets, or laws relating to the Company's businesses.
8. The Board of Directors shall consider, review, audit, and approve the business expansion plans, large-scale investment projects, including participation in investments with other business operators, proposed by the Management.
9. The Board of Directors shall constantly monitor performance according to the action plans and budgets.
10. The Board of Directors shall consider and determine the management structure with the authority to appoint the Board of Executives, Managing Director, and other sub-committees as deemed appropriate, such as the Audit Committee, the Nomination Committee, the Remuneration Committee, etc., including establish the scopes of authority and duties of the Board of Executives, Managing Director, and any appointed sub-committees.
11. However, the authorization under the scope of authority and duties shall not be in a manner that will enable the Board of Executives, Managing Director, and any sub-committees to consider and approve transactions possibly having conflicts, interests, or other types of conflicts of interest made with the Company or its subsidiaries (if any), unless it is the transaction approved under the policy and criteria completely considered and approved by the Board of Directors.
12. The Board of Directors may authorize a director or several directors or any individuals to perform any actions on behalf of the Board of Directors under the control of the Board of Directors or may authorize such persons to have authority as deemed appropriate within the period deemed fit by the Board of Directors. The Board of Directors may cancel, withdraw, change, or revise such authorization as deemed appropriate.

However, such authorization shall not be in a manner that will enable such persons to consider and approve transactions in which they or persons possibly having conflicts, interests, or other types of conflicts of interest will make with the Company or its subsidiaries, unless it is the approval of normal business transactions and it is in line with general trade conditions or policies and criteria completely considered and approved by the Board of Directors under the specified rules, conditions, and procedures regarding connected transactions and acquisition or disposal of significant assets of listed company pursuant to the notifications of the Capital Market Supervisory Board and / or the Stock Exchange of Thailand and/or any other notifications of related agencies.

Board Skill Matrix

Name of Director	Knowledge, Skill, Experience									
	Management/ Business	Directly Relating to Business	Indirectly Relating to Business	Strategic Planning	Laws	Accounting and Accounting Audit	Finance and Capital Management	International Business	Engineering	Others
Mr. Krirk-Krai Jirapaet	/			/	/		/	/		
Mr. Natthaphon Lilawattananun	/	/	/	/	/	/	/			
Mrs. Wasara Chotithammarat	/			/		/				
Dr. Kamol Takabut	/		/	/					/	
Mr. Suroj Lamsam	/			/			/			
Mr. Preedee Ngamsantikul	/	/		/	/		/	/	/	/
Dr. Apichart Sramoon	/		/	/			/		/	
Mr. Norachit Sinhaseni	/			/	/			/		/
Mr. Poonphiphat Tantanasin	/	/	/	/			/	/	/	
Mr. Ruangchai Kritsnakriengkrai	/	/		/				/	/	

7.3 Information on Sub-Committee

7.3.1 Audit Committee

The Audit Committee is composed of 3 independent directors who possess knowledge, capability, experiences, and qualifications according with the regulations of the Stock Exchange of Thailand. All of them are non-executive directors with a term of office of 3 years.

Name-Surname	Position
1. Mr. Natthaphon Lilawattananun *	Chairman of the Audit Committee
2. Dr. Kamol Takabut	Member of the Audit Committee
3. Mrs. Wasara Chotithammarat *	Member of the Audit Committee

Remarks : * A director with sufficient knowledge and experience in accounting and finance for reviewing the reliability of financial statements.

Mr. Thanut kerdjaruen is the Internal Auditor and Miss Suthinee Suwanchaisakul is the Secretary of the Audit Committee appointed by the 3/2021 meeting of the board of Audit Committee on August 9, 2021.

Scope of Authority, Duties, and Responsibilities of Audit Committee

1. Reviewing the accuracy and sufficiency of the Company's financial reports
2. Reviewing the suitability and effectiveness of the Company's internal control system and internal audit system and considering the independency of the internal audit section and approving the consideration of the appointment, transfer, dismissal of the head of the internal audit section or any other sections responsible for internal audit

3. Reviewing the Company's compliance with the laws on securities and exchange, regulations of the Stock Exchange of Thailand, and laws relating to the Company's businesses
4. Considering, selecting, nominating, and dismissing independent individuals in order to serve as the Company's auditors, proposing remuneration of such persons, and attending meetings with the auditors without the attendance of the Management at least once a year
5. Considering the disclosure of the Company's information in the case that there is any connected transaction or transactions with potential conflicts of interest to be in accordance with the laws and regulations of the Stock Exchange of Thailand in order to ensure that such transactions are reasonable and for the best interest of the Company
6. Preparing the report of the Audit Committee by disclosing in (56-1 One Report); Such report must be signed by the Chairman of the Audit Committee and contain at least the following information:
 - 1) Opinions on accuracy, completeness, and reliability of the Company's financial report
 - 2) Opinions on sufficiency of the Company's internal control system
 - 3) Opinions on compliance with laws on securities and exchange, regulations of the Stock Exchange of Thailand, or laws relating to the Company's business
 - 4) Opinions on suitability of auditors
 - 5) Opinion on transaction with potential conflict of interest
 - 6) Number of Audit Committee's meetings and meeting attendance of each member of the Audit Committee
 - 7) Overall opinions or observations obtained by the Audit Committee from the performance of duties according to the charter
 - 8) Other transactions that should be acknowledged by shareholders and general investors under the scope of the duties and responsibilities assigned by the Board of Directors
7. Considering and approving the Company's regulation on Internal Audit before presenting it to the Board for consideration and approval
8. Approving the internal audit plan, budget, and personnel of the Internal Audit Department
9. Considering and reviewing the independence and the reporting of performances of the Internal Audit Department
10. Considering and approving the appointment, transfer, or dismissal and evaluating the performances of internal audit manager
11. Reviewing the Code of Conduct before presenting to the Board for consideration
12. Reviewing with the Management to ensure that employees abide by the Company's Code of Conduct
13. Reviewing with the Management regarding the preparation of reports and the Management's Discussion and Analysis or MD&A and disclosing them in the 56-1 One Report.
14. Reviewing with the Management regarding financial management and financial risk management
15. Supervising the inspection/ investigation about matters necessary to the performance of duties and responsibilities of the Company
16. Reviewing the charter of the Audit Committee at least once a year
17. Performing any other duties assigned by the Board of Directors and approved by the Audit Committee
18. Considering the Company's information disclosure regarding the reporting on stake holding of directors and top 4 executives ranking from the Managing Director at least once a year

7.3.2 Nomination Remuneration and Corporate Governance Committee as follows:

Name-Surname	Position
1. Mr. Norachit Sinhaseni	Chairman of Nomination Remuneration and Corporate Governance Committee / Independent directors
2. Dr. Kamol Takabut	Independent director
3. Mrs. Wasara Chotithammarat	Independent director
4. Mr. Poonphiphat Tantanasin	Director
5. Mr. Preedee Ngamsantikul	Director

Miss Boonpa Ruddist is the Secretary of the Nomination Remuneration and Corporate Governance Committee.

The member of the Nomination Remuneration and Corporate Governance Committee shall have a term of office of 3 years.

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

The Committee shall establish the rules and policy on nomination of directors, members of sub-committees, and top executives by considering the suitability of numbers, structure, and composition of the committee, and also define their qualifications and present them to the Board of Directors and/or the annual general meeting of shareholders to request for an approval as the case may be.

Nomination and Appointment of Executives

1. Establishing rules and policy on nomination of directors, members of sub-committees, and top executives by considering the suitability of numbers, structure, and composition of the committee, and also define their qualifications and present them to the Board of Directors
2. Considering, recruiting, selecting, and nominating qualified persons to hold the position of directors in the case of retirement by rotation and/or vacant positions and/or additional appointment
3. Considering and screening qualified persons to hold the vacant position of President, including establishing the succession plans for top executives
4. Performing any other actions relating to nomination as assigned by the Board of Directors
5. Evaluating the performances of the Chief Executive Officer (CEO) and then presenting them to the Board of Directors' meeting for consideration and approval

Remuneration

1. Establishing the policy and rules on remuneration payment to the Board of Directors, the Audit Committee, the Board of Executive, and top executives by presenting it to the Board of Directors
2. Determining necessary and appropriate annual monetary and non-monetary remuneration for the Board of Directors, the Audit Committee, the Nomination, Remuneration, and Corporate Governance Committee, and the Board of Executive by considering the appropriateness based on duties, responsibilities, and performances and comparing with other companies in similar businesses and expected benefits to be obtained from directors in order to present it to the Board of Directors for consideration and then present it to the shareholders' meeting for approval as the case may be
3. Considering and reviewing policies and rules on determining appropriate remuneration and remuneration payment system based on duties and responsibilities and consistent with the Company's operating results and market conditions by mainly considering benefits created for the Company
4. Reporting policies and principles/rationale of determination of remuneration for directors and executives according to the regulations of the Stock Exchange of Thailand by disclosing them in the 56-1 One Report
5. Determining annual bonus and salary increment rate by considering the Company's operating results
6. Considering and screening the Company's salary structures and other benefits and returns
7. Performing any other relevant actions as assigned by the Board of Directors; The Management and any section is required to

report or present relevant information and documents to the Nomination, Remuneration, and Corporate Governance Committee to support the Nomination, Remuneration and Corporate Governance Committee in order to support the operations of the Nomination, Remuneration and Corporate Governance Committee to achieve successfully according to assigned duties

Corporate Governance

1. Considering, reviewing, and presenting the policy on good corporate governance, Code of Conduct, policy on corporate social and environmental responsibility, policy on sustainable development of the Company, and any other policies or guidelines promoting the Company's sustainable growth to the Board of Directors for approval
2. Ensuring that the Management continuously implements any policies/guidelines under Item 1 to develop the Company; Such policies and guidelines shall be in line with and appropriate for the Company's businesses and suggestions of associated agencies, and comparable to international standards.
3. Monitoring and reviewing work systems in the organization to be in line with ethics and best practices according to specified policies and guidelines
4. Supervising the Company's operations to be in accordance with the corporate governance principles of agencies with regulatory authority, such as the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand, etc.
5. Reporting the organization's performances according to the policy on good corporate governance and other related policies in order to report them to the Board of Directors and external organizations as appropriate

7.3.3 Risk Management Committee consists of

Name-Surname	Position
1. Mr. Ruangchai Kritsnakriengkrai	Chairman of Risk Management Committee
2. Miss Boonpa Ruddist	Member of the Committee
3. Mr. Kittti Achariyaboonyong	Member of the Committee
4. Mr. Charoensak Sarawong	Member of the Committee
5. Mr. Phot Wongkham	Member of the Committee
6. Mr. Nipat Chingchamikorn	Member of the Committee
7. Miss Sureeporn Mitdhammana	Member of the Committee
8. Miss Kobpet Chuphemporn	Member of the Committee
9. Miss Suanya Noochapun	Member of the Committee
10. Mr. Chanchai Thanawan	Member of the Committee
11. Mr. Surat Phanomai	Member of the Committee
12. Miss Suthinee Suwanchaisakul	Secretary

Scope of Authority, Duties, and Responsibilities of Risk Management Committee

1. Establishing overall risk management policy and guidelines covering various types of important risks, such as financial risks, exchange rate risks, marketing risks, and other risks possibly affecting the Company's operations and reputation, etc., in order to present them to the Board of Directors for consideration and approval
2. Performing assessment and analysis on potential risk factors, including establishing risk measurement criteria and acceptable risk limit of the Company
3. Establishing risk management processes, assessing, supervising, monitoring, and developing processes to achieve the highest efficiency and suitability for managing all types of potential risks
4. Regularly reporting the management, operations, and corporate risk status and any changes as well as areas for improvement and correction to the Board of Directors and notifying the Audit Committee to acknowledge and review the sufficiency and suitability of risk management
5. Managing and supervising overall corporate risk management to be in accordance with the good governance principles

6. Reviewing the sufficiency of the policy and risk management system as well as effectiveness of such system and compliance with specified policy
7. Assigning a risk management team as necessary
8. Performing duties as assigned by the Board of Directors
9. The Risk Management Committee shall hold the meeting at least once every 3 months and report to the Audit Committee and the Board of Directors for acknowledgement every quarter.

QTC Energy (Public) Company Limited realizes the importance of good corporate management in order to drive the organization towards stable growth and business expansion and steady financial position and create returns to shareholders at the appropriate level. Thus, the Company deems appropriate to implement the risk management system with operational frameworks and risk management processes that correspond to the rules of the Committee on Sponsoring Organizations of the Tread way Commission (COSO), an international standard, in order to ensure that the people involved have understanding on risk management principles and properly apply them.

The Risk Management Committee establishes the risk management policy as follow:

1. Ensuring that the risk management is the responsibility of employees at all levels who are required to be aware of the existing operational risks in their respective sections and organization as well as prioritize risk management in any areas at the adequate and appropriate level
2. Ensuring that all sections are responsible for assessing risks, determining risk indicators, guidelines on prevention and mitigation of risk or possible losses, including regularly monitoring and evaluating risk management and preparing risk reports according to the operational framework and risk management procedures
3. The organizational risk management process is set out in accordance with good standards in line with international practice in order to effectively manage risks that may affect the company's operations, develop and make risk management operations throughout the organization in the same direction. The risk management system is applied as part of the decision making, strategic planning, plans and operations of the company, including focusing on achieving the set forth objectives, goals, visions, missions and strategies.
4. Ensuring when employees witness or become aware of risks with potential impacts on the Company, the employee is required to immediately report such risks to the persons involved for further risk management.
5. Constantly promoting and providing knowledge and understanding on risk management processes and guidelines to executives and employees in order to foster and cultivate the habit of personnel at all levels to be aware of the importance and the participation in the organization's risk management operation as a part of the culture leading to value creation
6. A review of this policy is required annually and any changes must be submitted to the Audit Committee for consideration and proposed to the Board of Directors for approval.

7.3.4 Board of Executive

The Company's Board of Executive consists of 4 members, namely,

Name-Surname	Position
1. Mr. Poonphiphat Tantanasin	Chairman of the Board of Executive
2. Mr. Ruangchai Kritsnakriengkrai	Executive Director
3. Mr. Kitti Achariyaboonyong	Executive Director
4. Miss Boonpa Ruddist	Executive Director

Miss Boonpa Ruddist is the secretary of the Board of Executive, who was appointed by the Board of Directors' Meeting No. 1/2554 on February 24, 2011.

Scope of Authority and Duty of Board of Executive

1. Presenting the Company's goals, policies, business plans, including business strategies and the annual budget to the Board of Directors for consideration and approval
2. Supervising business operations of the Company to be in accordance with policies, action plans, and budgets approved by the Board of Directors
3. Considering and approving the Company's normal business transactions, such as investments in the purchase of machineries and other assets based on the investment budgets or budgets approved by the Board of Directors, purchases of raw materials into warehouses, and distribution of products, etc.; The limit for each item must be based on the operational authority approved by the Board of Directors.
4. Defining the organizational structure and administrative authority and considering the adjustment of salary and bonus of employees at the lower level than the department manager, including considering and approving the manpower rate that is not in the annual budget
5. Having the authority to appoint or employ a consultant relating to the administration of the organization for maximum efficiency
6. Considering the profit and loss of the Company and the proposal of an interim dividend or an annual dividend in order to present such matter to the Board of Directors for approval
7. Having the authority to appoint a person or several persons to perform any actions under the control of the Board of Executive or may authorize such persons to have authority as deemed appropriate by the Board of Executive within the period deemed fit by the Board of Executive. The Board of Executive may cancel, withdraw, change, or revise such authorized person or authorization as deemed appropriate.
8. Performing other duties as assigned by the Board of Directors from time to time

However, the authorization under the scope of authority and duties of the Board of Executive shall not be in a manner of delegation or sub-delegation that will enable the persons authorized by the Board of Executives to approve transactions possibly having conflicts (according to the definitions set forth in the notifications of the Capital Market Supervisory Board and/or the Stock Exchange of Thailand and/or related agencies), interests, or other types of conflicts of interest made with the Company or its subsidiaries and/or related companies. The Board of Executive shall not have the authority to approve such matters which must be proposed to the Board of Directors and / or the shareholders' meeting (as the case may be) for further approval, unless it is the approval of transaction under the normal course of business and general trading conditions in accordance with the notifications of the Capital Market Supervisory Board and / or the Stock Exchange of Thailand and / or related agencies.

7.4 Management Team

7.4.1 The Company has 13 executives, namely,

Name-Surname	Position
1. Mr. Poonphiphat Tantanasin	Chief Executive Officer
2. Mr. Ruangchai Kritsnakriengkrai	Managing Director
3. Miss Boonpa Ruddist	Deputy Managing Director of General Management
4. Mr. Kittti Achariyaboonyong	Deputy Managing Director of Marketing
5. Mr. Charoensak Sarawong	Deputy Managing Director of Factory
6. Mr. Phot Wongkham	Assistant to Managing Director of Transformer Business
7. Mr. Nipat Chingchamikorn	Assistant to Managing Director of Solar Business
8. Miss Sureeporn Mitthammana	Assistant to Managing Director of Sustainability Development and General Management
9. Miss Kobpetch Chuphemporn	Manager of Accounting and Finance Department

Name-Surname	Position
10. Miss Suanya Noochapun	Manager of Domestic Sales Department
11. Mr.Chanchai Thanawan	Manager of Production Department
12. Mr. Surat Phanomai	Manager of Quality Assurance
13. Miss Pakanat Tungtrakool	Manager of Company Secretary

Scope of Authority and Duty of Managing Director

1. Supervising business operations and/or administrating the Company's daily operations
2. Carrying out or administrating operations in line with policies, action plans, and budgets approved by the Board of Directors and/or the Board of Executive
3. Establishing the Company's policies, business plans, business strategies, and annual budgets for presenting them to the Board of Executive and requesting for an approval from the Board of Directors
4. Considering and approving the Company's normal business transactions, such as investments in the purchase of machineries and other assets based on the investment budgets or budgets approved by the Board of Directors, purchases of raw materials into warehouses, and distribution of products, etc.; The limit for each item must be based on the operational authority approved by the Board of Directors.
5. Having the authority to approve the manpower rate, employment and appointment of employees, and appointment and transfers of employees at the lower level than the department manager as approved by the Board of Directors, including consider and determine duties and responsibilities of each section and position
6. Constantly monitoring and evaluating the Company's performances and reporting management performances and work progress to the Board of Executive, the Audit Committee, and the Board of Directors
7. Considering and approving the entry into agreements regarding the Company's normal course of business; The limit for each item must be based on the operational authority approved by the Board of Directors.
8. Issuing directives, regulations, announcements, and any records to ensure that the Company's operations are in line with policies and for the interests of the Company, including maintaining the disciplines in the corporation
9. Having the authority to appoint committees or working groups for benefits and good and transparent management efficiency and to authorize a person or several persons to perform any actions under the control of the Managing Director or may authorize such persons to have authority as deemed appropriate by the Managing Director; The Managing Director may cancel, withdraw, change, or revise such authorized person or authorization as deemed appropriate.
10. Perform other duties as assigned by the Board of Executive or the Board of Directors

However, to carry out any operations where the Managing Director or persons authorized by the Managing Director or persons having potential conflicts (according to the definitions set forth in the notifications of the Capital Market Supervisory Board and/or the Stock Exchange of Thailand and/or related agencies), interests, or conflicts of interest made with the Company or its subsidiaries and/or related companies, the Managing Director shall not have the authority to approve such matters which must be proposed to the Board of Directors and / or the shareholders' meeting (as the case may be) for further approval, unless it is the approval of transaction under the normal course of business and general trading conditions in accordance with the notifications of the Capital Market Supervisory Board and / or the Stock Exchange of Thailand and / or related agencies

The Chairman of the Board of Directors has the following duties:

1. Presiding over the Board of Directors' meetings
2. Summoning the Board of Directors' meetings
3. Having the casting vote in the case of a tie vote at the Board of Directors' meetings
4. Presiding over the Shareholders' meetings

Determination of Authority for Financial Limit Approval

The Company determines the authority for the approval of financial limit for the Company's normal business transactions, which can be summarized as follows:

	Department Manager	Deputy Managing Director	Managing Director	Board of Executive	Board of Directors
(1) Investments from investment budgets (per project)	-	Not exceeding 2 million Baht	Not exceeding 3 million Baht	Not exceeding 20 million Baht	Exceeding 20 million Baht
(2) Investments not included in budget plans	-	-	-	Not exceeding 5 million Baht	Exceeding 5 million Baht
(3) Expenses relating to assets - Purchases of machinery based on investment budgets - Purchases of other assets	- -	Not exceeding 2 million Baht Not exceeding 2 million Baht	Not exceeding 3 million Baht Not exceeding 3 million Baht	Not exceeding 24 million Baht Not exceeding 24 million Baht	Exceeding 24 million Baht Exceeding 24 million Baht
(4) Sales of products by setting prices based on pricing policy (Price List)	Not exceeding 5 million Baht	Not exceeding 50 million Baht	Not exceeding 100 million Baht	Not exceeding 200 million Baht	Exceeding 200 million Baht
(5) Sales of products by setting prices lower than pricing policy (Price List) ¹	Not exceeding 10%	Not exceeding 15%	Not exceeding 15%	> 15%	
(6) Requests for purchases of materials into warehouses for production ²	Not exceeding 1 million Baht	Not exceeding 5 million Baht	Not exceeding 10 million Baht	> 10 million Baht	
(7) Requests for purchases of machineries/ tools/buildings ³	Not exceeding 2 million Baht	Not exceeding 2 million Baht	Not exceeding 3 million Baht	> 3 million Baht	

Remarks:

- To consider and approve the sales of products at a price lower than the pricing policy (Price List), it does not only consider the operational authority set forth in Item (5), but sales values are also taken into account. Such operations must be approved by authorized persons according to the sales values specified in Item (4).
- The Company considers and assigns the Board of Executive to have the authority to approve the requests for the purchases of materials into warehouses for production without the financial limit because the main materials to be purchased, e.g. silicon steel and copper foil, are the materials with few producers and the sales prices are based on the constantly changing prices of the global market. Therefore, to consider each purchase order, the demand of use and the trends in the changes of material prices are mainly taken into account. It is necessary to rely on flexibility and speed in the operations. In practical way, however, the Company reports such matter to the Board of Directors at the Board of Directors' meetings.
- Investments to purchase machineries shall be in accordance with the investment frameworks approved by the Board of Directors. In terms of procedures, the party to purchase assets must request for an approval to purchase assets according to the authority specified in Item (3). The authority specified in Item (7) involves the authority to sign and approve the Purchase Request.

7.4.2 Remuneration for Executives

The Board of Directors determines the remuneration for the Board of Executive and top executives in accordance with the rules and policies specified by the Board of Directors. It must be first considered by the Nomination, Remuneration, and Corporate Governance Committee. The rules are linked to the operating results of the Company, operations, and responsibilities. The policy on remuneration for executives is established clearly and transparently. The remuneration is at a level that is appropriate and consistent with the industry and at a sufficient level to attract and retain executives. The remuneration for executive directors and top executives is approved by the Board of Directors.

(1) Monetary remuneration

In 2021 and 2022, the Company paid remuneration for executives the amount of 36.83 million Baht and 33.54 million Baht, respectively

(2) Other remunerations of executives

Regarding the contributions to the Provident Fund, the Company establishes the provident fund for executives where the Company contributes 3 - 6% of their salary. In 2022, the Company paid the contributions to the provident fund for 12 executives in the total amount of 1,215,892 Baht.

(3) The company car (For executives who do not accept the company cars, the Company will pay monetary remuneration which is already included in the expenses above).

7.5 Personnel

7.5.1 Number of Personnel

As at December 31, 2023, the Company had a total of 252 employees (excluding 12 executives), consisting of 251 regular employees and 1 as daily employees, with the following details:

Department	Regular Employees (Person)	Daily Employees (Person)	Total
Business Development Department	-	-	-
International Sales Department	3	-	3
Government Sales Department	1	-	1
Domestic Sales Department	5	-	5
Customer Service Department	24	-	24
Solar Product Sales Department	6	-	6
EV Division	1	-	1
Product Management Department	2	-	2
Marketing Strategy Division	2	-	2
Sales Support Division	4	-	4
Investor Relations and Corporate Communications Division	3	-	3
Internal Audit Division	1	-	1
Accounting and Finance Department	11	-	11
Warehouse & Logistics Department	16	1	17
Human Resources Division	4	-	4
CSR Division	4	-	4
MIS Division	3	-	3
System Development Division	3	-	3
Production Department	125	-	125
Engineering Department	13	-	13
QA Department	14	-	14
Procurement Division	3	-	3
Research & Development and Production Process Division	2	-	2
Security Section	1	-	1
Total	251	1	252

7.5.2 Provident Fund

The Company established the Provident Fund on July 30, 2008, and had the policy to encourage the Company's Provident Fund Committee to comply with the Investment Governance Code for Institutional Investors, "I Code". Since the provident fund is considered the retirement savings fund for employees, the Company encourages the Provident Fund Committee to select responsible fund managers according to the I Code and manage the investments responsibly by taking into account environmental, social, and governance factors and adhering to the principles of low-risk investment.

With/Without PVD	Number of Employees and Executives Participating in PVD (Person)	Proportion of Employees Participating in PVD/ Total Number of Employees (%)
With PVD	QTC = 145 Person	55.34%
With PVD	QTCGP = 2 Person	100%
With PVD	QSolar1 = 4 Person	25%

7.5.3 Remuneration for Employees

The Board of Directors establishes policies and guidelines on remuneration and welfares for employees by taking into account the operating results, profitability of each year, and performance measurement according to OKR.

The Company has a total of 252 employees. In 2022, the Company paid remuneration in the amount of 107.32 million Baht to its employees. Such remuneration includes salary, overtime pay, living allowance, bonus, travel allowance, commissions, and contributions to the provident fund.

In addition, the subsidiary paid remuneration to its employees in the same manner as the Company in the total amount of 8.73 million Baht.

2022	QTC Energy PCL	QTC Global Power Co., Ltd. and Q Solar 1 Co., Ltd.
Operating Employees (Person)	252	17
Executive Employees (Person)	12	2
Total	264	19
Remuneration for Employees and Executives (Million Baht)	142.07	8.73

Subsidiary's Remuneration

- (1) Regarding the contributions to the Provident Fund, the Company establishes the provident fund for executives and subsidiary employees total amount of 258,533 Baht. (which is already included in the expenses above)
- (2) The company car (For executives who do not accept the company cars, the Company will pay monetary remuneration which is already included in the expenses above)

The Company prepares the employee handbook and distributes it to all employees in the organization so that they can acknowledge rules, regulations, and welfare to be received.

7.5.4 Legal Dispute

– N/A –

7.6 Other Information

- 7.6.1 At the Board of Directors' Meeting No. 12/2020 on December 17, 2020, the Board of Directors appointed Miss Pakanat Tungtrakool to be the company secretary. The qualifications of a person holding the position of company secretary are shown in Attachment 1.

The Company assigned Mr. Thanat Kerdjaruen to hold the position of Head of Compliance Supervision in order to supervise the compliance with the rules of government agencies that oversee the Company's business operations. The qualifications of a person holding the position of Company's Head of Compliance Supervision are shown in Attachment 3.

- 7.6.2 The Company assigned Miss Pakanat Tungtrakool to be the Head of Investor Relations. The contact channels are as follows:

Telephone: (66)2379 3089 ext. 241

Facsimile: (66)2379 3099 Email: ir@qtc-energy.com

Website: <http://investor.qtc-energy.com>

- 7.6.3 Remuneration of audit firms and its affiliates

- (1) Audit Fee

The Company and its subsidiaries paid the audit fees as follows:

Company Name	Audit Fee (Baht)
QTC Energy PCL	1,600,000
QTC Global Power Co., Ltd.	550,000
Q Solar 1 Co., Ltd.	360,000

- (2) Other service fees in addition to auditing

N/A

The Company has no directors and executives who had been employees or partners of the audit company.

Shareholding of Board of Directors and Top Executives

Directors and Top Executives	Position	Nature of Shareholding	Number of Ordinary Shares as at Dec 30, 2021	Number of Ordinary Shares as at Dec 30, 2022	Increase (Decrease)
Mr. Krirk-Krai Jirapaet	Chairman of the Board of Directors	No	0	0	0
Mr. Natthaphon Lilawattananun	Director	No	0	0	0
Dr. Kamol Takabut	Director	No	0	0	0
Mrs. Wasara Chotithammarat	Director	No	0	0	0
Mr. Suroj Lamsam	Director	No	0	0	0
Mr. Preedee Ngamsantikul	Director	Yes	2,450,000	2,450,000	0
Dr. Apichart Sramoon	Director	Yes	42,501,000	42,501,000	0
Mr. Norachit Sinhaseni	Director	No	0	0	0
Mr. Poonphiphat Tantanasin	Director / Chief Executive Officer	Direct	598,600	598,600	0
Mr. Ruangchai Kritsnakriengkrai	Director / Managing Director	No	0	0	0
Miss Boonpa Ruddist	Executive	No	0	0	0
Mr. Kitt Achariyaboonyong	Executive	No	0	0	0
Mr. Charoensak Sarawong	Executive	No	0	0	0
Mr. Phot Wongkham	Executive	Yes	1,000	1,900	900
Mr. Nipat Chingchamikorn	Executive	No	0	0	0
Miss Sureeporn Mitdhammana	Executive	No	0	0	0

8. Report on Significant Corporate Governance Performances

8.1 Summary of the Board of Directors' Performances of Duties in the Previous Year

The Board of Directors held on 7 meetings in 2022 to consider policies and operational guidelines to comply with the good governance principles, formulate strategies, action plans, and budgets, including monitor and supervise the Company to operate its business according to the specified goals, and established the guidelines. However, in the event that they fail to meet with defined plan, strategies must be adjusted to be consistent with current situation. All directors have performed their duties based on their own responsibilities with full effort so, in 2022, the Company had profits in the amount of 97.61 million Baht.

8.2 Nomination of Directors and Top Executives

The Company has the plan for appropriate and transparent nomination of directors and top executives to ensure that the Company recruits professional and manageable directors and top executives who are independent from major shareholders or other shareholders. The Nomination, Remuneration, and Corporate Governance Committee is assigned to nominate suitable persons to be a candidate based on the specified rules and methods for nomination and recruitment. Such rules and methods for nomination and recruitment depend on the suitability of the Company's situation at that time. The preliminary qualifications of the directors must be in accordance with the relevant laws, the Company's Articles of Association, and the rules of the Office of the Securities and Exchange Commission. In addition, directors with knowledge on electrical engineering and finance and accounting will be additionally considered.

Definition of "Independent Director"

The Company defines the definition of its independent directors as the director who is non-executive director and does not involve in the regular management and is not the Company's major shareholder. The Company has specified qualifications that are equal to the minimum requirements set by the SEC and the SET. Nominated independent directors of the Company are fully qualified according to the definitions as follows:

- (1) Holding no more than one percent of the total voting shares.
- (2) Not being an executive director involved in the management of the business, employee, staff, advisor earning regular monthly salary, controlling person during the period of two preceding years.

Relaxation of this requirement is in the case where the person is retired as a government official or as a consultant of a government agency which is a majority shareholder or has controlling interest for less than 2 years.
- (3) Not being a person who is related by blood or legal relations with a director or an executive.
- (4) Not having a business relationship with including not being the significant shareholder or the controlling person of a juristic person having a business relationship with the company in an amount starting from 20 million baht or more or from three percent of NTA, whichever is amount is lower, unless such foregoing relationships have ended for at least two years prior to the date of filing.
- (5) Not being an auditor of the company, its parent company, subsidiary, associate company, a major shareholder, a controlling person, unless such foregoing relationships have ended for at least two years prior to the date of filing.
- (6) Not being a provider of professional services, a significant shareholder, controlling person, or partner of such provider with a service fee of more than two million baht per year during the period of two preceding year.

* In case of a person who has qualifications inconsistent with 4 and 6, he or she shall be granted an exemption from such prohibition, provided that the issuer has obtained an opinion of the board of directors indicating that after a consideration in accordance with the principle in Section 89/7, the appointment of such person does not affect the performance of duties and the giving of independent opinions, and that the following information has also been disclosed in the notice calling the shareholders' meeting.

- (7) Not being a director who is appointed as the representative of directors of the issuer, major shareholder or shareholder who is a connected person of a majority shareholder.
- (8) Not undertaking any business of the same nature and in competition with the company and the subsidiary, or holding more than one percent of the voting shares, or being a managing director, employee, staff, advisor with a regular monthly salary, person with controlling interest in such business.
- (9) Not having any other characteristics that cause the inability to express independent opinions.
- (10) An independent director can be an independent director of an affiliated company, but a member of the Audit Committee is prohibited from being a director of a parent company, subsidiary or subsidiary at the same level (sister company) which are listed companies.
- (11) After being appointed as an independent director, that independent director may be assigned by the board of directors to make a decision on the business operation, the parent company, subsidiary, associate company, sister company, major shareholder or controlling person in the form of collective decision. However, a member of the Audit Committee is prohibited from taking part in the decision-making on the business operation.

The Board of Directors does not have independent directors holding the directorship position in more than 5 listed companies. None of the directors or top executives are employees or partners of the external audit firm which provided services to the Company during the past 2 years.

8.2.1 Election of Directors through Shareholders' Meeting

The Company does not apply the cumulative voting method (which is stipulated in the Articles of Association) in voting for the election of directors. The Company allows shareholders to use a ballot to elect a director individually. Shareholders shall cast their existing entire votes to elect persons nominated as a director one by one.

8.2.2 Self-Assessment of the Board of Directors

The Board of Directors requires the performance evaluation of each director and the entire Board annually at least once a year to perceive problems and obstacles during the previous year and improve the efficiency of operation of the Board of Directors because they can acknowledge their responsibilities and duties clearly. This is also to improve the relationship between the Board of Directors and the Management as well as guidelines for improvement and correction to be in accordance with the good corporate governance principles by using the form updated from the Stock Exchange of Thailand's self-assessment sample form of the Board of Directors as appropriate and in accordance with the specific characteristics of the Board of Directors. The assessment criteria are detailed as follows: 1. Performances, 2. Policies, 3. Corrective approaches in the case of non-compliance, 4. Preparations before meeting attendance, 5. Practices concerning corporate governance of the Company, 6. Performance of duties of the Chairman of the Board of Directors and risk management monitoring, etc. The results of the self-assessment of the Board of Directors are used to analyze statistical data. The assessment results will be notified to the Board of Directors for further action of the Management. In 2021, the Company assessed the performance of every sub-committee, namely, the Audit Committee, the Nomination, Remuneration, and Corporate Governance Committee, and the Risk Management Committee. The assessment criteria are detailed as follows: 1. Suitable structure and qualifications of sub-committees resulting in effective operations, 2. Effective performance of duties of sub-committees at the meetings, and 3. Roles, duties and responsibilities of sub-committees. In 2022, the assessment results of each committee were at the excellent level, which means the excellent operations.

8.2.3 Performance Evaluation of Chief Executive Officer

The Board of Directors requires the performance evaluation of the chief executive officer annually by using the form updated from the Stock Exchange of Thailand's self-assessment sample form of the managing director as appropriate and in accordance with the goals and strategic plans of the organization. The assessment criteria are divided into the following topics: 1. Leadership; 2. Strategy Formulation; 3. Compliance with Strategy; 4. Financial Planning and Performance; 5. Relationship with the Board of Directors; 6. External Relationships; 7. Management and Personnel Relationships; 8. Succession; 9. Product and Service Knowledge; 10. Personal Characteristics. The results of the self-assessment of the Board of Directors are used to analyze statistical data in order to improve and develop any weakness and determine the appropriate remuneration and incentives. In 2022, the performances were at the excellent level.

8.2.4 Board of Directors' Meeting

To promote and encourage the Board of Directors to attend every Board of Directors' meeting, the Company sets a meeting schedule in advance every year. Each meeting is scheduled on every second Thursday of each quarter in order to inform the Board of Directors in advance. Each meeting has a clear meeting agenda, including the agenda for acknowledgment and the agenda for consideration. Documents supporting the meeting are completely and sufficiently provided for decision-making and submitted to the Board of Directors at least 7 days in advance so that all directors can openly discuss and express their opinions. The Chairman of the Board will ask for opinions from other directors and process the comments and conclusions from the meeting. The minute of meeting is prepared by the company secretary. After being approved by the Meeting, it will be kept in the document cabinets on the second floor of the head office in Bangkok, which directors and related persons can audit them. The Company establishes the policy concerning the quorum for the Board of Directors' meeting in which no less than one-half of the total number of directors must be present at the meeting to constitute a quorum. The minimum quorum when the Board of Directors passes a resolution in the conference room shall be at least two-thirds of the total number of directors.

The details of the meeting attendance of each director for the year 2022 can be summarized as follows:

Name-Surname	Position	Meeting Attendance/Total Number of Meetings (Meeting)								
		Director			Audit Committee			Nomination Committee		
		Total	On site	On line	Total	On site	On line	Total	On site	On line
1. Mr. Krirk-Krai Jirapaet	Chairman of the Board	7/7	7/7	0/7	-	-	-	-	-	-
2. Mr. Norachit Sinhaseni	Director/ Vice Chairman of the Board of Directors/ Chairman of the Nomination Committee	7/7	5/7	2/7	-	-	-	3/3	3/3	0/3
3. Mr. Natthaphon Lilawattananun	Director/ Chairman of the Audit Committee	7/7	0/7	7/7	5/5	0/5	5/5	-	-	-
4. Mrs. Wasara Chotithammarat	Director/ Member of the Nomination Committee/ Member of the Audit Committee	7/7	2/7	5/7	5/5	0/5	5/5	1/1	-	1/1
5. Dr. Kamol Takabut	Director/ Member of the Nomination Committee/ Member of the Audit Committee	7/7	7/7	0/7	5/5	0/5	5/5	3/3	3/3	0/3
6. Mr. Suroj Lamsam	Director	7/7	0/7	7/7	-	-	-	-	-	-
7. Mr. Preedee Ngamsantikul	Director/ Member of the Nomination Committee	7/7	5/7	2/7	-	-	-	1/1	-	1/1
8. Dr. Apichart Sramoon	Director	7/7	0/7	7/7	-	-	-	-	-	-
9. Mr. Poonphiphat Tantanasin	Director/ Member of the Nomination Committee	6/6	6/6	0/6	-	-	-	3/3	3/3	0/3
10. Mr. Ruangchai Kritsnakriengkrai	Director	6/6	6/6	0/6	-	-	-	-	-	-
11. Mr. Phairoj Boonpun*	Director	2/2	2/2	0/2	-	-	-	-	-	-
12. Mr. Pornthep Panyarachun*	Director	4/4	1/4	3/4	-	-	-	-	-	-

Remarks: 1. Mr. Phairoj Boonpun directors retire by rotation, on 31 March 2022.

2. Mr. Pornthep Panyarachun resigned from position of director on 1 June 2022.

8.2.5 Term of Office

The Board of Directors is composed of skilled and knowledgeable persons. The Company arranges the number of directors that is suitable for the size of its business. Currently, the Company has the total of 10 directors; two of them are executive directors, three of them are non-executive directors, and five of them are independent directors, accounting for more than 50% of the entire Board of Directors. The details of the positions held by individual directors are as follows:

Name-Surname	Year of Appointment	Latest Year of Selection	Type of Director	Directorship Nomination/ Appointment in 2022	Next Appointment
1. Mr. Krirk-Krai Jirapaet	2016	2021	Independent Director	No	2024
2. Mr. Natthaphon Lilawattananun	2011	2021	Independent Director	No	2024
3. Dr. Kamol Takabut	2016	2022	Independent Director	Yes	2025
4. Mrs. Wasara Chotithammarat	2016	2021	Independent Director	No	2024
5. Mr. Suroj Lamsam	2017	2020	Director	No	2023
6. Mr. Preedee Ngamsantikul	2019	2022	Director	Yes	2025
7. Mr. Norachit Sinhaseni	2020	2020	Independent Director	No	2023
8. Dr. Apichart Sramoon	2020	2020	Director	No	2023
9. Mr. Poonphiphat Tantanasin	2011	2022	Executive Director	Yes	2025
10. Mr. Ruangchai Kritsnakriengkrai	2016	2020	Executive Director	No	2023

Remarks: There are 5 independent directors hold the position of independent director from the year of appointment. There are 4 directors holding the position for a term of not more than 9 years. There is 1 director holding the position for a term of more than 9 years, namely, Mr. Natthaphon Lilawattananun, who has knowledge and expertise in accounting and finance and able to provide consultation and advices that are very beneficial to the Company. During his tenure as an independent director, he has been responsible for auditing the Company to maintain the interests of the minority shareholders by expressing opinions that are independent from the Management.

Procedures for nominating directors to replace vacant positions due to retirement by rotation are as follows:

1. The Company offers opportunities to shareholders to nominate persons to be appointed as a director through the Company's website according to the requirements of the Office of the SEC and the Stock Exchange of Thailand.
2. Inquiries on the willingness of independent directors retiring by rotation and the intention of major shareholders are made to nominate a list of directors to replace those who retire by rotation.
3. The Nomination, Remuneration, and Corporate Governance Committee shall consider and screen the list before presenting it to the Board of Directors for consideration and further proposing to the shareholders' meeting for considering and appointing directors based on qualifications of directors as specified by relevant laws, the Company's Articles of Association, and the charter of the Board of Directors.

8.2.6 Remuneration for Directors and Executives

The directors' remuneration is provided according to the criteria and policy determined by the Board, which was initially considered by the Nomination, Remuneration and Corporate Governance Committee. Such criteria also relates to the Company's operating results, performance and responsibility of the directors. The Company has clearly and transparently determined its policy for directors' remuneration. The remuneration is at the appropriate level and consistent with industry, which can attract and preserve the qualified directors.

Details of the director's monthly fee, meeting fee and yearly remuneration as follow:

Meeting fee	(Baht per meeting)
Chairman of the Board of Director	20,000
Chairman of Audit Committee	15,000
Chairman of Nomination, Remuneration and Corporate Governance Committee	15,000
Director	10,000
Member of Audit Committee	10,000
Member of Nomination , Remuneration and Corporate Governance Committee	10,000
Monthly fee	(Baht)
Chairman of the board	30,000
Director	25,000
Yearly Remuneration	Actual payment not exceeding Baht 6 million

1. Remuneration for Directors

Monetary Remuneration

At the 2022 Annual General Meeting of Shareholders held on April 1, 2022, a resolution was passed on the determination of the directors' remuneration for the year 2022 in the form of meeting allowances and monthly remuneration according to the rate requested at the meeting and separate annual remuneration in the amount of not exceeding 6,000,000 Baht. The actual annual remuneration was paid in the amount of 5,999,994 Baht with the following details:

Name-Surname	Position	Total Meeting Allowances in 2022			Total Monthly Remuneration	Annual Remuneration in 2022	Total Amount Paid (Baht)
		Director	Member of Audit Committee	Member of Nomination Committee			
1. Mr. Krirk-krai Jirapaet	Chairman of the Board of Director	140,000	-	-	360,000	1,333,332	1,833,332
2. Mr. Natthaphon Lilawatthanun	Chairman of Audit Committee/ Director	105,000	75,000	-	300,000	666,666	1,146,666
3. Mr. Norachit Sinhaseni	Chairman of Nomination Committee/ Director	105,000	-	45,000	300,000	666,666	1,116,666
4. Dr. Kamol Takabut	Director/Nomination Committee/ Audit Committee	105,000	50,000	30,000	300,000	666,666	1,151,666
5. Mrs. Wasara Chotithammarat	Director/Nomination Committee/ Audit Committee	105,000	50,000	10,000	300,000	666,666	1,131,666
6. Mr. Suroj Lamsam	Director	105,000	-	-	300,000	666,666	1,071,666
7. Mr. Preedee Ngamsantikul	Director/Nomination Committee	105,000	-	10,000	300,000	666,666	1,081,666
8. Dr. Aphichat Sramoon	Director	105,000	-	-	300,000	666,666	1,071,666
9. Mr. Poonphiphat Tantanasin	Director/Nomination Committee	90,000	-	30,000	-	-	120,000
10. Mr. Ruangchai Kritsnakriengkrai	Director	90,000	-	-	-	-	90,000
11. Mr. Phairoj Boonpun*	Director	60,000	-	-	125,000	-	185,000
12. Mr. Pornthep Panyarachun*	Director	30,000	-	-	75,000	-	105,000
Total		1,145,000	175,000	125,000	2,660,000	5,999,994	10,104,999

Remarks: 1. Mr. Phairoj Boonpun directors retire by rotation, on 31 March 2022.

2. Mr. Pornthep Panyarachun resigned from position of director on 1 June 2022.

Remuneration in Other Forms

-N/A-

8.2.7 Supervision of Subsidiaries' and Affiliated Companies' Operations

Currently, the Company has 1 subsidiary and 1 affiliated company as follows:

1. Subsidiary: QTC Global Power Company Limited engages in the business of generating electricity and other types of energy, established on September 28, 2016, with the registered capital of 501.90 million Baht.
 - Q Solar 1 Company Limited (Q Solar 1), which engages in the business of solar power generation and was established on December 28, 2009, with the registered capital of 220 million Baht.
 - QTC Marketing Company Limited (QTCM), engaging in the business of distributing transformer, established on November 10, 2021 with a registered capital of 5 million baht.
2. Associated Company: PPWE Company Limited engages in the energy business, established on January 12, 2016, with the registered capital of 40 million Baht.

The Company supervises the operations of its subsidiaries and/or associated companies based on good corporate governance guidelines. The Company appointed the Chief Executive Officer to be the Chairman of the Board of Directors and appointed the Managing Director to be a director of the subsidiary in order to establish business operation guidelines, goals, and good corporate governance guidelines that are consistent with the parent company. In the previous year, there was no connected transaction between the subsidiary and the parent company.

8.2.8 Monitoring of Compliance with Policies and Corporate Governance Guidelines

The Company pays attention to the good corporate governance as it is a major mechanism in leading to an efficient, transparent, and verifiable management system. This will help create trust and confidence to shareholders, investors, stakeholders, and all related parties. The good corporate governance is the tool to add values, build competitiveness, and promote the long-term sustainable growth of the Company. The Board of Directors assigns the Nomination, Remuneration, and Corporate Governance Committee to monitor the compliance with the policy on human resource development for good and virtuous personnel.

Regarding the monitoring of the compliance with the corporate governance policy, in 2022, the Company promoted and communicated information to directors, executives, and employees at all levels throughout the organization, distributed the handbook for good corporate governance and Code of Conduct. The Company's Board of Directors, executives, and employees comply with the corporate governance policy and Code of Conduct. The Company has regularly monitored such compliance and implementation.

In 2022, there were issues or situations where the policy could not be complied with, that was, the Board should disclose the CEO's remuneration policy for the short term and long term based on the performance of the CEO. Since it is sensitive information, it is required time to prepare it. As a result of such commitment, in 2022, the Company's 2022 Annual General Meeting of Shareholders was assessed with a score of 100 points or at the good level from the Quality Assessment of the Annual General Meeting of Shareholders (AGM Project) organized by the Thai Investors Association (TIA), which was another channel to promote sustainable governance. In addition, according to the commitment to development and monitoring of corporate governance, the Company received the results from the survey of information on corporate governance of listed companies for the year 2022 with the overall average score of 95%, which was the excellent CG Scoring for the 8th consecutive years. The score was higher than the overall average score of listed companies. However, the Company is still committed to improving the corporate governance process of the Company.

1. Policy on Conflict of Interest

To ensure that the practices on conflicts of interest of directors, executives, and employees of QTC Energy Public Company Limited and all subsidiaries are transparent and verifiable, the following guidelines are established.

- Directors, executives, employees, including their spouses, children, relatives, or associates of such persons are prohibited from seeking interests for their own business or their associates with the Company directly or indirectly.

- Directors, executives, and employees are prohibited from performing any act that has conflicts of interest with the Company, which cause the Company to lose benefits or gain benefits less than it deserves, or sharing the benefits of the Company to them or their associates or doing any action in competition with the business of the Company.
- Directors, executives, and employees are responsible for reporting conflicts of interest when there is an interest in the manner that may cause a conflict of interest.
- The process for reporting conflicts of interest is established for employees from the department manager level to the Chairman of the Board of Directors and employees at all levels involved in operations that are at risk of conflicts of interest.
- In the event that it is necessary to make connected transactions which may cause conflicts of interest, such transactions shall be made similar to the transaction made with third parties having a trade agreement in the same manner as an ordinary person would agree with any general counterparty with trade bargaining power without the interference power resulted from the status of directors, executives, employees, or related persons and they shall not be involved in the approval of such transaction.
- The Board of Directors and top executives of the Company and its subsidiaries are responsible for complying with the regulations of the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission on the disclosure of information of connected transactions and conflicts of interest. Such information is required to be disclosed to stakeholders at least once a year in the annual report.
- Directors, executives, and employees of the Company and all subsidiaries are responsible for whistleblowing when the offenses of colleagues or supervisors or executives or directors are detected. If such person acknowledges the offenses and fails to make a whistleblowing report, it shall be deemed that such person is guilty of disciplinary action as prescribed in the Company's rules and regulations.

In 2022, the Company inspected the case that might cause a conflict of interest and there were no directors, executives, and employees having conflicts of interest. To enhance corporate governance within the organization, in the previous year, the Company revised the Code of Conduct in respect of conflicts of interest by including an issue on the prevention of the use of customer information in order to prevent and reduce such risks. The Board of Directors considered and approved such matter on December 15, 2022.

The Company provided knowledge on conflict of interest to directors, executives, and employees via e-mail and PR board regularly.

2. Policy on Securities Trading and Insider Trading and Confidentiality of the Company

1. The Company stipulates that the directors, executives, employees and workers of the Company, including spouses and minor children of such persons shall not trade the Company's securities during the period of 1 month prior to the disclosure of financial statements to the public.
2. Directors, executives, employees, and workers of the Company, including the spouse and minor children of such persons, are prohibited from using the Company's inside information that have or may have an impact on changes in the price of the Company's securities which has not been disclosed to the public in order to purchase, sell, offer for purchase, offer for sale, or solicit other persons to purchase, sell, offer for purchase or offer for sale of the Company's securities, directly or indirectly, before such information is disclosed to the public, whether such action is performed for their own benefit or for benefit of other persons or for other persons to perform such action for their own benefit. Anyone who violates this rule will be punished according to the disciplinary measures of the Company.
3. Directors, executives, employees, and workers of the Company are prohibited from disclosing or exploiting confidential information and / or inside information of the Company for personal gain or for the benefit of any other person, directly or indirectly, and whether they will receive benefits or not.
4. The benefits and confidential information of the Company or customers shall be maintained. Confidential information of the Company shall not be disclosed to third parties, especially competitors, even after the termination of the position of directors, executives, or employees of the Company.

The policy on securities trading and insider trading and confidentiality of the Company is recorded in the Code of Conduct which the Company prepares in a form of a handbook and distributes to all directors, executives, and employees with their signatures to certify the compliance in all respects. In addition, the Company also strictly supervises the compliance with the Code of Conduct and the Code of Conduct for Employees. The full version of such codes can be found on the website, www.qtc-energy.com.

In 2022, the Company provided knowledge to directors, executives, and employees through publicizing and publishing Insider Trading Policy via e-mail, Company's Line Group, and PR boards. In 2022, there was no offence on Insider Trading.

3. Policy on Anti-Corruption

The Board of Directors passes the resolution to approve the Anti-Corruption Policy and reviews it annually. In 2022, the resolution was approved on December 15, 2022. QTC Energy (Public) Company Limited operates its business under the good corporate governance by adhering to the principles of good governance, Code of Conduct, and social, environmental, and stakeholder responsibility and using fair competitive strategies with the best quality of products and services.

In addition, the Company was certified to be the member of the Thai Private Sector Collective Action Coalition Against Corruption on February 26, 2019. The Company renewed membership for the first time and membership will last from 21 March 2022 to 31 March 2025, with the commitment to anti-corruption in all forms. Directors, executives, employees as well as those related to the Company's business operations which the Company has the power to control over are required to strictly comply with this anti-corruption policy and they have always adhered to them as follows:

- 3.1 Directors, executives, and employees are prohibited from requesting or accepting bribes from government agencies, state enterprises, or any parties having business relationship with the Company, such as customers, business partners, business alliances, etc., directly or indirectly.
- 3.2 Directors, executives, and employees are prohibited from doing or promoting bribery in any form with government agencies, state enterprises, or any parties having business relationship with the Company, such as customers, business partners, business alliances, etc., in all activities under the Company's business activities, directly or indirectly.
- 3.3 Directors, executives, and employees are prohibited from making the "Facilitation Payments" to government officers in all cases, regardless of such action is caused by their own expenses, because facilitation payments to government officers are at a very high risk of becoming bribery or illegal expenses.
- 3.4 Directors, executives, and employees are prohibited from performing any act which is regarded as a "conflict of interest", whether it is performed directly or indirectly.
- 3.5 The Company does not have the policy to employ any individuals who are currently government or state-enterprise officers to work for the Company's business activities, such as product consultants, marketing consultant, etc., except services that are the part of the official services of the government sector or state enterprises or special employment of government officers after office hours to perform security surveillance. (Red Box Police) or special employment of government officers or state-enterprise officers after office hours, such as university professors, to undertake research and development projects for tools, machines, equipment, or software development, etc. The Company shall ensure that such employment will not be the return for any business benefits to each other in the future.
- 3.6 The Company will not provide political contributions to any political party by acting as a politically neutrality and will not provide any particular assistance to any political candidate. However, the Company considers that employees at all levels have the political right and freedom based on the democracy to participate in or support any political activities independently and personally by performing such action after office hours and do not use Company's assets or claim on behalf of the Company to perform such action.
- 3.7 The Company will develop preventive measures and anti-corruption guidelines that are in accordance with the relevant laws, including ethical practices. The risks in activities relating to corruption or likely to lead corruption are assessed and reviewed regularly (on a quarterly basis). In addition, a clear handbook and guideline is prepared so that the directors, executives, and employees can strictly abide by.

- 3.8 The Company provides knowledge on preventive and anti-corruption measures to the Board of Directors, executives, and employees in order to promote ethical, honest, and responsible practices.
- 3.9 The Company provides communication on anti-corruption policy and guidelines on anti-corruption to related business parties, such as customers, business partners, business alliances, government agencies, state-enterprise sector, etc., with the expectation to receive cooperation and strict compliance with such policy or to support the Company for anti-corruption.
- 3.10 The Company provides appropriate internal control and regular monitoring to prevent inappropriate conduct of directors, executives, and employees or any act contrary to the policy, especially operations in terms of sales, marketing, and procurement.
- 3.11 The Company establishes a mechanism for whistleblowing of wrongdoing, protection of whistleblowers, fact investigation, penalty of offenders, and reporting of consulting results. This is to ensure that the whistleblowers are protected and the operations are conducted fairly and transparently, which represent the Company's commitment.
- 3.12 The Company will create and maintain an organizational culture that adheres to the motto of "Corruption is unacceptable" for transactions made with both public and private sectors to be in accordance with the corporate value of "Quality of Details".
- 3.13 This anti-corruption policy covers human resource management processes from the nomination or recruitment of personnel, promotion, trainings, performance evaluation of employee, and provision of compensation. Supervisors at all levels are required to communicate and understand employees in order to implement it as a guideline for activities under their responsibilities and supervise the implementation effectively.

4. Policy on Whistleblowing

The Board of Directors provides channels for complaints, comments, and whistleblowing of illegal acts to employees and stakeholders. They can report such matter by mail to the Audit Committee of the Company at QTC Energy (Public) Company Limited, No. 2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road, Huamark, Bangkok, 10240, or by email, audit@qtc-energy.com.

In the previous year, there was no complaint.

9. Internal Control and Related Transactions

9.1 Internal Control

At the Board of Directors Meeting No. 1/2022 on February 8, 2022 where all three members of the Audit Committee were present, the Board of Directors assessed the adequacy of the Company's internal control system by inquiring the Management. It could be summarized that, according to the assessment of the Company's internal control system, there were 5 aspects, including:

1. Control Environment
2. Risk Assessment
3. Control Activities
4. Information and Communication
5. Monitoring Activities

The Board of Directors was of the opinion that the Company had the adequate internal control system regarding transactions made with major shareholders, directors, executives, or related parties of such persons (according to Part 3, Item 12 of the Assessment Form). Regarding other topics of the internal control, the Board of Directors considered that the Company had adequate and appropriate internal control as well.

Operations Relating to Company's Internal Control System

The Company appointed the Audit Committee to perform the duty of reviewing to ensure that the Company has proper and effective internal control system and internal audit and also inspecting the Company's performance to ensure the compliance with the laws on securities and exchange, the regulations of the Stock Exchange of Thailand, and laws relating to the Company's businesses. The Audit Committee will hold meetings at least once every quarter in order to consider and take actions to ensure that the accurate financial reports are prepared and information is disclosed completely and sufficiently, including consider related transactions or transactions with potential conflicts of interest to ensure the compliance with the laws and the regulations of the Capital Market Supervisory Board and the Stock Exchange of Thailand. Auditors are present at the meetings in order to provide observations based on the Company's audits.

Currently, the Company has Internal Audit division to audit and coordinate with Kandit Advisory Services Company Limited (outsourced), at the Audit Committee's Meeting No. 6/2021 on December 13, 2021, Kandit Advisory Services (KAS) Company Limited was appointed to audit the internal control system of the Company for the year 2022. Such auditors prepared a report on the assessment and audit of the Company's internal control system and regularly present the report to the Audit Committee on a quarterly basis. The Company has always taken the corrective actions and improved the operating system in any departments according to the suggestions of the auditors.

The Audit Committee considered the qualifications Kandit Advisory Services (KAS) Company Limited and Mr. Thanat Kerdcharoen and deemed that they were sufficient for such performance of duties as they were independent and experienced in performing the audit in businesses or industries similar to the Company.

However, the appointment, removal, and transfer of the person holding the position of Head of Internal Audit Section of the Company shall be approved or agreed by audit Committee. The qualifications of a person holding the position of Head of Internal Audit are shown in Attachment 3.

9.2 Related Transactions and Report on Conflicts of Interest

QTC Energy Public Company Limited ("Company") has transactions with persons with potential conflicts of interest, comprised of shareholders and/or executives of the Company. Related company refers to a company that has persons who may have conflicts of interest with the Company and relationships between the executives and shareholders of such company. The nature of relationship can be summarized as follows:

Persons with Potential Conflicts	Nature of Relationship
QTC Service Chiang Mai Company Limited engaging in the business of electrical system service	Mrs. Sasipim Wongkham is a director with signatory authority and a shareholder of QTC Service Chiang Mai, holding 99.94% of shares, and has a relationship with Mr. Poonphiphat Tantanasin as his younger sister who holds the positions of Chairman of the Board of Executive and Chief Executive Officer of the company. In addition, the child of Mr. Poonphiphat Tantanasin holds a total of 16.41% of the Company's shares.
Mr. Poonphiphat Tantanasin	Holding the position of Chairman of the Board of Executive and Chief Executive Officer; The child of Mr. Poonphiphat Tantanasin holds a total of 16.41% of the Company's shares.
PPWE Company Limited engaging in the business of investment in energy business	An affiliated company where the Company holds 49.98% of issued and paid-up shares of PPWE Company Limited, and has a joint director, namely, Mr. Poonphiphat Tantanasin, who holds the position of Chairman of the Board of Executive of the Company
QTC Global Power Company Limited engaging in the business of investment in energy business	A subsidiary where the Company holds 99.99% of issued and paid-up shares of QTC Global Power Company Limited, and has a joint director, namely, Mr. Poonphiphat Tantanasin, who holds the position of Chairman of the Board of Executive of the Company
Q Solar 1 Company Limited engaging in the business of solar energy business	An indirect subsidiary where QTC Global Power Company Limited holds 100.00% of issued and paid-up shares of Q Solar 1 Company Limited, and has a joint director, namely, Mr. Poonphiphat Tantanasin, who holds the position of director of the Company
QTC Marketing Company Limited engaging in the business of dealer of transformer	An indirect subsidiary where QTC Global Power Company Limited holds 100.00% of issued and paid-up shares of QTC Marketing Company Limited, and has a joint director, namely, Mr. Poonphiphat Tantanasin, who holds the position of director of the Company
Loxley Public Company Limited operated business by dividing business groups as follows: 1) Information Technology business 2) service business 3) energy business 4) network solutions business 5) trading business 6) special business and other businesses	It was considered as a related company with Mr. Suroj Lamsam holding the position of the Chief Executive Officer and the President of Loxley Public Company Limited as well as the director of QTC Energy Public Company Limited.

2 Descriptions of Related Transactions

In 2022 and 2021, the Company made transactions with persons with potential conflicts with the following details:

(1) Transaction of Sales of Products and Services

Persons with Potential Conflicts	Nature of Transaction	Value of Related Transaction (Million Baht)		Necessity and Rationale of Transaction
		Year 2022	Year 2021	
QTC Service Chiang Mai Company Limited ("QTC Chiang Mai") engaging in the business of electrical system service	Sales of Products	3.14	4.71	The Company sells transformers and materials that are components of transformers, such as transformer oil, low-voltage terminal tugs, bushing gasket set, etc.,
	Services	0.18	0.01	The company provided transformer repairing service, transformer testing service, and other related services to QTC Service Chiang Mai Company Limited that was the company's distributor.
	Trade Receivables	2.20	-	The selling prices of products for QTC Service Chiang Mai Company Limited are the discount prices equal to the discount rate offered to other distributors of the Company. In addition, the trade conditions are the same as other distributors of the Company.
	Purchase of Products and Services	0.03	0.24	It is expenses incurred from the Company employing QTC Service Chiang Mai to provide services to the Company's customers located in areas/provinces near the office of QTC Service Chiang Mai Company Limited, such as transformer transportation fees, transformer inspection fees, transformer repair fees, transformer crane service charges, etc., as the trucks and/or service staffs of the Company were fully occupied with other works and unable to provide services to such customers. In addition, QTC Service Chiang Mai Company Limited is able to provide fast and reliable services to customers. The service fees charged by QTC Service Chiang Mai to the Company is comparable to the actual expenses from services provided by the Company and/or comparable to service fees for employing any third parties.
	Trade Payables	-	0.04	

Persons with Potential Conflicts	Nature of Transaction	Value of Related Transaction (Million Baht)		Necessity and Rationale of Transaction
		Year 2022	Year 2021	
PPWE Company Limited engaging in the business of investment in energy business	Sales of Products	1.68	-	The Company sold transformers to PPWE Company Limited.
	Services	3.37	-	The Company provided installation service of charging stations for electric cars and other related services to PPWE Company Limited.
	Other Revenues	0.18	-	The company charged for management expenses for PPWE Company Limited.
	Interest received	-	0.59	The Company provided short-term loan to PPWE Company Limited to be used as a working capital and conduct the feasibility studies of investment projects with appropriate interest rates. In 2021, the company has already received loan payment from PPWE Company Limited.
	Trade Receivables	0.27	-	
QTC Global Power Company Limited engaging in the business of investment in renewable energy business	Services	-	0.36	The company charges administrative expenses from QTC Global Power Company Limited.
	Other Revenues	0.49	0.13	
	Other receivables	-	0.21	
Q Solar 1 Company Limited engaging in the business of solar energy business	Sales of Products	150.71	0.05	The company sold transformers and solar cells to Q Solar 1 Company Limited
	Services	0.09	4.2	The company also provided transformer maintenance service and transformer testing service.
	Other Revenues	1.20	-	The company charged for management expenses for Q Solar 1 Company Limited.
QTC Marketing Company Limited operated the business on electricity and electric energy bidding and distribution.	Services	0.26	-	The company provided transformer maintenance service and complete services on transformers whereas QTC Marketing Company Limited was the bidder and the Company was the subcontractor for providing services to customers. The company charged for management expenses for QTC Marketing Company Limited
	Other Revenues	0.18	-	
Loxley Public Company Limited operated business by dividing business groups as follows: 1) Information Technology business 2) service business 3) energy business 4) network solutions business 5) trading business 6) special business and other businesses	Sales of Products	3.40	-	The Company sold inverters to Loxley Public Company Limited.
	Trade Receivables	2.86	-	Product selling price was market price.

In 2022, The Company has examined cases that may cause conflicts of interest. No directors, executives or employees have conflicts of interest and no government employees are hired as employees or consultants of the Company according to the anti-corruption policy.

Measures or Procedures for Related Transaction Approval

The Company stipulates measures for conducting related transactions of the Company and persons with potential conflict. The Audit Committee is assigned to give opinions on the necessity of transactions, rationale, and appropriateness of transaction values. Various conditions are taken into account according to the normal course of business at fair market value comparable to prices proposed by any third parties. In the case where the Audit Committee lacks the expertise in considering a potential related transaction, the Company will assign a person with specialized knowledge and skills, such as an auditor, property appraiser, law firms, etc., who are independent from the Company and a person with potential conflict shall express opinions on such related transaction in order to support the decision-making of the Audit Committee. Accordingly, the Audit Committee will propose the results to the Board of Directors' meeting or the shareholders' meeting as the case may be.

Furthermore, the Company established the measures to prohibit executives or stakeholders from participating in approving transactions in which they have direct or indirect interest. In addition, the Board of Directors is required to oversee the Company to ensure the compliance with the law on securities and exchange, and regulations, notifications, directives, or requirements of the Capital Market Supervisory Board and the Stock Exchange of Thailand as well as the compliance with regulations on disclosure of information on related transactions and acquisition or disposal of significant assets of the Company or its subsidiaries and the compliance with the accounting standards set by the Federation of Accounting Professions and Certified Public Accountant of Thailand. Additionally, the Company discloses related transactions in Notes to Financial Statements audited or reviewed by the Company's auditors.

Tendency of Future Related Transactions

The Company may continuously conduct related transactions in the future which are in line with the normal course of business and will clearly establish policy on related transactions. Prices and trade conditions will be subject to the normal course of business which is the same as those specified for unrelated persons and/or companies, such as sales of goods, provision or receipt of services, etc. Related transactions occur due to necessity for the Company's business operations and for the benefits of the Company. Accordingly, the Audit Committee will consider and monitor the compliance with rules and provide opinions on rationale of transactions incurred on a quarterly basis.

Regarding the transaction of sales of products to QTC Service Chiang Mai Company Limited, which are entities with potential conflicts, it will continuously occur in the future. The Company formulates the policy on pricing and discounts for sales of transformers and materials or equipment that is components of transformers for each type of client, including distributors. It has been effective since May 15, 2011. Its objective is to increase clarity and perform price and discount comparison for the sales of products to QTC Service Chiang Mai Company Limited, which must be in accordance with prices and discounts provided to other distributors. This will help the Audit Committee consider and provide opinions on fairness and rationale of sales of products to QTC Service Chiang Mai Company Limited systematically, especially in the period when the Company does not sell products to other distributors.

Regarding the potential related transactions that do not occur due to the normal course of business in the future, the Company will assign the Audit Committee to review the compliance with rules and provide rationale for conducting such related transactions before the Company makes such transactions by implementing under the measures and procedures for related transaction approval as mentioned above. However, regarding future related transactions with potential conflicts of interest, the Board of Directors shall comply with laws on securities and exchange and regulations, notifications, directives, or requirements of the Capital Market Supervisory Board and the Stock Exchange of Thailand and also abide by regulations on disclosure of information on related transactions and acquisition or disposal of assets of the Company or its subsidiaries, including the accounting standards set forth by the Federation of Accounting Professions and Certified Public Accountant of Thailand.

QUALITY OF DETAILS

คุณภาพคู่บริการ สร้างพลังงานที่ยั่งยืน

Super Low Loss Transformer 



-  Reduce Greenhouse-gas emissions
-  Reduce No load losses > 80%
-  Short Circuit Withstand from CESI Italy
-  ROI 3-5 years

Dry Type Cast Resin Transformer 



-  Maximum Capacity 140%
-  Cooling system
-  Resistant to cracking and burns
-  Low Maintenance Cost

Oil Type Transformer 



-  No Limitation in Insulation
-  Safety with Environment
-  Low Fire Risk
-  Reduce Cost Maintenance

Smart Transformer Monitoring System 




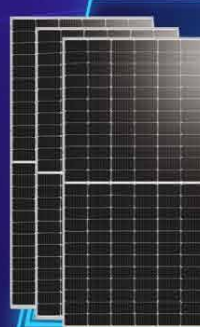
-  Real time online monitoring & alert
-  Auto GPS Location
-  Data record on cloud
-  Monitoring report
-  Peak History





Huawei Inverter (Distributor) 



-  Inverter Touch Free
-  Product Warranty 5 - 10 years
-  High Efficiency > 98.6%

LONGi Solar Panel (Distributor) 



-  Gallium-doped Wafer & Smart Soldering
-  Product Warranty 12 years
-  Hi-Mo5 Technology
-  Efficiency Warranty 25 years

Trina Solar Vertex (Distributor) 



-  Biggest Cell M12 210mm.
-  Product Warranty 12 years
-  1/3 Cut Technology with Multi Busbar
-  Efficiency Warranty 25 years

For more information



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Financial Reports 2022

Report of Certified Public Accountant

To the Shareholders of QTC Energy Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of QTC Energy Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2022, and the related consolidated statements of comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of QTC Energy Public Company Limited for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of QTC Energy Public Company Limited and its subsidiaries and of QTC Energy Public Company Limited as at 31 December 2022, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

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

Emphasis of Matters

I draw attention to Note 4 to the consolidated financial statements. During the current year, the Group restated the prior year's financial statements regarding records of impairment of property, plant and equipment, interconnection charge and power purchase agreement and derecognition of deferred tax assets. This resulted in adjustments, which amounted to Baht 101 million and Baht 62 million in the consolidated financial statements as at 31 December 2021 and as at 1 January 2021, respectively.

The Group restated the consolidated statement of financial position as at 31 December 2021, and the consolidated statements of comprehensive income, changes in shareholders' equity and cash flows for the year ended 31 December 2021 of QTC Energy Public Company Limited and its subsidiaries. These restated financial statements are presented herein as comparative information to reflect the correction of errors, and the consolidated statement of financial position of QTC Energy Public Company Limited and its subsidiaries as at 1 January 2021 are presented as comparative information to reflect the above adjustments.

My opinion is not modified in respect of this matter.

Key Audit Matters

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

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond to each matter are described below.

Recognition of revenue from sales

The revenue is the most significant amount in the consolidated statement of comprehensive income of the Group and is also the key indicator of business performance on which the users of financial statements focus. In addition, the Group has several customer base. Therefore, I focused on the actual occurrence and timing of revenue recognition of the Group.

I have examined the revenue from sales recognition of the Group by

- Gaining an understanding of operations and internal control procedures related to the recognition of revenue from sales.

- Assessing and testing the Group's significant internal controls with respect to the revenue cycle by making enquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operation of the designed controls and testing whether revenue recognition was consistent with the conditions of sales, and whether it was in compliance with the Group's policy.
- On a sampling basis, examining supporting documents for actual sales transactions occurring near the end of the accounting period.
- Reviewing credit notes that the Group issued after the period-end.
- Performing analytical procedures on the relationship of the accounting transactions to revenue from sales and performing analytical procedures on disaggregated data to detect possible irregularities in sales transactions throughout the period.

Impairment of property, plant and equipment, interconnection charge and power purchase agreement

In determining the impairment loss on property, plant and equipment, interconnection charge and power purchase agreement, management is required to exercise judgment with respect to the Group's projections of future operating performance, future assessment plans, as well as determination of appropriate discount rates and key assumptions. There is thus a risk with respect to the amount of impairment loss recorded on property, plant and equipment, interconnection charge and power purchase agreement.

I have assessed the identification of cash generating units and the financial models selected by management by

- Gaining an understanding of management's decision-making process and assessing whether the decisions made were consistent with how assets are utilised.
- Testing the significant assumptions applied by management in preparing estimates of the cash flows expected to be realised from the assets, by comparing those assumptions with information from both internal and external sources and comparing past cash flow projections to actual operating results in order to evaluate the exercise of management judgment in estimating the cash flow projections. I also evaluated the discount rate applied by management through analysis of the moving average finance costs of the Group and of the industry.

- Testing the assumptions and approaches used by management in calculating the fair value of assets, involving an internal expert to compare the information with information from external sources based on the expert's knowledge and past experience.

Impairment of investment in subsidiaries

As discussed in Note 13 to the consolidated financial statements, in determining the impairment loss, management had to exercise a high degree of judgement with respect to its projections of future operating performance and cash inflows that are expected to be generated from the subsidiaries. There is thus a risk with respect to the amount of impairment of investment in subsidiaries.

Our key audit procedures were as follows:

- Gaining an understanding of decision-making process of the financial models selected by the Company's management.
- Testing the significant assumptions applied by the Company's management in preparing estimates of the recoverable amounts that are expected to be generated from the investments in subsidiaries, by comparing those assumptions with information from both internal and external sources and comparing past cash flow projections to actual operating results in order to evaluate the exercise of management judgment in estimating the cash flow projections. I also evaluated the discount rate applied by the Company's management through analysis of the average finance costs of the subsidiaries and from the available public information in industries.
- Testing the assumptions and approaches used by management in calculating the fair value of assets, involving an internal expert to compare the information with information from external sources based on the expert's knowledge and past experience.

Other Matter

The consolidated statements of financial position of QTC Energy Public Company Limited and its subsidiaries, and the separate statements of financial position of QTC Energy Public Company Limited for the year ended 31 December 2021 (before restatement), presented herein as comparative information, were audited by another auditor who expressed unqualified opinions on those statements, under her report dated 10 February 2022.

Other Information

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

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

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

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

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

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

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

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

Auditor's Responsibilities for the Audit of the Financial Statements

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

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

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

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

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

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

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

I am responsible for the audit resulting in this independent auditor's report.

Rosaporn Decharkom

Certified Public Accountant (Thailand) No. 5659

EY Office Limited

Bangkok: 10 February 2023

Statements of Financial Position

As at 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements			Separate financial statements		
		31 December 2022	31 December 2021	1 January 2021	31 December 2022	31 December 2021	1 January 2021
			(Restated)	(Restated)			
Assets							
Current assets							
Cash and cash equivalents	7	611,787,924	347,430,673	152,317,224	404,984,746	215,053,291	76,248,261
Trade accounts receivable and contract assets	8, 9, 22	190,633,638	159,535,895	180,986,133	180,525,206	142,995,435	154,250,832
Other receivables	9	1,220,764	602,998	1,095,413	793,824	219,919	2,220,382
Inventories	10	347,055,482	322,207,874	166,541,370	347,055,482	322,207,874	166,543,843
Refundable value added tax		41,028,451	36,221,996	20,625,530	38,052,264	33,316,189	17,798,539
Prepaid expenses		8,917,406	4,235,240	6,313,748	8,796,181	4,215,114	6,281,106
Other current financial assets	11	178,430	350,000,000	613,202,223	42,900	200,000,000	468,411,092
Other current assets		13,447,968	11,780,224	15,058,900	11,916,798	11,296,528	14,655,274
Total current assets		1,214,270,063	1,232,014,900	1,156,140,541	992,167,401	929,304,350	906,409,329
Non-current assets							
Restricted bank deposits	12	3,101,495	101,244	100,994	-	-	-
Investments in subsidiaries	13	-	-	-	574,755,513	574,755,513	583,993,909
Investments in associates	14	6,853,306	7,359,458	-	7,359,458	7,359,458	-
Property, plant and equipment	15	517,801,997	544,836,990	590,321,682	305,430,921	325,666,024	327,767,248
Right-of-use assets	16	10,470,899	11,842,282	13,111,129	9,651,516	11,842,282	13,111,129
Computer software	17	4,276,741	5,522,735	5,961,075	4,273,019	5,513,883	5,943,642
Interconnection charge	18	2,214,355	2,503,501	3,196,283	-	-	-
Power purchase agreement	19	55,548,891	63,062,087	83,057,100	-	-	-
Deferred tax assets	20	5,317,208	5,864,078	7,254,400	10,663,046	10,019,737	13,915,338
Other non-current assets		27,269,780	12,496,994	14,053,229	9,137,300	10,944,763	12,830,756
Total non-current assets		632,854,672	653,589,369	717,055,892	921,270,773	946,101,660	957,562,022
Total assets		1,847,124,735	1,885,604,269	1,873,196,433	1,913,438,174	1,875,406,010	1,863,971,351

Statements of Financial Position (Continue)

As at 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements			Separate financial statements		
		31 December 2022	31 December 2021	1 January 2021	31 December 2022	31 December 2021	1 January 2021
			(Restated)	(Restated)			
Liabilities and shareholders' equity							
Current liabilities							
Trade accounts payable		167,021,190	121,243,296	104,830,804	167,021,190	121,243,296	104,830,804
Other payables	9	6,117,470	19,978,002	12,569,473	5,555,377	19,513,898	12,099,950
Current portion of :							
- Lease liabilities	16	4,537,781	3,782,758	4,191,760	4,138,697	3,782,758	4,141,907
- Provision for long-term employee benefits	9, 21	1,144,039	168,322	1,213,473	1,030,858	168,322	1,213,473
Income tax payable		-	12,293,787	14,192,748	-	7,730,950	9,777,131
Accrued expenses		17,101,041	18,451,723	18,077,696	16,371,351	17,543,550	17,034,795
Advance from customers	22	19,424,417	14,987,554	42,235,801	19,424,417	14,987,554	42,235,801
Other current liabilities		12,888,921	31,837,783	21,861,446	12,144,242	30,142,819	20,298,379
Total current liabilities		228,234,859	222,743,225	219,173,201	225,686,132	215,113,147	211,632,240
Non-current liabilities							
Lease liabilities, net of current portion	16	4,520,449	6,454,370	7,587,273	4,088,184	6,454,370	7,587,273
Provision for long-term employee benefits, net of current portion	9, 21	15,743,899	16,305,691	16,716,824	14,766,343	15,241,651	15,253,447
Other non-current liabilities		15,371,762	5,469,806	-	-	-	-
Total non-current liabilities		35,636,110	28,229,867	24,304,097	18,854,527	21,696,021	22,840,720
Total liabilities		263,870,969	250,973,092	243,477,298	244,540,659	236,809,168	234,472,960
Shareholders' equity							
Share capital							
Registered							
341,092,557 ordinary shares of Baht 1 each		341,092,557	341,092,557	341,092,557	341,092,557	341,092,557	341,092,557
Issued and paid-up							
341,092,557 ordinary shares of Baht 1 each		341,092,557	341,092,557	341,092,557	341,092,557	341,092,557	341,092,557
Premium on common shares		1,136,572,101	1,136,572,101	1,136,572,101	1,136,572,101	1,136,572,101	1,136,572,101
Premium on common shares from business combination		42,294,921	42,294,921	42,294,921	-	-	-
Retained earnings							
Appropriated - statutory reserve	24	34,109,256	34,109,256	31,780,695	34,109,256	34,109,256	31,780,695
Unappropriated		29,184,931	80,562,342	79,250,559	157,123,601	126,822,928	120,053,038
Other components of shareholders' equity		-	-	(2,877,143)	-	-	-
Equity attributable to owners of the Company		1,583,253,766	1,634,631,177	1,628,113,690	1,668,897,515	1,638,596,842	1,629,498,391
Non-controlling interests of the subsidiaries		-	-	1,605,445	-	-	-
Total shareholders' equity		1,583,253,766	1,634,631,177	1,629,719,135	1,668,897,515	1,638,596,842	1,629,498,391
Total liabilities and shareholders' equity		1,847,124,735	1,885,604,269	1,873,196,433	1,913,438,174	1,875,406,010	1,863,971,351

Statements of Comprehensive Income

For the year ended 31 December 2022

(Unit: Baht)

Note	Consolidated financial statements		Separate financial statements	
	2022	2021 (Restated)	2022	2021
Profit and loss:				
Revenue from sales and services				
Revenue from sales	9, 22, 29	1,170,488,839	1,130,364,594	1,118,518,923
Revenue from services	9, 22, 29	45,965,419	41,629,647	46,049,458
Total revenues from sales and services		1,216,454,258	1,171,994,241	1,164,568,381
Cost of sales and services				
Cost of sales	29	(1,041,214,951)	(851,483,055)	(1,008,599,097)
Cost of services	29	(26,864,821)	(23,938,399)	(26,864,821)
Total cost of sales and services		(1,068,079,772)	(875,421,454)	(1,035,463,918)
Gross profit		148,374,486	296,572,787	129,104,463
Gain on dissolution of subsidiary		-	1,605,445	-
Dividend income	13	-	-	87,499,996
Other income	9	20,243,739	11,427,069	20,231,407
Profit before expenses		168,618,225	309,605,301	236,835,866
Selling and distribution expenses	9	(45,984,488)	(41,957,858)	(45,984,488)
Administrative expenses		(101,951,083)	(115,032,487)	(90,511,950)
Loss on exchange rate		-	(3,071,986)	-
Loss on impairment of investments in associated company		-	-	-
Reversal of allowance for impairment loss of financial assets		-	14,592,715	-
Loss on impairment of property, plant and equipment, interconnection charge and power sales agreement		-	(43,800,000)	-
Total expenses		(147,935,571)	(189,269,616)	(136,496,438)
Operating profit		20,682,654	120,335,685	100,339,428
Share of loss from investment in associated company		(506,152)	(12,140,542)	-
Finance costs		(969,587)	(1,259,020)	(525,077)
Profit before income tax expenses		19,206,915	106,936,123	99,814,351
Income tax expenses	20	(3,371,403)	(18,580,825)	(2,205,131)
Profit for the year		15,835,512	88,355,298	97,609,220
Other comprehensive income:				
Other comprehensive to be recorded subsequently to profit or loss				
translation adjustments for foreign currency financial statement - net of income tax	20.2	-	2,877,143	-
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods</i>				
Actuarial gain - net of income tax	20.2	904,208	433,210	808,584
Other comprehensive income for the year		904,208	3,310,353	808,584
Total comprehensive income for the year		16,739,720	91,665,651	98,417,804

The accompanying notes are an integral part of the financial statements

Statements of Comprehensive Income (Continue)

For the year ended 31 December 2022

(Unit: Baht)				
Note	Consolidated financial statements		Separate financial statements	
	2022	2021 (Restated)	2022	2021
Profit attributable to:				
Equity holders of the Company	15,835,512	88,355,298	97,609,220	94,246,615
Non-controlling interests of the subsidiaries	-	-		
	<u>15,835,512</u>	<u>88,355,298</u>		
Total comprehensive income attributable to:				
Equity holders of the Company	16,739,720	91,665,651	98,417,804	94,246,615
Non-controlling interests of the subsidiaries	-	-		
	<u>16,739,720</u>	<u>91,665,651</u>		
Earnings per share				
Basic earnings per share				
Profit attributable to equity holders of the Company				
(Baht per share)	23	0.046	0.259	0.286
		<u>0.276</u>		

For the year ended 31 December 2022

	Consolidated financial statements								(Unit: Baht)		
	Equity attributable to owners of the Company				Other components of equity						
	Issued and fully paid-up share capital	Premium on common shares	Premium on common shares from business combination	Retained earnings		Exchange differences on translation of financial statements in foreign currency	Total other components of shareholders' equity	Total equity attributable to owners of the Company		Non-controlling interests of the subsidiaries	Total shareholders' equity
				Appropriated - Statutory reserve	Unappropriated						
Balance as at 31 December 2020											
-as previously reported	341,092,557	1,136,572,101	42,294,921	31,780,695	141,716,730	(2,877,143)	(2,877,143)	1,690,579,861	1,605,445	1,692,185,306	
Cumulative effects of prior year's restatement (Note 4)	-	-	-	-	(62,446,170)	-	-	(62,446,170)	-	(62,446,170)	
Balance as at 31 December 2020											
-as restated	341,092,557	1,136,572,101	42,294,921	31,780,695	79,270,560	(2,877,143)	(2,877,143)	1,628,133,691	1,605,445	1,629,739,136	
Profit for the year (Restated)	-	-	-	-	88,355,298	-	-	88,355,298	-	88,355,298	
Other comprehensive income for the year	-	-	-	-	433,210	2,877,143	2,877,143	3,310,353	-	3,310,353	
Total comprehensive income for the year	-	-	-	-	88,788,508	2,877,143	2,877,143	91,665,651	-	91,665,651	
Appropriated - statutory reserve	-	-	-	2,328,561	(2,328,561)	-	-	-	-	-	
Dividend paid (Note 25)	-	-	-	-	(85,148,164)	-	-	(85,148,164)	-	(85,148,164)	
Dissolution of a subsidiary company	-	-	-	-	-	-	-	-	(1,605,445)	(1,605,445)	
Balance as at 31 December 2021	341,092,557	1,136,572,101	42,294,921	34,109,256	80,582,343	-	-	1,634,651,178	-	1,634,651,178	
Balance as at 31 December 2021											
-as previously reported	341,092,557	1,136,572,101	42,294,921	34,109,256	181,890,710	-	-	1,735,959,545	-	1,735,959,545	
Cumulative effects of prior year's restatement (Note 4)	-	-	-	-	(101,328,368)	-	-	(101,328,368)	-	(101,328,368)	
Balance as at 31 December 2021											
-as restated	341,092,557	1,136,572,101	42,294,921	34,109,256	80,582,342	-	-	1,634,631,177	-	1,634,631,177	
Profit for the year	-	-	-	-	15,835,512	-	-	15,835,512	-	15,835,512	
Other comprehensive income for the year	-	-	-	-	904,208	-	-	904,208	-	904,208	
Total comprehensive income for the year	-	-	-	-	16,739,720	-	-	16,739,720	-	16,739,720	
Dividend paid (Note 25)	-	-	-	-	(68,117,131)	-	-	(68,117,131)	-	(68,117,131)	
Balance as at 31 December 2022	341,092,557	1,136,572,101	42,294,921	34,109,256	29,184,931	-	-	1,583,253,766	-	1,583,253,766	
	-	-	-	-	-	-	-	-	-	-	

The accompanying notes are an integral part of the financial statements

Statements Of Changes In Shareholders' Equity (Continue)

For the year ended 31 December 2022

(Unit: Baht)

	Separate financial statements				
	Issued and fully paid-up share capital	Premium on common shares	Retained earnings		Total
			Appropriated - Statutory reserve	Unappropriated	
Balance as at 31 December 2020	341,092,557	1,136,572,101	31,780,695	120,053,038	1,629,498,391
Profit for the year	-	-	-	94,246,615	94,246,615
Other comprehensive income for the year	-	-	-	-	-
Total comprehensive income for the year	-	-	-	94,246,615	94,246,615
Appropriated - statutory reserve	-	-	2,328,561	(2,328,561)	-
Dividend paid (Note 25)	-	-	-	(85,148,164)	(85,148,164)
Balance as at 31 December 2021	341,092,557	1,136,572,101	34,109,256	126,822,928	1,638,596,842
Balance as at 31 December 2021	341,092,557	1,136,572,101	34,109,256	126,822,928	1,638,596,842
Profit for the year	-	-	-	97,609,220	97,609,220
Other comprehensive income for the year	-	-	-	808,584	808,584
Total comprehensive income for the year	-	-	-	98,417,804	98,417,804
Dividend paid (Note 25)	-	-	-	(68,117,131)	(68,117,131)
Balance as at 31 December 2022	341,092,557	1,136,572,101	34,109,256	157,123,601	1,668,897,515
	-	-	-	-	-
	-	-	-	-	-

The accompanying notes are an integral part of the financial statements

Statements of Cash Flows

For the year ended 31 December 2022

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021 (Restated)	2022	2021
Cash flows from operating activities				
Profit before income tax	19,206,915	106,936,123	99,814,351	108,452,743
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Depreciation and amortisation	81,654,000	79,212,289	51,969,312	52,212,684
Allowance for expected credit losses of trade accounts receivable	1,586,808	(3,692,715)	1,586,808	(3,692,715)
Reduction of inventory to net realisable value (reversal)	1,038,307	595,309	1,038,307	595,309
Loss (gain) on disposal of equipment	(1,223,384)	(1,388,850)	(1,223,384)	(769,306)
Loss (gain) from disposal and written off of intangible assets	-	992,467	-	992,467
Unrealised loss from exchange rate	3,016,932	536,585	3,016,932	536,585
Gain on disposal of other current financial assets	-	(1,799,295)	-	(1,291,978)
Reversal of lease liability from cancellation contract	-	(579,970)	-	(579,970)
Write-off right-of-use assets	-	710,505	-	710,505
Gain on dissolution of a subsidiary	-	(1,605,445)	-	(387,443)
Loss on impairment of property, plant and equipment, interconnection charge and power sales agreement	-	43,800,000	-	-
Loss on impairment of investment in associated company	-	-	-	12,140,542
Share of loss from investments in associated company	506,152	12,140,542	-	-
Reversal of allowance for impairment of loan to associated company	-	(10,900,000)	-	(10,900,000)
Provision for employee benefits	1,318,133	1,533,019	1,195,812	1,420,714
Dividend income	-	-	(87,499,996)	(40,599,998)
Interest expenses	969,587	1,259,020	525,077	1,223,352
Profit from operating activities before changes in operating assets and liabilities	108,073,450	227,749,584	70,423,219	120,063,491
Operating assets decrease (increase)				
Trade accounts receivable and contract assets	(35,644,212)	25,063,443	(42,076,240)	14,868,602
Other receivables	(617,766)	492,415	(573,905)	2,000,463
Inventories	(25,885,915)	(156,261,813)	(25,885,915)	(156,259,340)
Refundable value added tax	(4,806,455)	(15,596,466)	(4,736,075)	(15,517,650)
Prepaid expenses	(4,682,166)	2,078,508	(4,581,067)	2,065,992
Other current assets	2,622,999	3,397,044	3,670,473	3,835,118
Other non-current assets	(14,772,786)	1,556,235	1,807,463	1,885,993
Operating liabilities increase (decrease)				
Trade accounts payable	45,720,623	15,955,416	45,720,623	15,955,416
Other payables	(21,252,186)	(7,011,265)	(9,680,873)	(7,005,846)
Accrued expenses	(1,350,682)	374,027	(1,172,199)	508,755
Advances from customers	4,436,863	(27,248,247)	4,436,863	(27,248,247)
Other current liabilities	970,637	(10,118,227)	1,920,922	(10,250,124)
Other non-current liabilities	9,901,955	-	-	-
Paid for employee benefits	-	(2,789,867)	-	(2,789,867)
Cash flows from (used in) operating activities	62,714,359	57,640,787	39,273,289	(57,887,244)
Cash paid for interest	(969,587)	(916,943)	(525,077)	(911,146)
Cash paid for income tax	(20,936,980)	(18,360,758)	(16,374,108)	(12,356,708)
Net cash flows from (used in) operating activities	40,807,792	38,363,086	22,374,104	(71,155,098)

The accompanying notes are an integral part of the financial statements

Statements of Cash Flows (Continue)

For the year ended 31 December 2022

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
	(Restated)			
Cash flows from investing activities				
Increase in restricted bank deposits	(3,000,251)	-	-	-
Decrease in other current financial assets	349,821,570	245,501,268	199,957,100	250,203,070
Proceeds from dissolution of subsidiary	-	-	-	9,238,396
Decrease in loans to related companies	-	10,900,000	-	10,900,000
Proceeds from sales of equipment	-	1,761,789	-	920,762
Purchases of equipment	(30,468,748)	(30,933,415)	(27,512,334)	(29,457,493)
Purchases of computer software	(212,800)	(2,695,567)	(110,000)	(2,695,567)
Proceeds from dividend	-	-	87,499,996	40,599,998
Net cash flows from (used in) investing activities	316,139,771	224,534,075	259,834,762	279,709,166
Cash flows from financing activities				
Repayment of lease liabilities	(4,708,121)	(4,745,291)	(4,395,220)	(4,695,438)
Dividend payment	(87,882,191)	(65,053,600)	(87,882,191)	(65,053,600)
Net cash flows used in financing activities	(92,590,312)	(69,798,891)	(92,277,411)	(69,749,038)
Translation adjustments for foreign currency				
financial statement	-	2,015,179	-	-
Net increase in cash and cash equivalents	264,357,251	195,113,449	189,931,455	138,805,030
Cash and cash equivalents at beginning of period	347,430,673	152,317,224	215,053,291	76,248,261
Cash and cash equivalents at end of period	611,787,924	347,430,673	404,984,746	215,053,291
	-	-	-	-
Supplemental cash flows information				
Non-cash items consist of:				
Dividend payable	154,439	20,094,564	154,439	20,094,564
Recognition of right-of-use asset and liability under				
lease agreement	2,461,349	3,783,357	2,461,349	3,783,357
Decrease in accounts payable from purchases of assets	14,018,999	14,419,794	14,018,999	14,419,794
Provision for decommissioning of assets	14,604,558	5,469,806	-	-
Actuarial gain - net of income tax	904,208	433,210	808,584	-

Note to Financial Statements

For the year ended 31 December 2022

1. General information

QTC Energy Public Company Limited (“the Company”) is a public company incorporated and domiciled in Thailand. The Company is principally engaged in the manufacturing and distributing of customer made transformers to domestic and foreign customers under the “QTC” Trademark and customer specific brands. The Company is also engaged in the import and distribution of product and equipment relating to the solar cell. Furthermore, the Company also provides various types of services for customers, such as scheduled checks and maintenance, transformer repairs and maintenance, transformer oil fill services, transformer rental services, etc., in order to support customer needs and facilitate both customers who have purchased the Company’s transformers and other customers in general. The registered office of the Company is at 2/2 Soi Krungthep Kritha 8(5), Krungthep Kritha Road, Huamark, Bangkok, with a branch at 149 Moo 2, Mapyangporn Sub District, Ploukdaeng District, Rayong.

As at 31 December 2022 and 2021, the Company’s major shareholders which references by Stock Exchange of Thailand website are as follows:

	Percentage	
	2022	2021
Miss Sasikarn Tantanasin	15.92	15.92
Mr. Apichat SaMun	12.46	12.46
Mr. Litsamy Latsavong	12.46	12.46
Mr. Phoukhaokham Pravovaxay	11.73	11.73
Mr. Tirapol Noparumpa	5.86	5.86

2. Basis of financial statements preparation

2.1 Statement of compliance

The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

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

2.2 Basic of consolidation

- (a) The consolidated financial statements include the financial statements of QTC Energy Public Company Limited (“the Company”) and the following subsidiary companies (“the subsidiaries”) (collectively as “the Group”):

Subsidiaries	Country of incorporation	Percentage of share held by the Company		Type of business
		2022	2021	
Direct subsidiary				
QTC Global Power Co., Ltd.	Thailand	99.99	99.99	Investing in renewable energy
Indirect subsidiaries				
Q Solar 1 Co., Ltd. ⁽¹⁾	Thailand	100.00	100.00	Solar power plant
QTC Marketing Co., Ltd. ⁽¹⁾	Thailand	100.00	100.00	Dealer distributing of electric transformer

⁽¹⁾ Held by QTC Global Power Co., Ltd.

- b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.
- c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
- d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.

e) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.

2.3 The separate financial statements present investments in subsidiaries and associate under the cost method.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards and interpretations which are effective for fiscal years beginning on or after 1 January 2022. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2023

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Adjustment to the prior year's financial statements

During the current year, the Group found that some accounting entries that were previously recorded were incorrect, and adjusted for the correction of errors in prior periods' financial statements by restating those financial statements, presented herein as comparative information, to reflect the correction of those errors. The adjustments are adjustments to impairment loss on property, plant and equipment interconnection charge and power purchase agreement and derecognition of deferred tax assets which were not recorded in the prior year.

The amounts of the adjustments affecting the statement of financial position and statement of comprehensive income are as follows:

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	31 December 2021	1 January 2021
	Increase (decrease)	
Statement of financial position		
Profit and loss:		
Assets		
Property, plant and equipment	(71,909)	(43,000)
Interconnection charge	(764)	(400)
Power purchase agreement	(20,582)	(9,000)
Deferred tax assets	(8,074)	(10,066)
Total Asset	(101,329)	(62,466)
Shareholder's Equity		
Retained earnings - unappropriated	(101,329)	(62,466)
Total Shareholder's Equity	(101,329)	(62,466)

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	For the year ended	
	31 December 2021	
	Increase (decrease)	
Statement of comprehensive income		
Cost of sales		(2,945)
Loss on impairment of property, plant and equipment		
interconnection charge and power purchase agreement		43,800
Income tax expenses		(1,992)
Profit for the year		(38,863)
Profit attributable to		
Equity holders of the Company		(38,863)
Earnings per share		
Basic earnings per share (Baht per share)		(0.114)

5. Significant accounting policies

5.1 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency.

Monetary assets and liabilities denominated in foreign currencies are translated into the Baht at the exchange rate at the reporting date. Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction.

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

5.2 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) with an original maturity of three months or less.

Bank deposits with restriction of usage are shown under non-current asset in the statement of financial position.

5.3 Related party transactions

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 associate 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.

5.4 Trade accounts receivable and contract assets

Trade receivables are amounts due from customers for goods sold or service performed in the ordinary course of business.

Trade receivables and contract assets are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, they are recognised at its present value of consideration.

The Group applies the TFRS 9 simplified approach to measuring expected credit losses which uses a simplified approach, which requires expected lifetime losses to be recognised from initial recognition of the receivables and contract assets. To measure the expected credit losses, trade receivables have been grouped based on the days past due. The expected loss rates are based on the payment profiles and the corresponding historical credit losses which are adjusted to reflect the current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables, and accordingly adjusts the historical loss rates based on expected changes. The impairment losses are recognised in profit or loss within administrative expenses.

5.5 Financial instruments

Recognition and derecognition

Financial assets and financial liabilities are recognised when the Group becomes a party to the contractual provisions of the financial instrument.

The Group shall financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire, or when the financial asset and substantially all the risks and rewards are transferred.

Classification and initial measurement of financial assets

Financial assets are initially recognised at fair value plus or less directly costs attributable to the acquisition of the asset. For financial assets measured at fair value through profit or loss (FVTPL), the Group recognises the associated costs as an expense in profit or loss.

The Group classify financial assets measurement by amortised cost method, fair value through other comprehensive income (FVOCI), or fair value through profit or loss (FVTPL) the classification is determined by both as follow:

- a. the entity's business model for managing the financial asset, and
- b. the contractual cash flow characteristics of the financial asset.

The Group classified revenue and expenses relating to financial assets that are recognised in profit or loss are presented within finance costs, finance income or other financial items, except for impairment loss on trade receivables which is presented within other expenses.

Subsequent measurement of financial assets

Financial assets at amortised cost

Financial assets are measured at amortised cost if the assets meet the following conditions.

- a. they are held within a business model whose objective is to hold the financial assets and collect its contractual cash flows, and
- b. the contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI).

Financial assets at fair value through profit or loss (FVTPL)

Financial assets that are held within a different business model other than hold to collect contractual cash flows or hold to collect contractual cash flows and sell financial assets are categorised at fair value through profit or loss (FVTPL). Further, irrespective of business model financial assets whose contractual cash flows are not solely payments of principal and interest are accounted for at financial assets at fair value through profit or loss. All derivative financial instruments fall into this category.

Financial assets at fair value through other comprehensive income (FVOCI)

The Group accounts for financial assets at fair value through other comprehensive income if the assets meet the following conditions:

- a. The Group held under a business model whose objective it is “hold to collect” the associated cash flows and sell, and
- b. the contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI) on the specified day.

Any gains or losses recognised in other comprehensive income (OCI) will be recycled upon derecognition of the asset.

Impairment of financial assets

The Group has considered impairment for financial assets that are measured at amortized cost and measure fair value through other comprehensive income (FVOCI).

The Group uses a simplified approach to recognize impairment of assets that do not have significant financing elements and contractual assets. According to estimates of credit losses over the life of such assets since the Group recognize.

In determining the expected credit loss. Executives were grouped by type of receivables and consider credit risks that are of a common nature. The expected credit loss rate is determined by the nature of the payment in the past. Information of credit losses from past experience, external factors, and future factors that may affect debtor payment.

The Group assesses credit risk of financial assets at the end of every period whether there has been a significant change.

The Group considers and recognises the expected credit loss by taking into account the past experience and anticipating the future. The recognised credit losses arise from the weighted average credit loss probability estimate. The amount of cash expected to be discounted the effective interest rate.

Losses and reversals of impairment losses are recorded in profit or loss separately.

Classification and measurement of financial liabilities

The Group classifies the financial instruments issued by the Group as financial liabilities or equity instruments consider based on contractual obligations to deliver the financial assets to other persons or entities.

The Group's financial liabilities include trade and other payables and derivative financial instruments.

Financial liabilities are initially measured at fair value, and, where applicable, adjusted for transaction costs of financial liability.

Subsequent measurement of financial liabilities

Financial liabilities are subsequent measured at amortized cost. Interest expense is to be calculated by using effective interest rate and charged to statement of income except for derivatives liabilities are measured at fair value through other comprehensive income (FVTOCI).

5.6 Derivatives

The Group uses derivatives, such as foreign currency forward contracts to hedge its foreign currency risks.

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes including interest income are recognised in profit or loss. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Derivatives are presented as non-current assets or non-current liabilities if the remaining maturity of the instrument is more than 12 months and it is not due to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

5.7 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between a buyer and a seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation techniques that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categories of input to be used in fair value measurement as follows:

- Level 1 Use of quoted market prices in an active market for such assets or liabilities
- Level 2 Use of other observable inputs for such assets or liabilities, whether directly or indirectly
- Level 3 Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5.8 Inventories

Inventories are stated at the lower of cost or net realizable value. Cost of raw materials are determined using the first-in first-out method. Cost of work in process and finish goods which includes all production costs and attributable factory overheads are determined using the specific method for work in process and finish goods. Net realizable value is the estimated selling price in the ordinary course of the business less the marginal cost to complete (for work in process) and other estimated costs necessary to make the sale.

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

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

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

5.9 Cost of business combinations

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

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

5.10 Investments in subsidiaries and associates

Investment in subsidiary companies

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

Investment in associate

Investment in associate in consolidated statement of financial position is accounted for by the equity method, and investment in associate in the separate statement of financial position is accounted for by the cost method. In the case of impairment, the Company will recognise loss from impairment as expense in the profit or loss. The Company recognises dividend income upon the associate's declaration of the payment.

Disposal of investments

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

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

5.11 Property, plant and equipment/Depreciation

Recognition and measurement

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (if any).

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

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

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

Subsequent costs

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

Depreciation

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

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

Land improvements	20 years
Building and factories	10, 20 years
Machinery and factory equipment	5, 10, 20 years
Furniture and office equipment	5, 20 years
Vehicles	5 years

The Group no depreciation is provided on freehold land or assets under construction.

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

Impairment

The Group assess whether there is an indication that any asset may be impaired. If any such indication exists, the Group make an estimate of the asset recoverable amount. Where the carrying amount of the asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. Impairment loss is recognised in the statement of profit or loss. An asset recoverable amount is the higher of fair value less costs to sell or value in use.

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

5.12 Right-of-use asset and lease liability

Leases - where the Group is the lessee

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right-of-use (ROU) asset and a lease liability at the lease commencement date. The ROU asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, initial direct costs and estimated costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any incentive received.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease, if the rate can be readily determined. If that rate cannot be readily determined, the Group uses the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability are as follows:

- fixed payments including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee;

- the exercise price, under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period; and
- payments of penalties for early termination of a lease if the Group is reasonably certain to terminate early.

To apply a cost model, the Group measures the ROU asset at cost, less accumulated depreciation and accumulated impairment loss and adjusted for any remeasurement of the lease liability. The ROU asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term. However, if the lease transfers ownership of the underlying asset to the Group by the end of the lease term or if the cost of the ROU asset reflects that the Group will exercise a purchase option, the Group depreciates the ROU asset from the commencement date to the end of the useful life of the underlying asset. The useful life of the ROU asset is determined on the same basis as those of property, plant and equipment.

The lease liability is re-measured when there is a change in future lease payments arising from the following items:

- a change in an index or a rate used to determine those payments
- a change in the Group's estimate of the amount expected to be payable under a residual value guarantee.
- the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is re-measured to reflect changes to the lease payments, the Group recognises the amount of the remeasurement of the lease liability as an adjustment to the ROU asset. However, if the carrying amount of the ROU asset is reduced to zero and there is a further reduction in the measurement of the lease liability, the Group recognises any remaining amount of the remeasurement in profit or loss.

Short-term leases and leases of low-value asset

The Group has elected not to recognise ROU assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

5.13 Computer software

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

5.14 Interconnection charge

Interconnection charge is presented at cost less accumulated amortization. Amortization is calculated by a straight-line basis over the estimated useful lives of 20 years.

5.15 Power purchase agreement

Power purchase agreement is identifiable assets derived from business combination. Power purchase agreement is presented at cost less accumulated amortization. Amortization is calculated by a straight-line basis over the estimated useful lives of 14 years.

5.16 Interest-bearing liabilities

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

5.17 Employee benefits

Short-term employment benefits

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

Post-employment benefits (Defined contribution plan)

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

Post-employment benefits (Defined benefit plan)

The Company and its subsidiary have obligations in respect of the severance payment it must make to employee upon retirement under the Labor Law. The Company and its subsidiary treat these severance payment obligations as a defined benefit plan.

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

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

5.18 Provision for liabilities and expenses and contingent assets

Provisions for liabilities and expenses are recognised in the financial statements when the Company has a present legal or constructive obligation as a result of past events with probable outflow of resources to settle the obligation, and where a reliable estimate of the amount can be made. The contingent asset will be recognised as a separate asset only when the realisation is virtually certain.

5.19 Revenue recognition

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Group expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax and is after deduction of any trade discounts and volume rebates. Judgement is required in determining the timing of the transfer of control for revenue recognition - at a point in time or over time.

Revenues from sales of goods and rendering of services

Revenue from sales of goods is recognised when a customer obtains control of the goods, generally on delivery of the goods to the customers. For contracts that permit the customers to return the goods, revenue is recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. Therefore, the amount of revenue recognised is adjusted for estimated returns, which are estimated based on the historical data.

Revenue from rendering of services is recognised over time when services have been rendered taking into account the stage of completion, measuring based on comparison of actual costs incurred up to the end of the period and total anticipated costs to be incurred to completion. The related costs are recognized in profit or loss when they are incurred.

For bundled packages, the Group accounts for individual products and services separately if they are distinct or the multiple services are rendered in different reporting periods. The consideration received is allocated based on their relative stand-alone selling prices which are determined based on the price list at which the Group sells the products and services in separate transactions.

Contract assets

The recognised revenue which is not yet due per the contracts has been presented under the caption of “Contract assets” in the statement of financial position. The amounts recognised as contract assets are reclassified to trade receivables when the Group’s right to consideration is unconditional such as upon completion of services and acceptance by the customer.

Advances received from customers

Advances received from customers is contract liabilities in respect of performance obligation with customer and presenting as “Advances from customer” in the statement of financial position.

Revenues from sales of electricity

Revenue from sales of electricity is recognised in amount of excluding tax and after deducting discounts when the Group delivers electricity and acceptance by the customer.

Contract assets

The recognised revenue from sales of electricity which are not yet been billed to the customer has been presented under the caption of “Contract assets” in the statement of financial position.

Interest income

Interest income is calculated using the effective interest method and recognised on an accrual basis. The effective interest rate is applied to the gross carrying amount of a financial asset, unless the financial assets subsequently become credit-impaired when it is applied to the net carrying amount of the financial asset (net of the expected credit loss allowance).

Dividends

Dividends are recognised when the right to receive the dividends is established.

5.20 Expenses recognition

Expenses are recognised on an accrual basis.

5.21 Finance costs

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

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method and recognised on an accrual basis.

5.22 Income tax

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

Current income tax

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

Deferred income tax

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

Deferred income tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. Deferred tax assets are reviewed at the end of each reporting period and reduced to the extent that the related tax benefit will be realised.

6. Critical accounting estimates, assumption and judgment

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

6.1 Impairment of trade accounts receivables and contract assets

The Company sets an allowance for doubtful accounts to reflect impairment of trade accounts receivable resulting from possible non-collection of receivables. The allowance is based on a review of the expected credit loss. Executives were grouped by type of receivables and consider credit risks that are of a common nature. The expected credit

loss rate is determined by the nature of the payment in the past. Information of credit losses from past experience, external factors, and future factors that may affect debtor payment. The Group assesses at the end of every period.

6.2 Allowance for obsolete and decline value of inventories

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

6.3 Plant, equipment and computer program

Management determines the estimated useful lives and residual values of the Group'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.

6.4 Leases

Determine the lease terms

The Group shall determine the lease term is reasonably certain to exercise an option to extend a lease, or not to exercise an option to terminate a lease, the Group shall consider all relevant ducts and circumstances that create an economic incentive for the lessee to exercise the option to extend the lease, or not to exercise the option to terminate the lease.

The Group shall revise the lease term if there is a change in the non-cancellable of a lease by may be caused by the Group of companies using (or not exercising) rights. The reasonably certain assessment of certainty upon the occurrence of either a significant event or a significant change in circumstances. This has an impact on assessment of the lease term and is under the control of the group.

Determination of the discount rate on lease liabilities

The Group assessment interest rate of incremental borrowing of lessee by using information provided by third-party financing of each leasing entity and updating information obtained to reflect changes in the tenant's financial factors, if possible.

6.5 Impairment of investments

The Company treats investments as impaired when there been a significant or prolonged decline in their fair value. The determination of what is "significant" or "prolonged" requires management judgment.

6.6 The impairment of property, plant and equipment, Interconnection charge and power purchase agreement

In determining the impairment loss on property, plant and equipment and power purchase agreement, the management is required to exercise judgements regarding determination of the recoverable amount of the asset, which is the higher of its fair value less costs of disposal and its value in use. The value in use calculation is based on a discounted cash flow model. The recoverable amount is sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash-inflows and the growth rate used for extrapolation purposes.

6.7 Post - employment benefits

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

6.8 Deferred tax assets

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

6.9 Provision for warranty expense

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

7. Cash and cash equivalents

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash on hand	63	158	48	141
Cash at banks	611,725	347,273	404,937	214,912
Total	611,788	347,431	404,985	215,053

As at 31 December 2022, bank deposits in saving accounts carried interests between 0.25 and 0.40 percent per annum (2021: between 0.05 and 0.50 percent per annum).

8. Trade accounts receivable and contract assets

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
<u>Trade accounts receivable - related parties</u>				
Aged on the basis of due dates				
Not yet due	3,446	-	3,446	-
Past due				
Up to 3 months	1,885	-	1,885	-
Total trade accounts receivable - related parties	5,331	-	5,331	-
<u>Trade accounts receivable - unrelated parties</u>				
Aged on the basis of due dates				
Not yet due	88,815	100,087	83,765	87,640
Past due:				
Up to 3 months	49,648	21,914	49,648	21,914
3 - 6 months	14,942	5,793	14,942	5,793
7 - 12 months	1,787	257	1,787	257
Over 12 months	32,927	26,521	32,927	26,521
Total	188,119	154,572	183,069	142,125
Less: Allowance for expected credit losses	(25,024)	(23,438)	(25,024)	(23,438)
Total trade accounts receivable - unrelated parties, net	163,095	131,134	158,045	118,687
Total trade accounts receivable - net	168,426	131,134	163,376	118,687

	Consolidated financial statements		(Unit: Thousand Baht) Separate financial statements	
	2022	2021	2022	2021
Contract assets				
Aged on the basis of revenues recognised dates				
Not yet due	13,351	26,147	8,292	22,053
Past due:				
Up to 3 months	6,109	1,730	6,109	1,730
3 - 6 months	398	63	398	63
7 - 12 months	797	260	797	260
Over 12 months	1,553	202	1,553	202
Total contract assets	22,208	28,402	17,149	24,308
Total trade accounts receivable and contract assets – net	190,634	159,536	180,525	142,995

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

As at 31 December 2022 and 2021, some trade accounts receivable which overdue 12 months are under process of installment payments with the Company.

The Company has movements in allowance for impairment loss for the years ended 31 December 2022 and 2021 are as follow:

	(Unit: Thousand Baht) Consolidated and Separate financial statements	
	2022	2021
Balance as at 1 January	23,438	32,884
Add: Allowance for expected credit losses	1,586	-
Less: Write-off uncollectible receivable	-	(5,754)
Less: Reversal of allowance for impairment loss	-	(3,692)
Balance as at 31 December	25,024	23,438

9. Related companies transactions

The relationships between the Company, subsidiaries and associate are summarised as described in Notes 13 and 14 to the consolidated financial statements and the relationships between the Company and other related parties and summarised below:

Related companies	Relationship
Q.T.C. Services Chiang Mai Co., Ltd.	Co - Relative of Director of the Company
Loxley PCL.	Joint of Director of the company

During the years end 31 December 2022 and 2021, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Group and those related parties.

		(Unit: Thousand Baht)			
		Consolidated financial statements		Separate financial statements	
	Pricing policy	2022	2021	2022	2021
<u>Revenue from sales</u>					
Indirect subsidiary companies	Agreed price	-	-	150,710	51
Associated company	Agreed price	1,676	-	1,676	-
Related company	Market prices	6,539	4,706	6,539	4,706
Total		8,215	4,706	158,925	4,757
<u>Revenue from service</u>					
Subsidiary company	Agreed price	-	-	-	359
Indirect subsidiary companies	Agreed price	-	-	349	4,200
Associated company	Agreed price	3,374	-	3,374	-
Related companies	Market prices	176	9	176	9
Total		3,550	9	3,899	4,568
<u>Other Income</u>					
Subsidiary company	Agreed price	-	-	493	134
Indirect subsidiary company	Agreed price	-	-	1,381	-
Associated company	Agreed price	179	-	179	-
Related companies	Market prices	-	6	-	6
Total		179	6	2,053	140
<u>Interest income</u>					
Associated company	5.09% - 5.50% per annum	-	593	-	593
<u>Dividend income</u>					
Subsidiary company	Board of Directors meeting's resolution	-	-	87,500	40,600
<u>Selling and distribution expenses</u>					
Related companies	Agreed price	31	238	31	238

Significant balances with related parties as at 31 December 2022 and 2021, are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Trade accounts receivable - related party</u>				
Related company	5,064	-	5,064	-
Associated company	267	-	267	-
Total	5,331	-	5,331	-
<u>Other receivable - related parties</u>				
Subsidiary company	-	-	-	210
Total	-	-	-	210
<u>Other payable - related parties</u>				
Related company	-	44	-	44
Total	-	44	-	44
<u>Provision for long-term employee benefits</u>				
Post-employment benefits - key management	5,086	4,600	4,364	3,932

Directors and management's benefits

During the years ended 31 December 2022 and 2021, the Group had employee benefit expenses payable to their directors and management as below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Short-term employee benefits	25,813	28,573	21,301	26,653
Post-employment benefits	485	527	432	495
Total	26,298	29,100	21,733	27,148

10. Inventories

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Raw materials	102,751	150,317	102,751	150,317
Work in process	20,879	52,914	20,879	52,914
Finished goods	230,483	120,116	230,483	120,116
Goods in transit	1,722	6,602	1,722	6,602
Total	355,835	329,949	355,835	329,949
Less: Allowance for obsolete and decline value of inventories	(8,780)	(7,741)	(8,780)	(7,741)
Inventories - net	347,055	322,208	347,055	322,208

During the current year, the Group reduced cost of inventories by Baht 3 million (2021: Baht 1 million), to reflect the net realisable value. This was included in cost of sales. In addition, the Group reversed the write-down of cost of inventories by Baht 2 million (2021: Nil) , and reduced the amount of inventories recognised as expenses during the year.

11. Other current financial assets

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Debt instruments measured at amortised cost</u>				
Financial institution deposits	178	-	43	-
<u>Financial assets measured at fair value through profit or loss</u>				
Investment in debt instrument	-	350,000	-	200,000
Total other current financial assets	178	350,000	43	200,000

12. Restricted deposit at bank

The balance is a fixed deposit which is restricted for usage from the pledge as collateral for fleet cards and bank guarantee in respect of performance under agreements as required in the business by indirect subsidiaries.

13. Investments in subsidiaries

13.1 Details of investments in subsidiaries as presented in separate financial statements

(Unit: Thousand Baht)

	Separate financial statements							
	Paid-up share capital		Percentage of shareholding		Cost method		Dividend income	
							2022	2021
	2022	2021	2022	2021	2022	2021		
<u>Direct subsidiary</u>								
QTC Global Power Co., Ltd.	501,900	501,900	99.99	99.99	700,000	700,000	87,500	40,600
<u>Indirect subsidiaries</u>								
Q Solar 1 Co., Ltd. ⁽¹⁾	220,000	220,000	100.00	100.00	-	-	-	-
QTC Marketing Co., Ltd. ⁽¹⁾	5,000	2,000	100.00	100.00	-	-	-	-
Total					700,000	700,000	87,500	40,600
Less: Allowance for impairment of investments in subsidiaries					(125,244)	(125,244)		
Net					574,756	574,756		

⁽¹⁾ The indirect subsidiaries are held by QTC Global Power Co., Ltd.

The Company has movement in impairment loss of investment in subsidiaries for the years ended 31 December 2022 and 2021 are as follow:

(Unit: Thousand Baht)

	Separate financial statements	
	2022	2021
Balance as at 1 January	125,244	134,661
Less: Reversal of impairment loss of during the year	-	(9,417)
Balance as at 31 December	125,244	125,244

13.2 Significant transactions of investments in subsidiaries during the year are as follows:

QTC Global Power Co., Ltd. (Direct subsidiary)

On 13 June 2022, the Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70 million common shares at rate of Baht 0.32 per share totalling to Baht 22.40 million. Interim dividend was paid to shareholders on 22 June 2022.

On 20 September 2022, the Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70 million common shares at rate of Baht 0.43 per share totalling to Baht 30.10 million. Interim dividend was paid to shareholders on 26 September 2022.

On 19 December 2022, the Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70 million common shares at rate of Baht 0.50 per share totalling to Baht 35.00 million. Interim dividend was paid to shareholders on 23 December 2022.

Q Solar 1 Co., Ltd. (Indirect subsidiary)

On 18 April 2022, the shareholder of Q Solar 1 Co., Ltd. approved of dividend payment to QTC Global Power Co., Ltd. for 2.20 million common shares at rate of Baht 4.55 per share totalling to Baht 10.01 million. Dividend was paid to shareholders on 13 May 2022.

On 12 September 2022, the Board of Director of Q Solar 1 Co., Ltd. approved of interim dividend payment to QTC Global Power Co., Ltd. for 2.20 million common shares at rate of Baht 13.70 per share totalling to Baht 30.14 million. Dividend was paid to shareholders on 19 September 2022.

On 8 December 2022, the Board of Director of Q Solar 1 Co., Ltd. approved of interim dividend payment to QTC Global Power Co., Ltd. for 2.20 million common shares at rate of Baht 17.75 per share totalling to Baht 39.05 million. Dividend was paid to shareholders on 16 December 2022.

14. Investments in associate

14.1 Details of investments in associate

		(Unit: Thousand Baht)							
						Consolidated financial statements		Separate financial statements	
		Paid-up share capital		Percentage of shareholding		Equity method		Cost method	
Type of business		2022	2021	2022	2021	2022	2021	2022	2021
				(%)	(%)				
<u>Associate</u> (incorporated in Thailand)									
PPWE Co., Ltd.	Production and distribution of electric power by alternative energy	40,000	40,000	49.98	49.98	6,853	7,359	19,999	19,999
Less: Allowance for impairment of investments on associate						-	-	(12,640)	(12,640)
Net						6,853	7,359	7,359	7,359

The Company has movement of investments in associate for the years ended 31 December 2022 and 2021 are as follow:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Balance as at 1 January	7,359	-	19,999	499
Add: Additional investment during the year	-	19,500	-	19,500
Less: Share of loss from associate				
during the year	(506)	(952)	-	-
Less: Unrecognise loss from associate	-	(11,189)	-	-
Balance as at 31 December	<u>6,853</u>	<u>7,359</u>	<u>19,999</u>	<u>19,999</u>

The Company has movement in loss of investments in associate in separate financial statement for the years ended 31 December 2022 and 2021 are as follow:

(Unit: Thousand Baht)

	Separate financial statements	
	2022	2021
Balance as at 1 January	12,640	500
Add: Loss during the year	-	12,140
Balance as at 31 December	<u>12,640</u>	<u>12,640</u>

14.2 Share of comprehensive income and dividend received

During the years ended 31 December 2022 and 2021, the Company recognised its share of comprehensive income from investments in the associate in the consolidated financial statements and dividend income in the separate financial statements as follows:

(Unit: Thousand Baht)

Associate	Consolidated financial statements				Separate financial statements	
	Share of other comprehensive					
	Share of loss from investments		income from investments in		Dividend received	
	in associate during the year		associate during the year		during the year	
	2022	2021	2022	2021	2022	2021
PPWE Co., Ltd.	506	12,140	-	-	-	-

14.3 Summarised financial information about material associate

Summarised information about financial position of PPWE Co., Ltd.

	(Unit: Thousand Baht)	
	2022	2021
Current assets	4,869	15,157
Non-current assets	9,542	-
Current liabilities	(455)	(188)
Net assets	13,956	14,969
Shareholding percentage (%)	49.98	49.98
Share of net assets	6,975	7,481
Other adjustments	(122)	(122)
Carrying amounts of associate based on equity method	6,853	7,359

Summarised information about comprehensive income of PPWE Co., Ltd.

	(Unit: Thousand Baht)	
	For the years ended 31 December	
	2022	2021
Revenue	15	2
Loss for the year	(1,013)	(1,645)
Other comprehensive income	-	-
Total comprehensive income	(1,013)	(1,645)

15. Property, plant and equipment

	Consolidated financial statements							(Unit: Thousand Baht)
	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	
Cost								
1 January 2021	106,090	20,760	250,055	850,851	52,682	9,651	10,696	1,300,785
Acquisitions	-	642	5,794	16,580	3,819	68	23,920	50,823
Disposals	-	-	(705)	(768)	(1,778)	(1,181)	-	(4,432)
Transfer in / (out)	-	10	5,618	20,578	33	-	(26,239)	-
31 December 2021	106,090	21,412	260,762	887,241	54,756	8,538	8,377	1,347,176
Acquisitions	2,423	195	431	19,769	2,311	1,776	13,166	40,071
Disposals / write-off	-	-	(191)	(2,655)	(2,112)	(1,808)	-	(6,766)
Transfer assets to right-of-use assets	-	-	-	-	-	(1,340)	-	(1,340)
Transfer from right of use assets	-	-	-	-	-	2,894	-	2,894
Transfer in / (out)	-	-	3,624	7,331	6,946	-	(17,901)	-
31 December 2022	108,513	21,607	264,626	911,686	61,901	10,060	3,642	1,382,035
Accumulated depreciation								
1 January 2021	-	7,779	121,437	484,815	43,041	7,482	-	664,554
Depreciation for the year (restated)	-	630	14,807	47,852	3,878	583	-	67,750
Depreciation for disposals	-	-	(664)	(569)	(1,744)	(988)	-	(3,965)
31 December 2021(restated)	-	8,409	135,580	532,098	45,175	7,077	-	728,339
Depreciation for the year	-	633	14,892	44,668	4,822	889	-	65,904
Cumulative depreciation transfer from right of use assets	-	-	-	-	-	2,178	-	2,178
Depreciation for disposals / write-off	-	-	(106)	(2,196)	(2,078)	(1,808)	-	(6,188)
31 December 2022	-	9,042	150,366	574,570	47,919	8,336	-	790,233

(Unit: Thousand Baht)

	Consolidated financial statements						
	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation
<u>Impairment loss</u>							
As at 1 January 2021 (restated)	23,100	597	796	21,416	-	-	45,909
Increase (restated)	-	930	1,240	25,921	-	-	28,091
As at 31 December 2021 (restated)	23,100	1,527	2,036	47,337	-	-	74,000
Increase	-	-	-	-	-	-	-
As at 31 December 2022	23,100	1,527	2,036	47,337	-	-	74,000
<u>Net book value</u>							
31 December 2021 (restated)	82,990	11,476	123,146	307,806	9,581	1,461	544,837
31 December 2022	85,413	11,038	112,224	289,779	13,982	1,724	517,802
<u>Depreciation for the year</u>							
2021 (Baht 51 million (restated) included in manufacturing cost, and the balance in selling and administrative expenses)							67,750
2022 (Baht 52 million included in manufacturing cost, and the balance in selling and administrative expenses)							65,904

(Unit: Thousand Baht)

Separate financial statements

	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	Total
<u>Cost</u>								
1 January 2021	31,090	2,744	228,631	376,268	52,816	8,672	10,522	710,743
Acquisitions	-	589	5,794	10,645	2,970	-	23,879	43,877
Disposals	-	-	(705)	(768)	(1,272)	-	-	(2,745)
Transfer in / (out)	-	-	5,618	20,578	33	-	(26,229)	-
31 December 2021	31,090	3,333	239,338	406,723	54,547	8,672	8,172	751,875
Acquisitions	-	-	431	10,250	2,068	1,785	13,082	27,616
Disposals / write-off	-	-	(191)	(2,655)	(1,866)	(1,808)	-	(6,520)
Transfer assets to right-of-use assets	-	-	-	-	-	(1,340)	-	(1,340)
Transfer from right of use assets	-	-	-	-	-	2,894	-	2,894
Transfer in / (out)	-	-	3,624	7,057	6,946	-	(17,627)	-
31 December 2022	31,090	3,333	243,202	421,375	61,695	10,203	3,627	774,525
<u>Accumulated depreciation</u>								
1 January 2021	-	224	106,568	225,731	43,285	7,167	-	382,975
Depreciation for the year	-	45	14,101	27,684	3,388	520	-	45,738
Depreciation for disposals	-	-	(664)	(569)	(1,271)	-	-	(2,504)
31 December 2021	-	269	120,005	252,846	45,402	7,687	-	426,209
Depreciation for the year	-	44	14,194	27,201	4,367	876	-	46,682
Cumulative depreciation transfer from right of use assets	-	-	-	-	-	2,178	-	2,178
Depreciation for disposals / write-off	-	-	(106)	(2,196)	(1,865)	(1,808)	-	(5,975)
31 December 2022	-	313	134,093	277,851	47,904	8,933	-	469,094

(Unit: Thousand Baht)

Separate financial statements

	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	Total
Net book value								
31 December 2021	31,090	3,064	119,333	153,877	9,145	985	8,172	325,666
31 December 2022	31,090	3,020	109,109	143,524	13,791	1,270	3,627	305,431
Depreciation for the year								
2021 (Baht 32 million included in manufacturing cost, and the balance in selling and administrative expenses)								45,738
2022 (Baht 33 million included in manufacturing cost, and the balance in selling and administrative expenses)								46,682

As at 31 December 2022, the Group has certain items of plant and equipment were fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation and allowance for impairment loss of those assets amounted to approximately Baht 147 million (2021: Baht 168 million) (the Company only: Baht 142 million (2021: Baht 164 million)).

16. Lease

The Group as a lessee has lease contracts for various items of assets used in its operations. Leases generally have lease terms between 3 - 5 years.

16.1 Right-of-use-assets

(Unit: Thousand Baht)

	Consolidated financial statement		
	Land	Vehicles	Total
<u>Cost</u>			
As at 1 January 2021	703	18,976	19,679
Additions	-	3,783	3,783
Decreased from changes in lease agreements	-	(3,077)	(3,077)
As at 31 December 2021	703	19,682	20,385
Additions	1,096	1,340	2,436
Transfer to property, plant and equipment	-	(2,894)	(2,894)
Adjustment during the year	26	1,219	1,245
As at 31 December 2022	1,825	19,347	21,172
<u>Accumulated depreciation</u>			
As at 1 January 2021	(325)	(6,242)	(6,567)
Depreciation for year (administrative expenses)	(325)	(4,017)	(4,342)
Decreased from changes in lease agreements	-	2,366	2,366
As at 31 December 2021	(650)	(7,893)	(8,543)
Depreciation for year (administrative expenses)	(353)	(3,983)	(4,336)
Decreased from changes in lease agreements	-	2,178	2,178
As at 31 December 2022	(1,003)	(9,698)	(10,701)
<u>Net book value</u>			
As at 31 December 2021	53	11,789	11,842
As at 31 December 2022	822	9,649	10,471

(Unit: Thousand Baht)

	Separate financial statement		
	Land	Vehicles	Total
<u>Cost</u>			
As at 1 January 2021	703	18,976	19,679
Additions	-	3,783	3,783
Decreased from changes in lease agreements	-	(3,077)	(3,077)
As at 31 December 2021	703	19,682	20,385
Additions	1,096	1,340	2,436
Transfer to property, plant and equipment	-	(2,894)	(2,894)
Adjustment during the year	26	-	26
As at 31 December 2022	1,825	18,128	19,953
<u>Accumulated depreciation</u>			
As at 1 January 2021	(325)	(6,242)	(6,567)
Depreciation for year (administrative expenses)	(325)	(4,017)	(4,342)
Decreased from changes in lease agreements	-	2,366	2,366
As at 31 December 2021	(650)	(7,893)	(8,543)
Depreciation for year (administrative expenses)	(353)	(3,583)	(3,936)
Decreased from changes in lease agreements	-	2,178	2,178
As at 31 December 2022	(1,003)	(9,298)	(10,301)
<u>Net book value</u>			
As at 31 December 2021	53	11,789	11,842
As at 31 December 2022	822	8,830	9,652

16.2 Lease liabilities

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Current portion of lease liabilities				
Not over 1 year	4,727	3,984	4,316	3,984
Over 1 year but not over 5 years	4,640	6,622	4,195	6,622
Total	9,367	10,606	8,511	10,606
Less: Deferred interest	(309)	(369)	(284)	(369)
Total	9,058	10,237	8,227	10,237
Less: Current portion	(4,538)	(3,783)	(4,139)	(3,783)
Net	4,520	6,454	4,088	6,454

Movements of the lease liabilities account during the years ended 31 December 2022 and 2021 are summarised below:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Balance as at 1 January	10,237	11,779	10,237	11,729
Additions	2,386	4,025	2,386	4,025
Accretion of interest	268	311	268	311
Deferred interest	(208)	(242)	(183)	(242)
Repayments	(4,848)	(5,056)	(4,436)	(5,006)
Adjustment during the year	1,223	-	(45)	-
Decreased from changes in lease agreements	-	(580)	-	(580)
Balance as at 31 December	9,058	10,237	8,227	10,237

A maturity analysis of lease payments is disclosed in Note 32.2 to the consolidated financial statements under the liquidity risk.

16.3 Expenses relating to leases that are recognised in profit or loss

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Depreciation expense of right-of-use assets	4,336	4,342	3,936	4,342
Interest expense on lease liabilities	268	311	268	311
Expense relating to short-term leases	165	-	165	-
Expense relating to leases of low-value assets	389	801	356	356

16.4 Others

The Group had total cash outflows for leases for the year ended 31 December 2022 of Baht 5 million (2021: Baht 6 million) (the Company only: Baht 5 million (2021: Baht 5 million)), including the cash outflow related to short-term lease, leases of low-value assets and variable lease payments that do not depend on an index or a rate.

17. Computer software

	(Unit: Thousand Baht)	
	Consolidated financial statements	Separate financial statements
<u>Cost</u>		
At 1 January 2021	23,775	23,732
Acquisitions	2,696	2,696
Disposals	(1,078)	(1,078)
At 31 December 2021	25,393	25,350
Acquisitions	110	110
At 31 December 2022	25,503	25,460
<u>Amortisation</u>		
At 1 January 2021	(17,814)	(17,789)
Amortisation for the year (administrative expenses)	(2,141)	(2,132)
Amortisation for disposals	85	85
At 31 December 2021	(19,870)	(19,836)
Amortisation for the year (administrative expenses)	(1,356)	(1,351)
At 31 December 2022	(21,226)	(21,187)
<u>Net book value</u>		
At 31 December 2021	5,523	5,514
At 31 December 2022	4,277	4,273

18. Interconnection charge

	(Unit: Thousand Baht)
	Consolidated financial statements
<u>Cost</u>	
At 1 January 2021	6,588
At 31 December 2021	6,588
At 31 December 2022	6,588
<u>Amortisation</u>	
At 1 January 2021	(2,992)
Amortisation for the year (cost of sales) (restated)	(293)
At 31 December 2021 (restated)	(3,285)
Amortisation for the year (cost of sales)	(289)
At 31 December 2022	(3,574)
<u>Allowance for impairment</u>	
At 1 January 2021 (restated)	400
Additions (restated)	400
At 31 December 2021 (restated)	800
At 31 December 2022	800

	(Unit: Thousand Baht)
	Consolidated
	financial statements
<u>Net book value</u>	
At 31 December 2021 (restated)	2,503
At 31 December 2022	2,214

The indirect subsidiary paid the interconnection charge into the project of the indirect subsidiary company to Provincial Electricity Authority (PEA). The ownership of the interconnection is belonging to the PEA and the indirect subsidiary has the right to use it.

19. Power purchase agreement

	(Unit: Thousand Baht)
	Consolidated
	financial statements
<u>Cost</u>	
At 1 January 2021	119,467
At 31 December 2021	119,467
At 31 December 2022	119,467
<u>Amortisation</u>	
At 1 January 2021	(27,410)
Amortisation for the year (cost of sales) (restated)	(7,595)
At 31 December 2021 (restated)	(35,005)
Amortisation for the year (cost of sales)	(7,513)
At 31 December 2022	(42,518)
<u>Allowance for impairment</u>	
At 1 January 2021 (restated)	9,000
Additions (restated)	12,400
At 31 December 2021 (restated)	21,400
At 31 December 2022	21,400
<u>Net book value</u>	
At 31 December 2021 (restated)	63,062
At 31 December 2022	55,549

On 25 June 2010, the indirect subsidiary had entered into the power purchase agreement with PEA by specified quality which start sale power in December 2011. The agreement is for the period of 5 years start from agreement date and can be renewable ever 5 years. Moreover, the indirect subsidiary has passed the inspection and quality certification by PEA and start to sale power to PEA since such date.

20. Income tax

20.1 The movements in deferred income tax assets / liabilities for the years ended 31 December 2022 and 2021 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements			
	Charged as income / (expense) in			
	31 December 2021 (Restated)	Other comprehensive income		31 December 2022
		Profit or loss	income	
Deferred income tax assets				
From allowance for expected credit losses				
of trade accounts receivable	4,688	317	-	5,005
From allowance for obsolete and decline				
value of inventories	1,548	208	-	1,756
From depreciation for plant and equipment	151	(12)	-	139
From provision for warranty expenses	872	17	-	889
From employee benefits obligation	3,295	308	(226)	3,377
From temporary differences from business				
combination - revaluation of land				
improvement, building improvement and				
machinery	10,852	(2,047)	-	8,805
Total	21,406	(1,209)	(226)	19,971
Deferred income tax liabilities				
From right-of-use-asset	321	(36)	-	285
From temporary differences from business				
combination - revaluation of land	6,759	-	-	6,759
From power purchase agreement	8,462	(852)	-	7,610
Total	15,542	(888)	-	14,654
Deferred income tax assets - net	5,864	(321)	(226)	5,317

(Unit: Thousand Baht)

Consolidated financial statements				
	Charged as income / (expense) in			31 December 2021 (Restated)
	1 January 2021 (Restated)	Profit or loss (Restated)	Other comprehensive income	
Deferred income tax assets				
From allowance for expected credit losses				
of trade accounts receivable	6,577	(1,889)	-	4,688
From allowance for obsolete and decline				
value of inventories	1,429	119	-	1,548
From depreciation for plant and equipment	163	(12)	-	151
From provision for warranty expenses	846	26	-	872
From employee benefits obligation	3,586	(183)	(108)	3,295
From temporary differences from business				
combination - revaluation of land				
improvement, building improvement				
and machinery	11,969	(1,117)	-	10,852
From translation adjustment	862	-	(862)	-
Total	25,432	(3,056)	(970)	21,406
Deferred income tax liabilities				
From right-of-use-asset	276	45	-	321
From temporary differences from				
business combination - revaluation of				
land	6,759	-	-	6,759
From power purchase agreement	11,143	(2,681)	-	8,462
Total	18,178	(2,636)	-	15,542
Deferred income tax assets - net	7,254	(420)	(970)	5,864

(Unit: Thousand Baht)

	Separate financial statements		
	Charged as income / (expense) in		
	31 December 2021	Profit or loss	Other
			comprehensive income
			31 December 2022
Deferred income tax assets			
From allowance for expected credit losses	4,688	317	-
From allowance for obsolete and decline value of inventories	1,548	208	-
From depreciation for plant and equipment	151	(12)	-
From provision for warranty expenses	872	16	-
From employee benefits obligation	3,082	280	(202)
Total	10,341	809	(202)
Deferred income tax liability			
From right-of-use-asset	321	(36)	-
Deferred income tax assets - net	10,020	845	(202)

(Unit: Thousand Baht)

	Separate financial statements		
	Charged as income / (expense) in		
	1 January 2021	Profit or loss	Other
			comprehensive income
			31 December 2021
Deferred income tax assets			
From allowance for expected credit losses	6,577	(1,889)	-
From allowance for obsolete and decline value of inventories	1,429	119	-
From impairment of investment in subsidiary company	1,883	(1,883)	-
From depreciation for plant and equipment	163	(12)	-
From provision for warranty expenses	846	26	-
From employee benefits obligation	3,293	(211)	-
Total	14,191	(3,850)	-
Deferred income tax liability			
From right-of-use-asset	276	45	-
Deferred income tax assets - net	13,915	(3,895)	-

20.2 Income tax expenses are as follows:

Income tax recognised in profit or loss

	(Unit: Thousand Baht)	
	Consolidated	Separate
	financial statements	financial statements
	2022	2021
	(Restated)	
Current income tax		
Income tax under Revenue Code	3,050	18,161
Deferred tax		
Movements in temporary differences	321	420
Income tax expense reported in profit or loss	3,371	18,581

Income tax recognised in other comprehensive income

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	2022	2021
Deferred tax on foreign currency translation differences for foreign operations	-	862
Deferred tax on defined benefit plan-actuarial gain	226	108
Total	226	970

	(Unit: Thousand Baht)	
	Separate	
	financial statements	
	2022	2021
Deferred tax on defined benefit plan-actuarial gain	202	-

As at 31 December 2022, the Group has deductible temporary differences and unused tax losses totaling Baht 149 million (2021: Baht 66 million) (the Company only: Baht 138 million (2021: Baht 138 million)), on which deferred tax assets have not been recognised as the Group believes future taxable profits may not be sufficient to allow utilisation of the temporary differences and unused tax losses.

The unused tax losses amounting to Baht 70 million (2021: Baht 66 million) will expire by 2027 (2021: by 2025).

20.3 Reconciliation between accounting profit and income tax expenses are as follows:

	Consolidated		(Unit: Thousand Baht)	
	financial statements		Separated	
	2022	2021	2022	2021
		(Restated)		
Accounting profit before tax	19,207	106,936	99,814	108,453
Applicable tax rate (%)	20%	20%	20%	20%
Tax multiplied by applicable tax rate	3,841	21,387	19,963	21,691
Adjustment for eliminate transaction	(2,757)	(2,294)	-	-
Tax on unrecognised of current year with temporary different as deferred tax asset	1,169	8,607	-	2,428
Tax on unrecognised of previously with temporary different as deferred tax asset	(3)	(2,503)	-	(2,503)
Income tax of loss from subsidiary	667	525	-	-
Effects of tax on:				
Exempted revenue for Revenue Code and tax reduction for profit	(122)	(7,807)	(17,503)	(8,120)
Non-deductible exempted revenue for Revenue Code	1,151	1,678	320	1,659
Exemption of additional expenses	(575)	(1,012)	(575)	(949)
Total	454	(7,141)	(17,758)	(7,410)
Income tax expense reported in profit or loss	3,371	18,581	2,205	14,206

21. Provision for long-term employee benefits

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

Movements in the present value of the defined benefit obligations for the years ended 31 December 2022 and 2021 are as follows:

	Consolidated		(Unit: Thousand Baht)	
			Separated	
	financial statements		financial statements	
	2022	2021	2022	2021
Beginning balance as at 1 January	16,474	17,930	15,410	16,467
Recognised in profit or loss:				
Current service costs	1,259	1,533	1,146	1,421
Finance cost	285	342	252	312
Included in other comprehensive income:				
Actuarial (gain) or loss				
Demographic assumptions changes	-	(52)	2,503	-
Financial assumptions changes	(3,762)	(1)	(6,242)	-
Experience adjustments	2,632	(488)	2,728	-
Benefit paid during the year	-	(2,790)	-	(2,790)
Balance as at 31 December	16,888	16,474	15,797	15,410
Less: Current portion within one year	(1,144)	(168)	(1,031)	(168)
Net	15,744	16,306	14,766	15,242

The Group expects to pay Baht 1 million of defined benefit obligations during the next year (2021: Baht 0.2 million) (the Company only: Baht 1 million (2021: Baht 0.2 million)).

As at 31 December 2022, the weighted average duration of the liabilities for defined benefit obligations is 19 years (2021: 17 years) (the Company only: 18 years (2021: 18 years)).

Principal actuarial assumptions

The following are principal actuarial assumptions at the reporting date for the years ended 31 December 2022 and 2021 are as follows:

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
<u>Financial assumptions</u>				
Discount rate	1.89% - 4.14% per annum	1.91% - 3.13% per annum	3.19% - 4.14% per annum	1.91% per annum
Future salary average				
increment rate	3.50% - 6.52% per annum	5.00% - 7.37% per annum	5.62% per annum	6.52% per annum
<u>Demographic assumptions</u>				
Normal retirement age	60 years	60 years	60 years	60 years
Mortality rate	Thai Mortality Table 2017	Thai Mortality Table 2017	Thai Mortality Table 2017	Thai Mortality Table 2017

Sensitivity analysis

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

(Unit: Thousand Baht)

	Effect to the defined benefit obligation			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Change in discount rate				
Discount rate (0.5% increment)	(895)	(876)	(839)	(829)
Discount rate (0.5% decrement)	963	955	920	904
Future salary growth (0.5% increment)	910	1,016	851	962
Future salary growth (0.5% decrement)	(846)	(937)	(791)	(887)
Turnover rate (0.5% increment)	(997)	(1,127)	(932)	(1,064)
Turnover rate (0.5% decrement)	1,074	1,236	1,002	1,167

22. Revenue

22.1 Disaggregated revenue information

Revenue from manufacturing and sale of electric transformer business

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

1. For Distribution Transformers: 10 KVA - 5000 KVA
 - 1.1 Hermetically Sealed Oil Type Distribution Transformers
 - 1.2 Open Type Transformers with Conservators.
2. Power Transformers: 5000 KVA - 30000 KVA
3. Special Transformers: designed and manufactured in accordance with customers’ usage and features, such as Earthling Transformer, Dry-Type Class F&H, Unit Substation, Pad mounted and Amorphous 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 the Company’s transformers and general customers.

Revenue from sale of electric equipment business

1. The Company is the distributor of solar panel for LONGI Solar, which is regarded as the best Tier 1 solar panel with half-cut technology photovoltaic modules that deliver up to 98% efficiency and generate higher amount of power even in low light conditions. In addition, it can generate electricity continuously for more than 25 years. Currently, the Company sells solar panels with a maximum capacity of 545 W.
2. The Company is the distributor of Huawei Solar Inverter, which is the product that converts direct current (DC) to alternating current (AC) for using with solar panels, including the domestic and international distributor of DE BUSDUCT in order to create a foundation for the Company's sustainable growth and continuously growing operating results.

Revenue from manufacturing and sale of electricity business

The subsidiary is principally engaged in the manufacturing and sale of electricity from solar energy. Details of revenue are disclosed in Note 29 to the consolidated financial statements.

22.2 Revenue recognised in relation to contract balances

During the year 2022, the Group recognised revenues which was included in the contract liabilities balance at the being period of Baht 15 million (2021: Baht 42 million) (the Company only: Baht 15 million (2021: Baht 42 million)).

22.3 Revenue to be recognised for the remaining performance obligations

As at 31 December 2022, the Group expects to recognised revenue in the future in respect of performance obligations which are unsatisfied with customers for the sales and services contracts which have duration within one-year or less than that of Baht 317 million (2021: Baht 334 million) (the Company only: Baht 317 million (2021: Baht 334 million)).

22.4 Contract assets - unbilled receivable

As at 31 December 2022, the Group has balances of unbilled revenues amounted to approximately of Baht 22 million (2021: Baht 28 million) (the Company only: Baht 17 million (2021: Baht 24 million)).

22.5. Contract assets and contract liabilities

As at 31 December 2022 and 2021, the Group has an outstanding balances of contract assets and contract liabilities with customers as follows:

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Contract assets				
Unbilled revenues	22,208	28,402	17,149	24,308
Total of contract assets	22,208	28,402	17,149	24,308
Contract liabilities				
Advance from customer	19,424	14,988	19,424	14,988
Total of contract liabilities	19,424	14,988	19,424	14,988

23. Earning per share

Basic earning per share is calculated by dividing profit for the year attributable to the equity holders of the Company (excluding other comprehensive income) by weighted average number of ordinary share in issue during the year.

The calculation of basic earning per share for years ended 31 December 2022 and 2021 are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Basic earning per share		(restated)		
Profit attributable to share holder of the Company (Thousand Baht)	15,835	88,355	97,609	94,247
Weighted average number of common shares (Thousand shares)	341,093	341,093	341,093	341,093
Earning per share (Baht per share)	0.046	0.259	0.286	0.276

24. Statutory 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. At present, the statutory reserve has fully been set aside.

25. Dividend

Dividends	Approved by	Total dividends (Million Baht)	Dividend per share (Baht)
Final dividends for 2020	Annual General Meeting of the shareholders on 23 April 2021	85	0.25
Total for 2021		85	0.25
Final dividends for 2021	Annual General Meeting of the shareholders on 1 April 2022	68	0.20
Total for 2022		68	0.20

As at 31 December 2022, the Company has accrued dividend of Baht 0.2 million. (2022: Baht 20 million).

26. Provident fund

The Group and employee have established a contributory Provident Fund. This Provident Fund has already been registered under the Provident Fund Act, B.E. 2530. Under the Fund plan, employee has to contribute to the fund at the specific rate and will be entitled to receive the fund when staff is no longer member in accordance with regulation of the fund. The Group's contribution to the Fund for the year 2022 amounted to Baht 3 million (2021: Baht 3 million) (the Company only: Baht 3 million (2021: Baht 3 million)).

27. Expenses by nature

Significant expenses by nature for the years ended 31 December 2022 and 2021 are as follows:

	Consolidated financial statements		(Unit: Thousand Baht) Separate financial statements	
	2022	2021 (restated)	2022	2021
Raw materials and supplies used	851,632	741,666	851,769	741,666
Changes in finished goods and work in process	(78,332)	(68,938)	(78,332)	(68,935)
Salaries, wages and other employee benefits	162,164	162,264	152,193	150,218
Depreciation and amortization	81,654	92,212	51,969	52,213
Repair and maintenance expenses	12,946	12,779	11,794	11,938
Electric expense	8,073	7,510	7,841	7,262
Transportation expense	8,266	8,930	8,263	8,927

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
		(restated)		
Marketing expense	8,842	3,715	8,842	3,715
Warranty expenses	3,368	3,452	3,368	3,452
Commission expense and sales promotion	7,036	9,171	7,036	9,171
Professional fee	5,538	5,616	4,073	4,658
Travelling expense	6,153	3,236	5,897	3,034
Bank fee	1,529	2,299	1,007	2,298
Loss on derecognition of property plant and equipment, interconnection charge and power purchase agreement	-	43,800	-	-
Others	131,060	61,499	134,653	54,069

28. Promotional privilege

The indirect subsidiary received promotional privileges from the Board of Investment Promotion Act B.E. 2520 under a certificate No.1114(1)/2554 on 27 January 2011 for production and distribution of electricity from solar energy such as exemption import duties on the machineries, exemption from corporate income tax on net profit derived from the promoted activities, for the period of 8 years from the date income is first derived from such activity. After the period 8 years which exemption from corporate income tax, the indirect subsidiary entity to received exemption from corporate income tax on net profit derived from the promoted activities at the rate of 50% normal.

29. Segment reporting

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

For management purposes, the Group is organised into business units based on its products and services and have three reportable segments as follows:

- Manufacturing and sale of electric transformer segment
- Sale of electric equipment segment
- Manufacturing and sale of electricity segment

No operating segments have been aggregated to form the above reportable operating segments.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating profit or loss and total assets and on a basis consistent with that used to measure operating profit or loss and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

(Unit: Thousand Baht)

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Geographic information

The Group operates in Thailand only. As a result, all the revenues and assets as reflected in these financial statements pertain exclusively to this geographical reportable segment.

Major Customers

(Unit: Million Baht)

Type of customers	Consolidated financial statements							
	Number of customers		Manufacturing and sale of electric transformers		Manufacturing and sale of electricity		Total	
	For the years ended 31 December							
	2022	2021	2022	2021	2022	2021	2022	2021
Private companies	2	2	259	229	-	-	259	229
Government enterprise	1	1	160	127	47	134	207	261
Total	3	3	419	356	47	134	466	490

30. Commitments and contingent liabilities

30.1 Capital commitments

As at 31 December 2022, the Group had capital commitments in acquisition of assets approximately Baht 53 million (2021: Nil), (the Company only: Baht 3 million (2021: Nil)).

30.2 Electricity sales commitments

An indirect subsidiary into several agreements with the Provincial Electricity Authority (PEA) and the Metropolitan Electricity Authority (MEA) to sell electricity in a specified quantity and at a stipulated price as defined in the agreements. The agreements are for a period of 5 starting from the agreement date, and will automatically renew every 5 years until termination. The details of the agreements are as follows:

Agreement date	Project location	Capacity	Commercial operation date
25 June 2010	Prachinburi Province	8 kilowatts	Start selling electricity since 2 December 2011

30.3 Guarantees

As at 31 December 2022, the Group has obligations under bank guarantees on behalf of the Group to guarantee performance bonds required in the normal course of businesses approximately Baht 36 million (2021: Baht 23 million), (the Company only: Baht 27 million (2021: Baht 23 million)).

30.4 Credit facilities

As at 31 December 2022, two of indirect subsidiary has credit facility of fleet card approximately Baht 0.1 million (2021: Baht 0.1 million) and a letter of guarantee, which is use for guaranting the business operating contract, the amount is Baht 3 million (2021: Nil) which pledged by fixed deposits as described in Note 12 to the consolidated financial statements.

31. Fair value hierarchy

As at 31 December 2022 and 2021, the Group had the financial assets and financial liabilities that were measured at fair value using different levels of inputs as follows:

(Unit: Thousand Baht)

Consolidated financial statements				
As at 31 December 2022				
	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value				
Derivatives				
Foreign currency forward contracts	-	2,590	-	2,590

(Unit: Thousand Baht)

Consolidated financial statements				
As at 31 December 2021				
	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value				
Derivatives				
Foreign currency forward contracts	-	26	-	26

(Unit: Thousand Baht)

Separate financial statements				
As at 31 December 2022				
	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value				
Derivatives				
Foreign currency forward contracts	-	2,590	-	2,590

(Unit: Thousand Baht)

	Separate financial statements			
	As at 31 December 2021			
	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value				
Derivatives				
Foreign currency forward contracts	-	26	-	26

During the current year, there were no changes in the methods and the assumptions used to estimate the fair value of financial instruments, and there were no transfers within the fair value hierarchy.

32. Financial instruments

32.1 Derivatives

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Derivative assets				
Derivative assets not designated as hedging instruments				
Foreign exchange forward contracts	2,590	26	2,590	26
Total derivative assets	<u>2,590</u>	<u>26</u>	<u>2,590</u>	<u>26</u>

Derivatives not designated as hedging instruments

The Group uses foreign exchange forward contracts to manage some of its transaction exposures. The contracts are entered into for periods consistent with foreign currency exposure of the underlying transactions, generally from 2 to 6 months.

32.2 Financial risk management and policies

The Group's financial instruments principally comprise cash and cash equivalents, trade accounts receivable, and investments. The Group is exposed to various types of risks related to these financial instruments. The major risks include credit risk, liquidity risk and market risk. These consist of foreign exchange risk and interest rate risk. The Group has risk management policies as follow.

Credit risk

The Group is exposed to credit risk primarily with respect to trade accounts receivable, contract assets, deposits with banks and financial institutions and other financial instruments. Except for derivatives, the maximum exposure to credit risk is limited to the carrying amounts as stated in the statement of financial position. The Group's maximum exposure relating to derivatives is noted in the liquidity risk topic.

Trade receivables and contract assets

The Group provides credit term on its trade transactions. The Group manages its exposure to credit risk by closely monitoring collection of trade receivables and focuses on overdue accounts. The Group measurement by expected credit loss that occur over the life for all the receivables. It is no longer necessary for a credit event to occur before credit losses are recognises.

Deposits with banks and financial institutions

The Group manages the risk by classified risk of deposits with bank and financial institutions. The Group will do transactions with financial institutions or invests in financial products which have assessed credit-rating by reputable bank to minimize concentrations of credit risk and therefore mitigate financial loss through a counterparty's potential failure to bank payments.

Market risk

Foreign currency risk

The Company has exposure for foreign currency risk relating primarily to its trade accounts receivable accounts payable 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. The Group 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 2022 and 2021, the balances of financial assets and liabilities denominated in foreign currencies as follows:

Foreign currency	Financial assets		Financial liabilities		Average exchange rate	
	2022	2021	2022	2021	2022	2021
	(Thousand)	(Thousand)	(Thousand)	(Thousand)	(Baht per 1 foreign currency unit)	
EURO	-	-	6	1	37.2053	38.2813
USD	189	809	6	389	34.3913 - 34.7335	33.2469 - 33.5929
AUD	577	231	32	1	22.9645 - 23.7936	23.8456 - 24.6798

As at 31 December 2022 and 2021, the Company has open forward contracts for the collection from trade accounts receivable which settlement dates are ranging between 2 months and 6 months as follows:

Consolidated and separate financial statements				
2022			2021	
Foreign currencies	Contracts rates		Foreign currencies	Contracts rates
(Thousand)	(Baht per 1 foreign currency unit)		(Thousand)	(Baht per 1 foreign currency unit)
<i>Forward contracts</i>				
USD (Sell)	1	34.67	491	33.65 - 33.74
USD (Buy)	1,305	34.72 - 36.85	-	-
AUD (Sell)	305	23.69 - 23.93	231	23.63

The following tables demonstrate the sensitivity of the Group's profit before tax to a reasonably possible change in US dollar exchange rates, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities including non-designated foreign currency derivatives as at 31 December 2022 and 2021. The Group's exposure to foreign currency changes for all other currencies is not material. This information is not a forecast or prediction of future market conditions and should be used with care.

2022			2021	
Currency	Increase / decrease	Effect on profit	Increase / decrease	Effect on profit
		before tax		before tax
	(%)	(Thousand Baht)	(%)	(Thousand Baht)
USD	+3	189	+3	415
	-3	(189)	-3	(415)
AUD	+3	375	+3	165
	-3	(375)	-3	(165)

Interest rate risk

The interest rate risk is that future movements in market interest rates that will affect the results of the Group operations and its cash flows. The Group's exposure to interest rate risk relates primarily to their deposits with bank, other current financial assets and lease liabilities as follows:

(Unit: Thousand Baht)

Consolidated financial statements					
2022					
	Floating interest rate	Fixed interest rates	Non- interest bearing	Total	Effective interest rate (% per annum)
<u>Financial assets</u>					
Cash and cash equivalents	611,725	-	63	611,788	0.25% - 0.40%
Trade accounts receivable and contract assets	-	-	190,634	190,634	-
Other account receivables	-	-	1,221	1,221	-
Other current financial assets	-	178	-	178	0.40%
Restricted bank deposit	-	3,101	-	3,101	0.50%, 0.55%
	<u>611,725</u>	<u>3,279</u>	<u>191,918</u>	<u>806,922</u>	
<u>Financial liabilities</u>					
Trade accounts payable	-	-	167,021	167,021	-
Other account payable	-	-	6,118	6,118	-
Lease liabilities	-	9,058	-	9,058	0.59% - 5.52%
	<u>-</u>	<u>9,058</u>	<u>173,139</u>	<u>182,197</u>	

(Unit: Thousand Baht)

Consolidated financial statements					
2021					
	Floating interest rate	Fixed interest rates	Non- interest bearing	Total	Effective interest rate (% per annum)
<u>Financial assets</u>					
Cash and cash equivalents	347,273	-	158	347,431	0.05% - 0.50%
Trade accounts receivable and contract assets	-	-	159,536	159,536	-
Other account receivable	-	-	603	603	-
Other current financial assets	-	350,000	-	350,000	0.50%
Restricted deposit at bank	-	101	-	101	0.55%
	<u>347,273</u>	<u>350,101</u>	<u>160,297</u>	<u>857,671</u>	
<u>Financial liabilities</u>					
Trade accounts payable	-	-	121,243	121,243	-
Other account payable	-	-	19,978	19,978	-
Lease liabilities	-	10,237	-	10,237	0.59% - 5.52%
	<u>-</u>	<u>10,237</u>	<u>141,221</u>	<u>151,458</u>	

(Unit: Thousand Baht)

Separate financial statements					
2022					
	Floating interest rate	Fixed interest rates	Non- interest bearing	Total	Interest rate (% per annum)
<u>Financial assets</u>					
Cash and cash equivalents	404,937	-	48	404,985	0.25% - 0.40%
Trade accounts receivable and contract assets	-	-	180,525	180,525	-
Other account receivable	-	-	794	794	-
Other current financial assets	-	43	-	43	0.40%
	404,937	43	181,367	586,347	
<u>Financial liabilities</u>					
Trade accounts payable	-	-	167,021	167,021	-
Other account payable	-	-	5,556	5,556	-
Lease liabilities	-	8,227	-	8,227	0.59% - 5.52%
	-	8,227	172,577	180,804	

(Unit: Thousand Baht)

Separate financial statements					
2021					
	Floating interest rate	Fixed interest rates	Non- interest bearing	Total	Interest rate (% per annum)
<u>Financial assets</u>					
Cash and cash equivalents	214,912	-	141	215,053	0.25% - 0.35%
Trade accounts receivable and contract assets	-	-	142,995	142,995	-
Other account receivable	-	-	220	220	-
Other current financial assets	-	200,000	-	200,000	0.50%
	214,912	200,000	143,356	558,268	
<u>Financial liabilities</u>					
Trade accounts payable	-	-	121,243	121,243	-
Other account payable	-	-	19,514	19,514	-
Lease liabilities	-	10,237	-	10,237	0.59% - 5.52%
	-	10,237	140,757	150,994	

Liquidity risk

Liquidity risk arises from the possibility that customers may not be able to settle obligations to the Company within the normal terms of trade. To manage this risk, the Group periodically assesses the financial viability of customers.

As at 31 December 2022 and 2021, the financial instrument classified by the periods of time from the date on the statements of financial position to their maturity dates are as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements			
	As at 31 December 2022			
	Less than			Total
	On demand	1 year	Over 1 year	
Non-derivatives				
<u>Financial assets</u>				
Cash and cash equivalents	611,788	-	-	611,788
Trade accounts receivable and contract assets	190,634	-	-	190,634
Other receivables	1,221	-	-	1,221
Other current financial assets	-	178	-	178
Restricted bank deposit	-	3,101	-	3,101
<u>Financial liabilities</u>				
Trade accounts payable	167,021	-	-	167,021
Other account payables	6,118	-	-	6,118
Lease liabilities	-	4,538	4,520	9,058

	(Unit: Thousand Baht)			
	Consolidated financial statements			
	As at 31 December 2021			
	Less than			Total
	On demand	1 year	Over 1 year	
<u>Financial assets</u>				
Cash and cash equivalents	347,431	-	-	347,431
Trade accounts receivable and contract assets	159,536	-	-	159,536
Other receivables	603	-	-	603
Other current financial assets	-	350,000	-	350,000
Restricted bank deposit	-	101	-	101
<u>Financial liabilities</u>				
Trade accounts payable	121,243	-	-	121,243
Other account payables	19,978	-	-	19,978
Lease liabilities	-	3,783	6,454	10,237

(Unit: Thousand Baht)

	Separate financial statements			
	As at 31 December 2022			
	Less than			Total
	On demand	1 year	Over 1 year	
Financial assets				
Cash and cash equivalents	404,985	-	-	404,985
Trade accounts receivable and contract assets	180,525	-	-	180,525
Other receivable	794	-	-	794
Other current financial assets	-	43	-	43
Financial liabilities				
Trade accounts payable	167,021	-	-	167,021
Other account payables	5,556	-	-	5,556
Lease liabilities	-	4,139	4,088	8,227

(Unit: Thousand Baht)

	Separate financial statements			
	As at 31 December 2021			
	Less than			Total
	On demand	1 year	Over 1 year	
Financial assets				
Cash and cash equivalents	215,053	-	-	215,053
Trade accounts receivable and contract assets	142,995	-	-	142,995
Other account receivable	220	-	-	220
Other current financial assets	-	200,000	-	200,000
Financial liabilities				
Trade accounts payable	121,243	-	-	121,243
Other account payables	19,514	-	-	19,514
Lease liabilities	-	3,783	6,454	10,237

32.3 Fair value of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

33. Capital 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. The financing activities were controlled financing costs be kept at a low level.

34. Event after the reporting period

On 10 February 2023, the meeting of the Board of Directors of the Company passed a resolution to propose to the Annual General Meeting of Shareholders for approval the payment of a dividend in respect of the operating results in 2022 at Baht 0.20 per share totaling Baht 68 million. The dividend will be paid on 26 April 2023.

35. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 10 February 2023.

1. Descriptions of Directors, Executives, and Controlling Persons of the Company and Company Secretary

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Mr. Krik-krai Jirapaet Chairman of the Board of Directors June 22, 2016	80	<ul style="list-style-type: none">Master of Economics, University of Sydney, AustraliaDirector Certification Program (DCP), Class 61/2005Audit Committee Program (ACP), Class 8/2005Role of the Chairman Program (RCP), Class 11/2005	-	-	Present	Chairman of the Board of Directors/ Independent Director	QTC Energy (Public) Company Limited	Production and Distribution of Transformer Energy
					Present	Chairman of Advisors to the Company	Banpu (Public) Company Limited University of the Thai Chamber of Commerce	
					Present	Vice President of the Council of Trustees	Thai Garment Development Foundation	Thai Garment
					Present	Chairman of the Board Honorary President	Thai Institute of Directors Association	
					Present	Chairman of the Board of Directors/ Independent Director	Triple I Logistics (Public) Company Limited	Transport and Logistics
					2017- Present	Chairman of the Board of Directors/ Independent Director	Banpu (Public) Company Limited	Energy
					2008-2016	Member of the National Reform Council	National Reform Council	
					2014-2015	Member of the Monetary Policy Committee	Bank of Thailand	Finance
Mr. Norachit Sinhaseni Director Vice Chairman of the Board and Chairman of the Nomination, Remuneration, and Corporate Governance Committee July 30, 2020	69	<ul style="list-style-type: none">Master of Arts in International Relations, The Fletcher School of Law and Diplomacy, United StatesDirector Certification Program (DCP), Class 113/2552Role of the Chairman Program (RCP), Class 46/2563Advanced Audit Committee Program (AAP), Class 37/2563Board Nomination & Compensation Program (BNCP), Class 10/2563	-	-	2009-2011	Minister of Commerce	Ministry of Commerce	
					2020-Present	Director/ Vice Chairman of the Board and Chairman of the Nomination, Remuneration, and Corporate Governance Committee	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2021-Present	Member of the Thai National Group, Permanent Court of Arbitration in The Hague	Court of Arbitration	Government Affairs
					2019-Present	Independent Director / Chairman of the Nomination and Remuneration Committee / Chairman of the Risk Management Committee / Member of the Audit Committee	Central Plaza Hotel (Public) Company Limited	Hotel / Food
					2019- Present 2015-2018	Member of the Council of State Member of Constitution Drafting Commission	Office of the Council of State Constitution Drafting Commission	Government Affairs Government Affairs
					2014-2015	Permanent Secretary	Ministry of Foreign	Government Affairs

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Mr. Natthaphon Lilawathananun Director and Chairman of the Audit Committee July 28, 2011	65	<ul style="list-style-type: none"> Master of Business Administration (MBA) Faculty of Commerce and Accountancy, Department of Finance, Chulalongkorn University Directorship Training Director Accreditation Program (DAP), Class 10/2004 Audit Committee Program (ACP), Class 3/2004 	-	-	2008 - Present	Director and Chairman of the Audit Committee	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2018 - Present	Managing Director	Excellent Digital Development Company Limited	Computer System Development
					2018 - Present	Managing Director	Jobmyway Recruitment Company Limited	Online Job Recruitment Service
					2005 - Present	Director	Unimit Engineering (Public) Company Limited	Production of Gas Storage Tank
					2005 - Present	Managing Director	NBS Research & Consulting Company Limited	Business and Research Consultant
					2003 - Present	Managing Director	Excellent Business Management Company Limited	Business and Research Consultant
					2003 - 2012	Director and Member of Audit Committee	Unique Mining Services (Public) Company Limited	Sales of Coal
Mrs. Wasara Chotithamarat Director, Member of Audit Committee and Member of Nomination, Remuneration and Corporate Governance Committee September 13, 2016	58	<ul style="list-style-type: none"> Master of Business Administration, Faculty of Commerce and Accountancy, Thammasat University Bachelor of Accountancy, Faculty of Commerce and Accountancy, Thammasat University Director Certification Program (DCP), Class 11/2009 Advanced Audit Committee Program (AACCP), Class 25/2017 Ethical Leadership Program (ELP) Class 26/2022 Company Secretary Program (CSP) Class 128/2022 	-	-	2016 - Present	Independent Director/ Member of Audit Committee/ Member of Nomination	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2020-Present	Independent Director/ Member of Audit Committee	Lease IT (Public) Company Limited	Finance
					2022 - Present	Accounting & Finance Senior Vice President	KCE Electronics Public Company Limited	Electronic Components
					2017 - 2021	Accounting Director	Summit Group, Summit Auto body Industry Co.Ltd.	Auto Parts
					2014-2015	Chief Financial Officer	The Cool Company Limited	Freezers

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Dr. Kamol Takabut Director, Member of Audit Committee, and Member of Nomination, Remuneration, and Corporate Governance Committee March 31, 2016	73	<ul style="list-style-type: none"> Doctor of Engineering in Thermodynamiques & Energetique, Faculty of Engineering, Perpignan University, France Director Certification Program (DCP), Class 67/2005 	-	-	2016-Present	Director, Member of Audit Committee, and Member of Nomination, Remuneration, and Corporate Governance Committee	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2015-Present	Independent Director, Member of Nomination	Getabec (Public) Company Limited	Transformer Industry
					2010-Present	Chief Executive Officer	Italian Thai Power Company Limited	Construction Contracting
					2018	Member of the Committee of the Energy Conservation Fund	Ministry of Energy	
					2018	Member of the Arbitration Committee	Ministry of Justice	
					2018	Director of the Town and Country Planning Board	Ministry of Interior	
					2012-2018	President of the Council of Engineers	Council of Engineers	
Mr. Suroj Lamsam Director August 29, 2017	57	<ul style="list-style-type: none"> Master of Business Administration in Management. Sasin Graduate Institute of Business Administration Master of Arts, Communications, New York University Bachelor of Arts., Marketing and Consumer Studies, Syracuse University, Syracuse New York King in Public Director Accreditation Program, Class 40/2548 	-	-	2017-Present	Director, Chief Executive Officer and President	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2021-Present	Director	Kasikornbank Public Company Limited	Financial
					2020-Present	President	Loxley (Public) Company Limited	Technology and Trading
					2020-Present	President	L Food Solutions Company Limited	Food Service
					2019-Present	Director	Dole Thailand Company Limited	Production / export of canned food
					2019-Present	Managing Director	AOT Aviation Security Company Limited	Security
					2019-Present	Managing Director	LB EV Company Limited	Production and Distribution of electric vehicles
					2019-Present	President	L Automotive Company Limited	Production / Rental / Hire-purchase of motor vehicles
					2018-Present	Director	The Foodsource Company Limited	Import / Distribution / Wholesale of Food
					2018-Present	Director	Slamsamut Warin Company Limited	
					2018-Present	Director	Loxley Joint & Hold Company Limited	Wholesale of fish / aquatic products
					2018-Present	Director	BP-Castrol (Thailand) Company Limited	Holding Company

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years		
					Duration	Position	Company Name Type of Business
Mr. Suroj Lamsam (Continued)					2017-Present	Director	Car Convenience Company Limited
					2017-Present	Director	Loxley Intertrade (Guangzhou) Company Limited
					2017-Present	Chairman of the Board	Loxbit (Public) Company Limited
					2017-Present	Director	ASM Security Management Company Limited
					2016-Present	Director	Loxley GTECH Technology Company Limited
					2016-Present	Director	Loxley Trading Company Limited
					2016-Present	Director	Loxley Global Company Limited
					2011-Present	Director	Loxley Mobile Company Limited
					2008-Present	Managing Director	Loxley Property Development Company Limited
					2008-Present	Managing Director	Data Mining Company Limited
					2005-Present	Director	Ekpavee Company Limited
					2000-Present	Managing Director	Thai Gateway Company Limited
					1999-Present	Director	Thanakorn Vegetable Oil Company Limited
					1999-Present	Director	Lam Sam Estate Company Limited
					Present	Director	Phatra Samphant Company Limited
					Present	Director	Point Asia Land Development Company Limited
					Present	Director	Chanaporn Company Limited
					Present	Director	Ruam Samphant Company Limited
					Present	Director	Wanatan Company Limited
					Present	Director	Satera Patana Company Limited
					Present	Director	Surudee Company Limited
Mr. Preedee Ngamsantikul Director and Member of Nomination, Remuneration and Corporate Governance Committee (Authorized Director) June 7, 2019	47	<ul style="list-style-type: none"> Master of Economics, Faculty of Economics, Sinakharinwrot University Bachelor of Engineering International Program, Sirindhorn International Institute of Technology, Civil Engineering, Thammasat University Director Accreditation Program (DAP), Class 161/2019 	0.72	-	2019-Present	Director / Member of Nomination	QTC Energy (Public) Company Limited
					Present	Academic Committee, Concrete Structure	Thailand Concrete Association (TCA)
					2020-Present	Managing Director	CSE (Thailand) Company Limited
					2020-Present	Director	iGL Synergy Co., Ltd.
					2020-Present	Director	Nam Theun 1 Power Co., Ltd.
					2015-Present	Vice President – International Affair	Thailand Underground and Tunnelling Group The Engineering Institute of Thailand
					2014-Present	Regional Advisor	ILF Consulting Engineers (Asia) Ltd.
					2009-Present	Managing Director	DD 49 Company Limited
							Engineering consultant

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Dr. Apichart Sramoorn Director July 30, 2020	53	<ul style="list-style-type: none"> • Doctor of Engineering (D.Eng.), Civil Engineering and Energy, Nagaoka University of Technology (NUT), Japan • Master of Soil Engineering, Asian Institute Of Technology (AIT), Thailand • Bachelor of Civil Engineering (First Class Honor), King Monkut's University of Technology Thonburi (KMUTT) • Financial Statements for Directors Program, Class 19/2013 • Director Accreditation Program (DAP), Class 169/2020 	12.46	-	2020-Present	Director	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2020-Present	Chief Executive Officer	TEAM Consulting Engineering and Management (Public) Company Limited	Engineering consultant
					2019-Present	Chairman of Board	TEAM SQ (Public) Company Limited	Architectural services
					2017-Present	Chairman of Board/ Director	Geotechnical & Foundation Engineering Company Limited	Geotechnical Engineering and Financial Foundations
					2019-Present	Chairman of Board	World Credit Foncier Company Limited	Finance
					2019-Present	Director	NauticAWT Limited	Energy
					2018-Present	Chairman of Board/ Director	TEAM Construction Management Company Limited	Civil Engineering
					2017-Present	Chairman of Board	World Corporation (Public) Company Limited	Real Estate
					Present	Director	iGL Synergy Co., Ltd.	Engineering and Consultation
					Present	Director	Nam Theun 1 Power Co., Ltd.	Hydroelectric dam in Laos
					2018-2019	Managing Director	TLT Consultant Company Limited	Engineering consultant
					2016-2018	Vice President	TEAM Consulting Engineering and Management (Public) Company Limited	Engineering consultant

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Mr. Poomphiphat Tantanasin Director, Member of the Nomination, Remuneration, and Corporate Governance Committee, and Chief Executive Officer (Authorized Director) July 28, 2011	70	<ul style="list-style-type: none">• Bachelor's Degree in Electrical Engineering, King Mongkut's Institute of Technology North Bangkok• Director Certification Program (DCP) Class 117/2009• Director Accreditation Program (DAP) Class 77/2009• Financial Statements for Directors (FSD) Class 4/2009• Role of the Compensation Committee(RCC) Class 20/2015	0.18	-	2011-Present	Director, Member of the Nomination, Remuneration, and Corporate Governance Committee /Chief Executive Officer	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2021-Present	Director	QTC Marketing Company Limited	Energy Transformer
					2020-Present	President Director	Thai Transformer Association	
					2017-Present	Advisor of the Council of Engineers	Q Solar 1 Company Limited	Solar Power Plant
					2017-Present	Director	Council of Engineers	
					2017-Present	Expertise	Council of Engineers	
					2017-Present	Advisor to the Electrical Subcommittee Advisor	Engineering Institute of Thailand (EIT)	
					2017-Present	Advisor		
					2017-Present	Director	Tanasin 2560 Company Limited	Hotel
					2017-Present	Director	Tanasin 2017 Company Limited	General
					2017-Present	Director	Tanasin Holding Company Limited	Investment
					2016-Present	Director	QTC Global Power Company Limited	Energy
					2016-Present	Director	PPWE Company Limited	Energy
					2008-Present	Director	M-DIC Holding Company Limited	Training
					2006-Present	Honorary Advisor	Thai Electrical & Mechanical Contractors Association	Electrical and contracting business
					1996-Present	Director	Jarin Apartment Limited	Apartment
					2014 – 2018	Director	Partnership QTC Panco Company Limited	Production and Distribution of Transformer (Laos)

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Mr. Ruangchai Kritsnakriengkrai Director and Managing Director (Authorized Director) September 13, 2016	57	<ul style="list-style-type: none"> Master of Business Economics, School of Development Economics, National Institute of Development Administration Bachelor of Engineering in Electrical Power Engineering, King Mongkut's Institute of Technology North Bangkok Director Accreditation Program (DAP) Class 116/2015 Finance Statement for Director(FSD) Class 27/2015 Director Certification Program(DCP) Class 236/2017 Risk Management Program for Corporate Leaders (RCL), Class 28/2022 	-	-	2016-Present	Managing Director/ Director	QTC Energy (Public) Company Limited	Production and Distribution of Transformer Energy
					2016-Present	Director	QTC Global Power Company Limited	Transformer Energy
					2017-Present	Director	Q Solar 1 Company Limited	Solar Power Plant Energy
					2021-Present	Director	QTC Marketing Company Limited	Energy
					2021-Present	Director	PPWE Company Limited	Energy
					2014-2019	Director	QTC Panco Company Limited (Subsidiary)	Production of Transformer (Laos)
Miss Boonpa Ruddist Deputy Managing Director of General Management	62	<ul style="list-style-type: none"> Bachelor of Business Administration, Kasem Bundit University Company Secretary Program (CSP), Class 29/2009 Effective Minute Taking (EMT), Class No. 13/2009 Board Reporting Program (BRP), Class No. 2/2010 Company Reporting Program (CRP), Class No. 1/2011 Company Secretary Forum 2013 	-	-	2011-Present	Deputy Managing Director of General Management	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2011-2020	Company Secretary	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2008-2010	Executive Director	QTC Transformers Company Limited	Production of Transformer
					2006-2008	General Management Manager	QTC Transformers Company Limited	Production of Transformer
					2004-2006	Sales and Services Administration Manager	QTC Transformers Company Limited	Production of Transformer

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Mr. Kitti Achariyaboonyong Deputy Managing Director of Marketing	56	<ul style="list-style-type: none"> Bachelor of Engineering in Electrical Engineering, King Mongkut's University of Technology North Bangkok Director Certification Program (DCP), Class 272/2019 Strategic Board Master Class (SMB), Class 11/2022 	-	-	2018 – present	Deputy Managing Director of Marketing	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2011-2018	Marketing Manager	Ekarat Engineering Public Company Limited	Production of Transformer
					2006–2011	Sales & Marketing Director	Weltech Group Company Limited	Distribution of Computer Devices and Cosmetics
Mr. Charoensak Sarawong Deputy Managing Director of Factory	51	<ul style="list-style-type: none"> Bachelor of Electrical Engineering, Faculty of Engineering, Mahanakorn University 	-	-	2017-Present	Deputy Managing Director of Factory	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2010-2017	Manager of Production Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2003-2010	Production Manager	QTC Transformers Company Limited	Production of Transformer
Mr. Phot Wongkham Assistant to Managing Director of Transformer Business	38	<ul style="list-style-type: none"> Master of Business Administration in Management, Ramkhamhaeng University 	0.00056	Grandchild of Mr. Poonphiphat Tantanasin	2021-Present	Assistant to Managing Director of Transformer Business	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2021-Present	Director	QTC Marketing Company Limited	Dealer of Transformer
					2019-2020	Manager of International Sales Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2017-2018	International Sales Manager	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2015-2016	Export Sales Executive	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
Mr. Nipat Chingchamikom Assistant to Managing Director of Solar Business	40	<ul style="list-style-type: none"> Master of Marketing / Business Administration, Ramkhamhaeng University 	-	-	2021-Present	Assistant to Managing Director of Solar Business	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2013–2020	Manager of Special Project Sales and Customer Service Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2008-2013	Sales Supervisor	QTC Energy (Public) Company Limited	Production and Distribution of Transformer

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Miss Sureeporn Mitthammana Assistant to Managing Director of Sustainability Development and General Management	52	<ul style="list-style-type: none"> Diploma in Computer, Eastern Technological College 	-	-	2021 - Present	Assistant to Managing Director of Sustainability Development and General Management	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2017 - 2020	Manager of Corporate Sustainability Development Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					1996 - 2017	Corporate Social Responsibility Manager	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
Miss Suanya Noochapun Manager of Government Sales Department	44	<ul style="list-style-type: none"> Master of Business Administration, Kasetsart University 	0.0016	-	2021-Present	Manager of Government Sales Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2012-2020	Manager of Domestic Sales Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2007-2012	Domestic Sales Manager	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
Miss Kobpetch Chuphemporn Manager of Accounting and Finance Department	48	<ul style="list-style-type: none"> Master of Public Administration, National Institute of Development Administration 	-	-	2018-Present	Manager of Accounting and Finance Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2013 - 2018	Manager of Accounting and Finance Department	Jagota Brothers Trading Company Limited	Trading
Mr.Chanchai Thanawan Manager of Production Department	48	<ul style="list-style-type: none"> Bachelor of Industrial Engineering, Faculty of Engineering, Kasem Bundit University 	-	-	2019-Present	Manager of Production Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2017-2018	Production Manager	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2013-2016	Head of Assembly Section	Ekarat Engineering Public Company Limited	Transformer

Name-Surname/Position/ Date of Directorship Appointment	Age (Years)	Educational Qualifications	Shareholding Proportion in Company (%)	Family Relationship between Executives	Work Experiences for the Past 5 Years			
					Duration	Position	Company Name	Type of Business
Miss Pakanat Tungtrakul Company Secretary	42	<ul style="list-style-type: none"> Master of Business Administration in General Business Administration, Khon Kaen University Company Secretary Program (Class 24) Thai Listed Companies Association (TLCA) Company Secretary Program (CSP), Class 122/2021 Board Reporting Program (BRP) , Class 38/2021 Company Reporting Program (CRP) , Class 32/2022 Effective Minutes Taking (EMT) , Class 52/2022 Fundamentals of Laws and Regulations Related to Thai Listed Companies CGR Workshop Enhancing Good Corporate Governance IOD 	-	-	2021-Present	Company Secretary	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2011-Present	Senior Manager of Investor Relations and Corporate Communications	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2011-2016	Department Investor Relations and Corporate Communications	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
Mr. Surat Phanomai Manager of Quality Assurance	36	<ul style="list-style-type: none"> Bachelor of Engineering, Rajamangala University of Technology Isan Khon Kaen Campus 	-	-	Present	Manager of Quality Assurance	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2020-2022	Senior Manager of Testing Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2017-2020	Manager of Testing Department	QTC Energy (Public) Company Limited	Production and Distribution of Transformer

Remarks: The Board of Directors holds 13.36% of the total issued shares. There was no spouse of any director or executive holding shares of the Company, except Mr. Poonphiphat Tantanasin whose wife holds 602,600 shares.

Company Secretary

To enhance knowledge in company secretary works and to achieve efficient performance of the company secretary's duties, the Company requires the company secretary to complete various training courses, such as basic laws and regulations on listed companies program, Company Secretary Program, and attend any seminars organized by the Stock Exchange of Thailand and the Thai Institute of Directors (IOD).

At the Board of Directors Meeting No. 12/2020 on December 9, 2020, the Board of Directors passed the resolution to appoint Miss Pakanat Tungtrakool to be the company secretary, who has knowledge and capability and completed the training courses relating to performance of duties of company secretary, in order to perform duties in accordance with Section 89/15 of the Securities and Exchange Act, B.E. 2535 amended by the Securities and Exchange Act (No. 4) B.E. 2551. The duties and responsibilities of the company secretary are as follows:

1. Serving as a center for storing any important documents
2. Preparing the director register and reports on stake holdings of directors and executives
3. Arranging the Board of Directors' meetings and Shareholders' meetings and preparing the letter of invitation to meeting and the minutes of meetings
4. Notifying resolutions and policies of the Board of Directors and shareholders to relevant executives and monitoring such resolutions and policies through the managing director
5. Ensuring the disclosure of information and reports of information in the areas under his/her responsibility to regulatory agencies in accordance with the laws, regulations, and policy on information disclosure of the Company
6. Contacting and communicating with general shareholders to ensure that they acknowledge shareholders' rights and the Company's news
7. Providing news and information to directors on issues concerning the Company's business operations in order to support the performance of directors' duties
8. Providing advices to newly appointed directors
9. Other matters as assigned by the Board of Directors

Brief Profile of Company Secretary

Miss Pakanat Tungtrakul

Education	:	Master of Business Administration in General Business Administration, Khon Kaen University Bachelor's Degree in Business English, Faculty of Humanities and Social Sciences, Suan Dusit Rajabhat University
Training Courses	:	<ul style="list-style-type: none">• Company Secretary Program (CSP) Class 122/2021• Board Reporting Program - BRP 38/2021• Company Reporting Program(CRP) 32/2022• Effective Minutes Taking(EMT) 52/2022• Basic Laws and Regulations on Thai Listed Companies Program• Company Secretary Program (Class 24), Thai Listed Companies Association• CGR Workshop Enhancing Good Corporate Governance Program, IOD• AGM Checklist Intensive Program, Thai Investors Association• Program on How to Use Information Dissemination System of Listed Companies through Electronic Media• Effective Minute Taking Techniques Program, Thammasat University• Professional Investor Relations Program (Class 2), Federation of Accounting Professions• Investor Relations Program of SET and Thai Listed Companies Association
Qualifications	:	Ability to summarize issues and prepare minutes of meeting; Pursuing knowledge on rules and regulations of SET and SEC; Having the flexibility to work, working under pressure, and good skill in interpersonal relationships

2. Details on Directors of Related Company, Subsidiary, and Affiliated Company

List	Company	Related Company																	Subsidiary	Affiliated Company
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Mr. Krirkkrai	Jirapaet	*	X, //																	
Mr. Natthaphon	Lilawatthanun			////	////	////														
Dr. Kamol	Takabut						C													
Mrs. Wasara	Chotithamarat							//, AC												
Mr. Suroj	Lansam		/						C, ///							/				
Mr. Preedee	Ngamsantikul		/						////	/	/	////								
Mr. Norachit	Sinhaseni		//												//, AC					
Dr. Apichart	Sramoon		/							/	/		C							
Mr. Poonphiphat	Tantanasin		/, C														/	/	/	/
Mr. Ruangchai	Kritsnakriengkrai		/, ///, ////														/	/	/	/

Remarks x = Chairman of the Board of Directors C = Chairman of the Board of Executive AC= Member of Audit Committee / = Director

// = Independent Director

/// = Executive Director

//// = Managing Director

* = Chairman of Advisor

Related Company:

1. Banpu Public Company Limited
2. Triple I Logistics (Public) Company Limited
3. Jobmyway Recruitment Company Limited
4. NBS Research & Consulting Company Limited
5. Excellent Business Management Company Limited
6. Italian Thai Power Company Limited
7. Lease IT (Public) Company Limited

8. Loxley (Public) Company Limited
9. CSE (Thailand) Company Limited
10. iGL Synergy Company Limited
11. Nam Theun 1 Power Company Limited
12. DD 49 Company Limited
13. TEAM Consulting Engineering and Management (Public) Company Limited
14. Central Plaza Hotel (Public) Company Limited

15. Kasikornbank Public Company Limited
16. QTC Global Power Company Limited
17. Q Solar 1 Company Limited
18. QTC Marketing Company Limited
19. PPWE Company Limited

3. Details on Internal Audit Chief and Operational Supervisor of the Company

In 2022, the Company appointed Kandit Advisory Services (KAS) Company Limited to conduct internal audit in order to make the Company's internal control system to be appropriate and efficient. Internal Audit Chief was Mr. Thanat Kerdcharoen, holding the position of partner/Managing Director with the following work experience:

Profile

- 20-year experience in providing advisory services on internal control, internal audit, risk management, governance, and anti-corruption to government and private agencies and financial institutions.
- Be a lecturer in workshops on risk management for companies preparing to be listed in the stock market.
- Provide advisory services to the following businesses: transformer business, palm oil manufacturing business, power plant business, construction business, real estate development business, production business, retailing business, automobile industry, leasing business, state enterprises, and international organizations.

Work Experience

- 2018 – Present: Managing Director of Kandit Advisory Services Company Limited;
- 2013 – 2017: Associate Director of Risk Assurance Department (providing services on internal control, internal audit, anti-corruption, operational systemization) of PricewaterhouseCoopers ABAS Co., Ltd.
- 2010 – 2013: Manager of Business Risk Advisory Department of Grant Thornton Specialist Advisory Services Co., Ltd.
- 2003 – 2010: Assistant Manager of Internal Audit Department of Dharmniti Auditing Company Limited

Certificates

- Bachelor of Accounting, Kasetsart University
- Master of Science Program in Management Information Systems, Thammasat University
- Certified Internal Auditor (CIA), The Institute of Internal Auditors
- Certificate in Risk Management Assurance (CRMA), The Institute of Internal Auditors
- Certified Information Systems Auditor (CISA), Information Systems Audit and Control Association
- Certified Fraud Examiner (CFE), Association of Certified Fraud Examiners
- Independent Auditor of CAC -SME

Professional Experience

Be a special instructor for lecturing risk management and internal audit to graduate and undergraduate students of Kasetsart University, Thammasat University, and University of the Thai Chamber of Commerce.

Have an experience as a lecturer for the Institute of Internal Auditors of Thailand

Audit Objectives

1. To provide independent internal audit under Professional Code of Conduct of Internal Audit that was the important matter for supporting management of Management Department and Audit Committee in order to maintain confidence that the Company's designed internal control system was efficient and effective for achieving the Company's goals.
2. To give advices and suggestions on improvement of internal control system, risk management and Good Corporate Governance through internal audit process and mutually agreed practices.

Activities for Controlling Audit include:

1. Income process gained from domestic sales / government / oversea / services / solar business;
2. Production process and product costs, inventory management process;
3. Preventive maintenance process and repairing;
4. Investment control process and investment study of QTC Global Power Company Limited;
5. Control process of Solar Farm business of Q Solar 1 Company Limited;
6. Personnel management process and calculation of salary and remuneration;
7. Occupational safety, health, and environment process.

Operations on Internal Audit Control

KAS has conducted internal audit independently under generally accepted Internal Audit Professional Practices Framework by:

1. Studying on nature of basic business and making Audit Plan under consideration on important risks of the Company as well as consulting with the executives before making and proposing Internal Audit Plan to the Board of Directors for considering and conducting audit under the plan approved by the Audit Committee.
2. Studying on operational system and internal control through interviewing, questioning, and Walkthrough in order to evaluate internal control design whether it can prevent risks appropriately or not;
3. Selecting samples of related documents for testing Operating Effectiveness.
4. Preparing internal audit report with close operational quality control process from the office's executives.
5. Attending the meetings with the Board of Directors and related staffs of the Company on results of internal audit and proposing internal audit report to the Company's Audit Committee.

The Audit Committee already considered on qualifications of Kandit Advisory Services Company Limited and Mr. Thanat Kerdcharoen and had the opinions that they were appropriate for performing such duties whereas the Company established Internal Audit Department with Miss Sutthinee Suwanchaisakul holding the position of Internal Audit Manager and Secretary of the Audit Committee to coordinate with outsourced internal auditors as well as monitor consecutive development and improvement of audited units.

4. Operating Assets

Details of Operating Assets

As at December 31, 2022, the operating assets were as follows:

Type/Nature of Asset	Nature of Ownership	Obligations	Net Book Value as at December 31, 2021 (Million Baht)	Net Book Value as at December 31, 2022 (Million Baht)
Land located at Bangkok Office, Huamark, Bang Kapi, Bangkok, with the total area of 1 Rai	Owner	Free of Obligations	14.09	14.09
Land of Factory located at Map Yang Phon Sub-district, Pluak Daeng District, Rayong Province, with the total area of 31-2-96.70 Rai	Owner	Free of Obligations	17	17
Land of Factory located at Bo Thong Sub-district, Kabinburi District, Prachinburi Province, with the total area of 213 Rai	Owned by Subsidiary ²	Free of Obligations	51.9	54.32
Land Improvement	Owned	Free of Obligations	3.06	3.02
Land Improvement	Owned by Subsidiary ²	Free of Obligations	8.42	8.02
Building located at No.149, Moo 2, Pluak Daeng-Huai Prap Road, Map Yang Phon Sub-district, Pluak Daeng District, Rayong Province	Owner	Free of Obligations	73.18	67.40
Building located at No. 2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road, Huamark, Bangkok	Owner	Free of Obligations	46.15	41.71
Building located at No. 102, Moo. 5, Bo Thong Sub-district, Kabinburi District, Prachinburi Province	Owned by Subsidiary ²	Free of Obligations	3.82	3.11
Factory Machinery and Equipment	Owner	Free of Obligations	153.88	143.52
Factory Machinery and Equipment	Owned by Subsidiary ²	Free of Obligations	153.93	146.27
Office Supplies and Furniture	Owner	Free of Obligations	9.58	13.98
Vehicles	Owner	Free of Obligations	1.46	1.72
Building under Construction	Owner	Free of Obligations	0.27	0.60
Machinery and Equipment during Installation	Owner	Free of Obligations	8.10	3.04
Total			544.84	517.80

Remarks ¹ Type/Nature of Asset: Vehicles, In 2021, the Company complied with the Financial Reporting Standard No. 16, Re: "Lease Agreement" (TFRS 16), stipulating criteria for contract recognition. Vehicles worth 4.97 million Baht had obligations to guarantee the hire-purchase contracts with financial institutions.

² During 2022, the corporate group updated 2021 Financial Statement by recording loss impairment on lands, buildings and equipment, electrical network connection service fee and power purchase agreement and amortization of deferred tax assets. This affected to other comprehensive income items at the end of December 31st, 2021, in the part of the account of costs of sales and losses caused by impairment loss on lands, buildings and equipment, electrical network connection service fee, power purchase agreement, and income tax expenses.

Report on details of assets used in business operation at December 31st, 2021, was considered as data that had already been updated.

Investment Policy in Subsidiaries and Associated Companies

The Company has the policy to invest in subsidiaries and associated companies by initially performing the feasibility study of the project. Such project must provide returns on investment of approximately 8-10%.

Details of Property Appraisal List

-N/A-

QTC
QTC ENERGY PCL.

เดินหน้าสู่การเป็น ผู้นำ'ด้านพลังงาน' ที่ดีที่สุด

ด้วยหม้อแปลงไฟฟ้ามาตรฐาน QTC

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QTC ENERGY PCL.
AMORPHOUS

TIS 384-2543

@QTC_ENERGY QTC-ENERGY.COM QTCENERGYPCL

5. Detailed Policy and Guidelines on Corporate Governance and Code of Conduct

1. Corporate governance policy of the Company is available on the website : <https://investor.qtc-energy.com/th/corporate-governance/corporate-governance-policy>
2. Code of Conduct is available on the website: <https://investor.qtc-energy.com/th/corporate-governance/cg-report-and-download>
3. The Company has the written anti-corruption policy and guidelines to avoid requesting, accepting, paying, and doing business with individuals and juristic persons involved in corruption, which are completely approved by the Board of Directors and published on the Company's website, <https://investor.qtc-energy.com/th/corporate-governance/cg-report-and-download>

Charter of Board of Directors

The Board of Directors consists of persons with knowledge and capability who play an important role in determining the business direction of the Company. The Board of Directors cooperates with top executives to set the short-term and long-term action plans as well as formulate policies on marketing, production, finance, research and development, engineering, human resource management, risk management, and overview of the organization. They play an important role in independently supervising, auditing, and evaluating the operations of the Company and the performances of the top executives to be in accordance with the plan.

1. Leadership and Vision

The Board of Directors realizes the importance of good governance principles in promoting and strengthening the confidence of shareholders, stakeholders, and the public, and believes that the compliance with good governance principles will benefit shareholders and stakeholders. To achieve the Company's vision, "To be a manufacturer, distributor, and provider of technology with world-class standard in power business with good governance, social and environmental responsibilities", the Board of Directors must take action in accordance with the highest ethical standards and comply with the laws for the best interests of shareholders and stakeholders.

2. Structure and Components

Structure and Balance of Power

- 2.1. The Board of Directors shall consist of at least 5 members but not more than 12 members as specified in the Company's Articles of Association. The appropriate number of directors will be reviewed at intervals.
- 2.2. The Company has the policy stipulating that the Chairman of the Board and the Chief Executive Officer shall not be the same person to create clarity on the responsibilities between the formulation of corporate governance policy and the routine management.
- 2.3. The Board of Directors is responsible for the shareholders and the participation in corporate governance of the Company with independence and neutrality for the benefits of all shareholders and other stakeholders.
- 2.4. The structure of the Board of Directors consists of independent directors in an appropriate number for corporate governance. The number must not be less than one-third of the total number of the Board of Directors, but it must not be less than 3 persons, which meet the requirements of the Office of the Securities and Exchange Commission.
- 2.5. The appointment of directors shall be in accordance with the Company's Articles of Association and related laws. However, there shall be transparency and clarity in the nomination of directors. In addition, the educational background and professional experiences of such person shall be taken into account with sufficient details for the benefits of decision-making of the Board of Directors and shareholders.
- 2.6. A director who retires by rotation may be re-elected to hold the position for another term.

3. Qualifications

The Board of Directors shall have the qualifications according to the requirements of the Office of the Securities and Exchange Commission.

- 3.1. Directors shall be knowledgeable and competent with integrity, business ethics, and knowledge and abilities to perform duties for the Company.
- 3.2. Possessing qualifications and not having any prohibited characteristics under the Public Limited Companies Act and the laws on securities and exchange, including not having any characteristics indicating a lack of qualification to be entrusted to manage a business with a public shareholder as specified in the Notifications of the Securities and Exchange Commission
- 3.3. Directors shall not operate businesses as a partner or become a director in other juristic persons that conduct business of the same nature as the Company and are a significant competition with the Company, whether it is performed for their personal gain or for the benefit of others, unless it is notified to the shareholders' meeting prior to the resolution of appointment.
- 3.4. Independent directors, who is non-executive director and do not involve in the management permanently, and is not the company's major shareholder. The company has specified requirements equal to the minimum requirements set by the SEC and the SET. Nominated independent directors of the company are fully qualified according to the definitions as below:
 - (1) Holding no more than one percent of the total voting shares.
 - (2) Not being an executive director involved in the management of the business, employee, staff, advisor earning regular monthly salary, controlling person during the period of two preceding years.
Relaxation of this requirement is in the case where the person is retired as a government official or as a consultant of a government agency which is a majority shareholder or has controlling interest for less than 2 years.
 - (3) Not being a person who is related by blood or legal relations with a director or an executive.
 - (4) Not having a business relationship with including not being the significant shareholder or the controlling person of a juristic person having a business relationship with the company in an amount starting from 20 million baht or more or from three percent of NTA, whichever is amount is lower, unless such foregoing relationships have ended for at least two years prior to the date of filing.
 - (5) Not being an auditor of the company, its parent company, subsidiary, associate company, a major shareholder, a controlling person, unless such foregoing relationships have ended for at least two years prior to the date of filing.
 - (6) Not being a provider of professional services, a significant shareholder, controlling person, or partner of such provider with a service fee of more than two million baht per year during the period of two preceding year.
* In case of a person who has qualifications inconsistent with 4 and 6, he or she shall be granted an exemption from such prohibition, provided that the issuer has obtained an opinion of the board of directors indicating that after a consideration in accordance with the principle in Section 89/7, the appointment of such person does not affect the performance of duties and the giving of independent opinions, and that the following information has also been disclosed in the notice calling the shareholders' meeting.
 - (7) Not being a director who is appointed as the representative of directors of the issuer, major shareholder or shareholder who is a connected person of a majority shareholder.
 - (8) Not undertaking any business of the same nature and in competition with the company and the subsidiary, or holding more than one percent of the voting shares, or being a managing director, employee, staff, advisor with a regular monthly salary, person with controlling interest in such business.
 - (9) Not having any other characteristics that cause the inability to express independent opinions.
 - (10) An independent director can be an independent director of an affiliated company, but a member of the Audit Committee is prohibited from being a director of a parent company, subsidiary or subsidiary at the same level (sister company) which are listed companies.
 - (11) After being appointed as an independent director, that independent director may be assigned by the board of directors to make a decision on the business operation, the parent company, subsidiary, associate company, sister company, major shareholder or controlling person in the form of collective decision. However, a member of the Audit Committee is prohibited from taking part in the decision-making on the business operation.

- 3.5. Executive directors are the full-time director who takes part in the management of the Company and receives remuneration from the Company on a monthly basis in the form of salary or other remunerations that are similar to salary.
- 3.6. Directors shall notify the Company without delay upon the following cases:
 - (1) Having a direct or indirect interest in any contract made by the Company during the fiscal year by specifying facts about the nature of the contract, name of the contractual party, and interests of the directors in such contract (if any)
 - (2) Holding shares or debentures in the Company and its affiliates by specifying the total amount of increase or decrease during the fiscal year (if any)

4. Scope of Authority, Duties and Responsibilities of the Board

The missions and responsibilities of the directors are in accordance with laws, objectives, regulations, and resolutions of the shareholders' meeting which are carried out with integrity and due care to protect the interests of the Company. Such operations include;

- 4.1. Defining vision, policies, strategies, business goals, business plans, and budgets of the Company, including monitoring and evaluating the management and operations of the Management to be in accordance with the established policies, strategies, goals, action plans, and budgets efficiently in order to maximize economic value for the Company and its shareholders
- 4.2. Setting the norm and evaluating the performance of duties of the Managing Director and other top executives (at least once a year)
- 4.3. Regularly and continuously reviewing the succession plan for the Managing Director position
- 4.4. Supervising and monitoring performances and ensuring the compliance with the ethics of directors, action plans and budgets continuously
- 4.5. Ensuring that there is an effective control system, providing accurate, complete, and reliable information, complying with relevant policies, rules, as well as laws and regulations, maintaining assets, and using resources effectively for the best interests
- 4.6. Providing the reliable accounting system, financial reporting, and auditing, including ensuring that there is sufficient and appropriate internal control and internal audit
- 4.7. Considering potential risks and establishing appropriate and effective risk management guidelines
- 4.8. Authority and duties of directors are determined by laws and resolutions of the shareholders' meeting which include the following operations:
 - (a) Appointing and considering the remuneration, including setting conditions of employment for the position of managing director
 - (b) Appointing a Deputy Managing Director
 - (c) Providing an approval for the appointment of top executives from the department manager level or higher level
 - (d) Considering and approving the following matters:
 1. Annual business plan
 2. Annual budget
 3. Annual financial statement
 4. Appointment of an auditor
 5. Remuneration for the sub-committees (Not more than the total amount approved by the shareholders)
 6. Remuneration and employment conditions for the position of Managing Director after performing the annual review
 7. Changes in organizational structure at the group level and other important organizational changes
 8. Authority Table

9. Acquisition, establishment, disposal or suspension of any significant assets or any business of the Company by complying in accordance with the relevant notifications of the Capital Market Supervisory Board
10. Issuance of documents relating to the securities of the Company
- (e) Any other matters which are not otherwise assigned to the Board of Executive Committee, Managing director or the Management
- 4.9. Establishment and determination of roles and duties of sub-committees are as follows:
 - (a) Establishing sub-committees as deemed appropriate and necessary in order to support the management of the Board of Directors, considering and screening important operations carefully and efficiently, such as the Board of Executive, the Audit Committee, the Nomination and Remuneration Committee, etc.
 - (b) Considering and approving the roles and duties of any sub-committees and changing the composition as well as significant changes to the performances of the appointed sub-committees
- 4.10. Establishing rules and methods for evaluating the performances of committees and regularly assessing the effectiveness
- 4.11. Appointing a Company Secretary, who is appointed by the Board of Directors to provide assistance in various activities of the Board of Directors and the Company, such as the Board of Directors' meeting and shareholders' meeting, as well as give advices on practices and operations in accordance with the relevant laws and regulations to directors and the Company regularly, and also ensures that the directors and the Company disclose accurate, complete, and transparent information and support the corporate governance in accordance with the good corporate governance standards
- 4.12. Approving the credit limit of expenses for normal business transactions of the Company, borrowing or requesting any loan from a financial institution and lending to affiliates
- 4.13. Considering, revising, reviewing, and approving business expansion plans, large-scale investment projects as well as joint ventures with other operators proposed by the Management
- 4.14. Appointment of directors or company executives to be directors of subsidiaries or affiliates
- 4.15. Registering for company's establishment and notification of dissolution

5. Duties of the Chairman

- 5.1 Calls a board meeting. Serves as chairman of board meetings. In the event that a decision is made at the meeting If the votes are equal, the chairman shall have an additional vote as a casting vote.
- 5.2 Sets agendas for board meetings in consultation with management to ensure that important matters are included on the agenda.
- 5.3 Conducts board meetings in accordance with the agenda, relevant laws and good corporate governance. Allocates sufficient time and encourage all directors to participate in discussions. Uses prudent consideration and express opinions freely.
- 5.4 Monitors and supervises the performance of the Board of Directors to ensure efficiency and achieve the organization's goals.
- 5.5 Strengthens good relationship between the Board of Directors and the Management.

6. Term of Office and Election of Directors

- 6.1. At each Annual General Meeting of Shareholders, one-third (1/3) of the directors shall vacate office. If the number of directors is not a multiple of three, then the number nearest to one-third shall vacate office. The directors to vacate office in the first and second years following the registration of the Company shall be drawn by lots. In every subsequent year, the directors who have been longest in office shall vacate office. The directors who retire by rotation may be re-elected to hold the position for another term.
- 6.2. In addition to the retirement by rotation, the Directors shall vacate office upon:
 - (a) Death
 - (b) Resignation
 - (c) Being disqualified or being under any of the prohibited characteristics under the law on public companies and/or the law on securities and exchange

- (d) Being removed by a resolution of the Shareholders' Meeting by the votes of not less than three-fourths (3/4) of the number of the shareholders attending the meeting and entitled to vote and having shares in aggregate no less than half of the shares held by the shareholders attending the meeting and entitled to vote
 - (e) Being removed by an order of the Court
- 6.3. In the event that the director position is vacant due to reasons other than the retire by rotation, a director shall elect any person who has qualifications under the law on public limited companies to be a director in replacement at the next Board of Directors' meeting. Unless the remaining term of the director is less than 2 months, the person being replaced such director shall retain his/her office only for the remaining term of office of the director whom he/she replaces.
- 6.4. Any director who wishes to resign from office shall submit a resignation letter to the Company. The resignation shall be effective from the date of the resignation letter submitted to the Company. The director who resigns under Paragraph One may notify the public companies registrar of his resignation as well.
- 6.5. Directors shall retire at 72 years of age, excluding independent directors of the Company.

7. Meeting

- 7.1 The Board of Directors' meeting requires at least one half of the total number of directors to constitute a quorum. In the event that the Chairman of the Board is not present at the meeting or is unable to perform duties, the Deputy Chairman of the Board shall preside over the meeting. In the case that the Deputy Chairman of the Board is not present at the meeting or is unable to perform duties, directors present at the meeting shall elect one director to preside over the meeting.
- 7.2 The final decision of the Board of Directors' meeting shall be made by a majority vote. One director shall have one vote, unless the director having interests in any matter has no right to vote on that matter. In the case of a tie vote, the Chairman of the Meeting shall have a casting vote.
- 7.3 The regular Board of Directors' meeting shall be held at least once every three months. The Chairman of the Board of Directors shall summon the Board of Directors' meetings. If necessary, two or more directors may request the Chairman of the Board to summon a Board of Directors' meeting. The Chairman of the Board shall schedule the meeting date within 14 days from the date of receiving such request.
- 7.4 The Chairman of the Board or a director assigned by the Chairman of the Board shall schedule the date, time, and venue of the Board of Directors' meeting.
- 7.5 To summon the Board of Directors' Meeting, the Chairman of the Board or an assigned person shall submit a letter of invitation to meeting via registered mail to directors or directly handing over to directors or their representatives by specifying date, time, venue, and agendas no less than 7 days before the date of the meeting. Unless there is an urgent and necessary case for protecting rights or interests of the Company, the meeting appointment shall be notified by other means and the date of the meeting may be scheduled earlier.

8. Remuneration

The Nomination Committee determines the remuneration of the Board of Directors under corporate governance. It is considered from the amount of work, responsibility and size of the business in comparison with other companies in the same industry business model and presented to the Board of Directors for consideration before presenting to the shareholders' meeting for consideration and approval.

Charter of Audit Committee

1. Objectives

The Audit Committee is the sub-committee of the Board of Directors which is considered as a mechanism for important support of the good corporate governance system in order to promote the Board of Directors in supervising and monitoring the management of the Company to be in accordance with the Securities and Exchange Act and the compliance with relevant laws, regulations, requirements and policies, including ethics and Code of Conduct of the Company. The Audit Committee is also responsible for supervising the correctness and reliability of financial reports, internal control system, risk management, and good internal audit in order to perform operations efficiently and build the credibility to all parties relating to the Company.

2. Composition and Qualifications

- 2.1 The Board of Directors shall appoint at least 3 members of the Audit Committee.
- 2.2 There shall be at least one member of the Audit Committee who has knowledge, understanding or experience in accounting or finance and ongoing knowledge on reasons for changes in financial reports.
- 2.3 The Audit Committee shall possess the following qualifications:
 - 1) Having qualifications as required by relevant laws, especially the law on securities and stock exchange and the regulations of the SET
 - 2) Holding shares no more than 1% of the paid-up capital of the Company, its affiliates, associated companies, or related companies, which shall include the shares held by related persons
 - 3) Being a director of the Board of Directors, but not being involved in management of the Company, its affiliates, associated companies, related companies, or major shareholders of the Company
 - 4) Being a director who is not a worker, employee, or advisor who receives a regular salary from the Company. its affiliates, associated companies, related companies, or major shareholders of the Company
 - 5) Being a director who has no interests or personal interests, directly or indirectly, in finance and management of the Company, its affiliates, associated companies, or major shareholders of the Company, including having no interests in any transactions of the Company within 2 years prior to being appointed as a member of the Audit Committee
 - 6) Being a director who is not a related person or close relatives of executives or major shareholders of the Company
 - 7) Being a director who is not appointed as a representative to protect the interests of the Company's directors, major shareholders, or shareholders relating to the Company's major shareholders
 - 8) Not being or never been an auditor of the Company, major shareholders, and significant shareholders or partners of the audit firm, unless he/she has been discharged from the aforementioned characteristics for at least 2 years
 - 9) Not being or never been a professional service provider, including a legal advisor or a financial advisor which receives service fees of exceeding 2 million Baht per year from the Company and major shareholders, and not being significant shareholders or partners of such professional service provider, unless he/she has been discharged from the aforementioned characteristics for at least 2 years
 - 10) In the case that the person appointed by the Company to be an independent director is a person who has or has had a business relationship or professional services in excess of the specified value, the Board of Directors can consider a waiver if it deems that such relationship does not affect the independent expression of opinions. The Company shall disclose such information in the Form 56-1 Annual Report and the letter of invitation to meeting.
 - 11) Not conducting business of the same nature as the Company or its subsidiaries and being a significant competition with the Company
 - 12) Not being a director assigned by the Board of Directors to make decisions in the Company's business operations
 - 13) Not being a director of the parent company and subsidiaries that are a listed company
 - 14) Being a person who can perform duties and express opinions or report the performance of duties as assigned independently without being under the control of executives or major shareholders of the Company, including related persons or close relatives of such persons
 - 15) Not being a political officer, political office holder, member of local council, local administrator, political advisor, executive director of political parties, or officers of political parties
 - 16) Being a trusted and generally recognized person
 - 17) Being able to devote time to perform duties of the Audit Committee

3. Appointment, Term of Office, and Vacation of Office

3.1 Appointment of Audit Committee

- 3.1.1 The Board of Directors shall appoint the Company's independent directors to be the member of the Audit Committee.
- 3.1.2 The Audit Committee shall select 1 member of the Audit Committee to hold the position of Chairman of the Audit Committee.
- 3.1.3 The Secretary of the Audit Committee is appointed by the approval of the Audit Committee to assist the Audit Committee in matters of meeting appointments, preparing agendas, submitting meeting documents, recording, and keeping minutes of meeting.

3.2 Term of Office

The tenure of the Audit Committee is 3 years for each term. In the case that the position of the member of the Audit Committee is vacant for any reasons other than the retirement by rotation, the Board of Directors shall appoint qualified persons to be the member of the Audit Committee members so that the number of members of the Audit Committee will reach the quantity specified by the Board of Directors in this charter. The person appointed to be a member of the Audit Committee shall retain his/her office only for the remaining term of office of the member of the Audit Committee whom he/she replaces. The Board of Directors' Meeting may re-appointed the qualified member of the Audit Committee who retires by rotation to resume the position of the member of the Audit Committee.

3.3 Vacation of Office upon:

- Retire by rotation
- Lack of qualifications to be a member of the Audit Committee
- Death
- Resignation
- Dismissal
- Being sentenced to imprisonment according to the final judgment or a legal order, except an offense committed by negligence or a petty offense
- Being an incompetent or quasi-incompetent person
- Being a bankruptcy

4. Duties and Responsibilities of Audit Committee

- 4.1 Reviewing the accurate and sufficient financial reporting of the Company
- 4.2 Reviewing the Company's internal control system and internal audit system to be appropriate and effective, considering the independence of the internal audit department, and providing opinions on appointment, transfer, and dismissal of the Head of Internal Audit Department or any other departments responsible for internal audit
- 4.3 Reviewing the Company's compliance with the law on securities and exchange, the Stock Exchange of Thailand's regulations, or other laws relating to the Company's businesses
- 4.4 Considering, selecting and nominating the appointment and dismissal of any independent person to be the auditor of the Company and proposing the remuneration of such person, including attending the meeting with auditors without the attendance of the Management at least once a year
- 4.5 Considering the disclosure of the Company's information in the event that there is a connected transaction or a transaction with potential conflict of interests to be in accordance with the laws and regulations of the Stock Exchange of Thailand in order to ensure that such transactions are reasonable and provide the highest benefits to the Company
- 4.6 Preparing the Report of the Audit Committee and disclosing it in the Company's annual report, which must be signed by the Chairman of the Audit Committee and contain at least the following information:
 - 1) Opinions on the accuracy, completeness, and reliability of the Company's financial reports
 - 2) Opinions on the adequacy of the Company's internal control system

- 3) Opinions on the compliance with the law on securities and exchange, the regulations of the Stock Exchange of Thailand, or laws relating to the Company's businesses
 - 4) Opinion on the appropriateness of the auditor
 - 5) Opinion on transactions with potential conflicts of interest
 - 6) Number of Audit Committee meetings and the meeting attendance of each member of the Audit Committee
 - 7) Opinions or overall observations received by the Audit Committee from the performance of their duties in accordance with the charter
 - 8) Other items that the shareholders and general investors should acknowledge under the scope of duties and responsibilities assigned by the Board of Directors
- 4.7 Considering and approving the Company's regulations on internal audit prior to presenting them to the Board of Directors for consideration and approval
 - 4.8 Approving the internal audit plan, budget, and personnel of the Internal Audit Department
 - 4.9 Considering and reviewing the independence and reporting of the performance of the Internal Audit Department
 - 4.10 Considering and approving the appointment, transfer, or termination of employment as well as the performance evaluation of the Internal Audit Manager
 - 4.11 Reviewing provisions of the Code of Conduct before presenting them to the Board for consideration
 - 4.12 Performing the review with the Management to ensure that the employees comply with the Company's Code of Conduct
 - 4.13 Reviewing anti-corruption measures
 - 4.14 Performing the review with the Management regarding the preparation of Management's Discussion and Analysis or MD&A and disclosing it in the annual report
 - 4.15 Performing the review with the Management regarding financial management and financial risk management
 - 4.16 Supervising the inspection / investigation of matters necessary for the performance of duties and responsibilities of the Company
 - 4.17 Reviewing the charter of the Audit Committee at least once a year
 - 4.18 Performing any other acts as assigned by the Board of Directors, which must be approved by the Audit Committee
 - 4.19 Considering disclosure of the Company's information on reporting stake holding of the first 4 rank of directors and executives from the Managing Director at least once a year

In the event that there is a change in the scope of duties and responsibilities of the Audit Committee, the Company shall notify such change in the form specified by the Stock Exchange of Thailand and submit it within 3 working days from the date of change.

5. Meeting

- 5.1 The Audit Committee shall provide or summon a meeting as deemed appropriate at least once a quarter.
- 5.2 The meeting agenda is clearly formulated in advance and supporting documents shall be submitted at least 7 days in advance.
- 5.3 The Audit Committee shall hold the meeting with the auditors without the attendance of the Management at least once a year.
- 5.4 The Audit Committee's meeting requires at least one-half of the total number of members present at the meeting to constitute a quorum.
- 5.5 A resolution of the Audit Committee's meeting shall be made by a majority of votes of members present at the meeting.
- 5.6 The Audit Committee is entitled to invite related persons, such as directors, executives, or employees of the Company and / or group companies to attend the meeting.
- 5.7 The Chairman of the Audit Committee may summon an additional meeting upon request from the member of the Audit Committee, internal auditor, auditor or the Chairman of the Board of Directors.

6. Reporting

The Audit Committee is responsible for reporting activities to the Board of Directors or performing any other duties assigned by the Board of Directors. The Audit Committee report is important to the Board of Directors, shareholders, and general investors since such report expresses independent and straightforward opinions of the Audit Committee. As a result, the Audit Committee ensures that the Management has carefully performed the management and taken into account the interests of the shareholders equally.

6.1 Reporting to Board of Directors

- 1) Reporting activities on a regular basis so that the Board of Directors will be informed about the activities of the Audit Committee
 - Minutes of the Audit Committee Meeting clearly specifying opinions of the Audit Committee on various matters
 - Summary of reports on activities during the year
 - Report on opinions on financial reports, internal audit, and internal audit processes
 - Any other reports that the Board of Directors should acknowledge
- 2) Immediately reporting any detected matters so that the Board of Directors can provide solutions in time
 - List of conflicts of interest
 - Suspicions or assumptions that there may be corruption or irregularities or significant deficiencies in the internal control system
 - Suspicions on violation of any laws on securities and exchange, regulations of the Stock Exchange of Thailand, or other laws relating to the Company's business
 - Any other reports that the Board of Directors should acknowledge

6.2 Reporting to Official Authorities

If the Audit Committee reports the matter having a material impact on the financial position and operating results to the Board of Directors and the discussion with the Board of Directors and the Management is made to take any corrective action, when the time limit is reached and the Audit Committee finds that such corrective action is ignored without reasonable reason, any one of the member of the Audit Committee or the Audit Committee may report such detected matters to the Office of the Securities and Exchange Commission or the Stock Exchange of Thailand.

6.3 Reporting to Shareholders and General Investors

Reporting activities during the year based on the duties and responsibilities assigned by the Board of Directors; such report shall be signed by the Chairman of the Audit Committee and disclosed in the annual report of the Company.

7. Performance Evaluation

The Audit Committee shall perform the self-assessment for its performances and report the results of the assessment as well as problems and obstacles of operations that may cause the operation to fail to achieve the objectives of the establishment of the Audit Committee to the Board of Directors annually.

8. Advisor

The Audit Committee may ask for professional opinions from external advisors at the expenses of the Company with the approval of the Board of Directors.

Charter of Nomination, Remuneration, and Corporate Governance Committee

1. Objectives

The Nomination, Remuneration, and Corporate Governance Committee, abbreviated as the “Nomination Committee”, was first established by the resolution of the Board of Directors Meeting No. 2/2557 on May 8, 2014, in order to promote the good corporate governance principles according to the guidelines of the Stock Exchange of Thailand and Thai Institute of Directors (IOD) and to build confidence in operating with transparency and fairness to all stakeholders. In addition, it is extremely important to the sustainable growth of the organization. As a result, the Board of Directors passed the resolution to appoint the Nomination, Remuneration, and Corporate Governance Committee, and also prepare the charter to determine the authority, duties, responsibilities, composition, tenure, and arrangement of meetings to create clear guidelines for the operation of the Nomination Committee in accordance with the good corporate governance principles.

2. Composition and Qualifications

- 2.1 The Board of Director appointed the Nomination and Remuneration Committee consisted of at least 3 directors and executives whereas over a half of the committees must be independent directors. Moreover, the President of the Nomination and Remuneration Committee must be the independent director as well in order to perform duties and give opinions independently.
- 2.2 The Nomination Committee shall have appropriate knowledgeable, capabilities, and experiences, including the understanding on their qualifications, duties and responsibilities.
- 2.3 The Nomination Committee is entitled to appoint 1 employee of the Company to act as a secretary of the Nomination Committee.

3. Term of Office

- 3.1 The term of the Nomination and Remuneration Committee is 3 years. In the event that the position of the Nomination and Remuneration Committee is vacant for other reasons besides dismissal, the Board of Directors must appoint persons with complete qualifications as the Nomination and Remuneration Committee with the complete number as defined by the Company herein. Such persons will be able to hold the position under the remaining term of replaced committees.
- 3.2 The member of the Nomination Committee may be re-appointed to resume the position as deemed appropriate by the Board of Directors.
- 3.3 In addition to the vacation of office according to Item 3.1, the member of the Nomination Committee shall vacate office upon:
 1. Retire by rotation
 2. Lack of qualifications to be a member of the Nomination Committee
 3. Resignation
 4. Death
 5. Dismissal by a resolution of the Board of Directors
- 3.4 In the case of dismissal by a resolution of the Board of Directors, the Board of Directors shall have the authority to appoint an additional member of the Nomination Committee for the purpose of performing operations based on the objectives or replacing a member of the Nomination Committee who vacates office under Item 3.1 or 3.3. The person appointed to a member of the Nomination Committee under Item 3.3 shall retain his/her office only for the remaining term of office of the member of the Nomination Committee whom he/she replaces.

4. Duties and Responsibilities

- 4.1 Nomination
 1. Formulating rules and policies for nominating directors, members of the Audit Committee, members of the Nomination Committee, and top executives by considering the suitability of the structure and the composition of the Board and also determining the qualifications of directors to propose them to the Board of Directors and / or propose for approval to the Shareholders' Meeting, as the case may be

2. Considering, recruiting, selecting, and nominating qualified persons to serve as directors, members of the Audit Committee, and members of the Nomination Committee who retire by rotation and / or vacant office and / or is additionally appointed
 3. Ensuring the sizes and composition of the Board of Directors and sub-committees are suitable for the organization, including the adaptation to the changing environment; All committees shall consist of persons with appropriate knowledge, capabilities, skills, and experiences in various fields
 4. Ensuring that the Company provides an appropriate succession plan and management continuity for the position of Chairman of the Board of Executive, Managing Director, and top executives by proposing it to the Board of Directors' Meeting for approval
 5. Evaluating performances of the Chief Executive Officer (CEO) to propose them to the Board of Directors' Meeting for consideration and approval
 6. Performing any other acts relating to nomination as assigned by the Board of Directors
- 4.2 Determination of Remuneration
1. Establishing rules and policies for determining remuneration for the Board of Directors, the Audit Committee, the Nomination Committee, the Board of Executive, and top executives by presenting them to the Board of Directors
 2. Determining necessary and appropriate monetary and non-monetary remuneration for the Board of Directors, the Audit Committee, the Nomination Committee, and the Board of Executive each year by considering the appropriateness for the duties, responsibilities, performances, comparison with companies in similar businesses, and benefits expected to receive from the directors in order to propose it to the Board of Directors for consideration and further present to the Shareholders' Meeting, as the case may be, for approval
 3. Considering and reviewing the policy and rules for determining remuneration and the remuneration payment system to be suitable for duties and responsibilities and consistent with the Company's operating results and the market conditions by mainly taking into account the benefits that will be generated for the Company
 4. Reporting the policies, principles / reasons for determining remuneration for directors and executives according to the regulations of the Stock Exchange of Thailand by disclosing them in the Annual Registration Statement (Form 56-1 One Report)
 5. Reviewing the Management's proposal of the policy on remuneration payment and other special benefits other than normal wages for employees, considering and screening the bonus payment and annual salary increment rate by considering the Company's operating results
 6. Performing any other relevant acts assigned by the Board of Directors; The Management and any sections shall report or present relevant information and documents to the Nomination Committee to support the performances of the Nomination Committee to achieve the assigned duties
- 4.3 Good Corporate Governance
1. Considering, reviewing, and presenting the good corporate governance policy, the Code of Conduct, the corporate social responsibility policy, the sustainable development policy of the Company, other policies and practices that will support the Company's sustainable growth to the Board of Directors for approval
 2. Ensuring that the Management adopts the policies / practices under Item 1 to develop the Company continuously; Such policies and practices shall be consistent with and appropriate for the business of the Company and suggestions of relevant authorities and comparable to international standards.
 3. Monitoring and reviewing any work systems in the organization to be in line with the ethics and best practices in accordance with the specified policies and practices
 4. Supervising the operations of the Company to be in accordance with the good corporate governance principles of any regulatory agencies, such as the Securities and Exchange Commission and the Stock Exchange of Thailand, etc.

5. Reporting the organization's performances in accordance with the good corporate governance policy and other related policies to the Board of Directors and external organizations as deemed appropriate
6. Perform any other acts relating to the good corporate governance as assigned by the Board of Directors

5. Reporting

The Nomination Committee shall regularly report their performance of duties to the Board of Directors and prepare the report on performance of duties in the previous year to the shareholders in the Annual Registration Statement (Form 56-1 One Report) and the Annual Registration Statement (Form 56-1) by disclosing the following details:

1. Number of meetings
2. Number of meeting attendance of each member of the Nomination Committee
3. Performance of duties according to the specified charter

6. Meeting

1. The Nomination Committee shall hold the meeting at least once a year and have the authority to summon an additional meeting as deemed necessary and appropriate. The quorum of the Nomination Committee requires at least one half of the total members of the Nomination Committee.
2. All members of the Nomination Committee should attend every meeting in person. In the case that there is a necessary reason that they may not be able to attend the meeting, the Chairman of the Nomination Committee should be informed in advance.
3. The Chairman of the Nomination Committee shall preside over the meeting. In the event that the Chairman of the Nomination Committee is not present at the meeting or is unable to perform duties, the members of the Nomination Committee present at the meeting shall select a member to preside over the meeting.
4. A resolution of the Nomination Committee shall be made by a majority of votes present at the meeting. One member of the Nomination Committee shall have one vote. Any member of the Nomination Committee with any interest in the matter being considered shall not participate in expressing opinions and shall not be entitled to vote on such matter.
5. The letter of invitation to meeting shall be submitted to the Nomination Committee 7 days in advance prior to the meeting date, except any necessary or urgent cases, the meeting appointment may be notified by other means or the meeting date may be scheduled earlier. The secretary of the Nomination Committee is responsible for recording the minutes of meeting.
6. The Nomination Committee may invite related parties to attend the meetings in order to clarify facts to the Nomination Committee's Meeting.

7. Advisor

The Nomination Committee may ask for professional opinions from external advisors at the expenses of the Company.

Report of Audit Committee

The Audit Committee of QTC Energy (Public) Company Limited is comprised of Mr. Natthaphon Lilawatthanun acting as the Chairman of the Audit Committee Mr. Kamol Takabut and Mrs. Wasara Chotithammarat acting as the member of the Audit Committee. The Audit Committee's important scope of duties and responsibilities pursuant to the Charter of the Audit Committee is to oversee the Company's financial reports to be in accordance with generally accepted accounting standards and principles, review the Company's performances to be in accordance with good corporate governance principles, provide the effective internal control system, comply with related laws and regulations, and supervise any cases with potential conflicts of interest between the Company and related parties. Hence, the Audit Committee held 5 meetings in 2022 with the essential substances and issues as follows:

1. Financial Reports Review

The Audit Committee mutually audited and reviewed quarterly Financial Statement and 2022 Financial Statement with Management Department and the auditor by reviewing data that were the subject matters and obtained some clarification and suggestions from the auditor in order to ensure that the Company's financial reports met with Accounting Standard and Financial Reporting Standard with timely and reliable disclosure of sufficient and complete data for benefits of users of Financial Statements.

2. Review on Connected Transaction or Transactions with Conflicts of Interest

The Audit Committee had the opinions that disclosure of data on connected transactions of the Company was correct and reasonable. In addition, the Company also performed operations under trading and business conditions normally, generally, and fairly for the ultimate benefit of the Company as well as the criteria as defined by the Stock Exchange of Thailand.

3. Reviewing the efficiency of the internal control system

Supervising and ensuring that the internal audits were carried out independently by employing Kandit Advisory Services Company Limited, which was a company providing internal audit services by using outsourcing, to be the Company's internal auditor; The Audit Committee will consider the annual internal audit plan and the report of internal audit results and monitor the internal audit results with the Management continuously and also provide advices to the internal auditor to ensure that the annual internal audit plan is carried out effectively and efficiently. The Audit Committee has reported the results of the audit of internal control system to the Board of Directors quarterly and has provided useful suggestions on internal control system for correcting under internal audit reports. It was found that the Company's internal control system was sufficient and appropriate. Regarding the internal audit results for the year 2022, no significant indicators of corruption or defects of internal control were found.

4. Assessing the internal control system

Assessing the internal control system in accordance with the guidelines specified by the Office of the Securities and Exchange Commission, which cover the corporate internal control, risk management, operation control, information system and data communication, and monitoring system; The Audit Committee deemed that the Company's internal control was adequate and effective.

5. Consideration for the appointment of auditors for the year 2023

Considering, selecting, and appointing the auditors, and proposing the audit fees for the year 2023; A proposal was made to the Board of Directors to appoint Ms. Rosaporn Decharkom, Certified Public Accountant No. 5659 or Mr. Chayapol Suppasertanon, Certified Public Accountant No. 3972 or Mrs. Gingkam Atsawarangsalit, Certified Public Accountant No. 4496 or Ms. Pimjai Manitkajohnkit, Certified Public Accountant NO. 4521 or Ms. Orawan Techawatanasirikul, Certified Public Accountant No. 4807 or Ms. Kirdsiri Kanjanaprakasit, Certified Public Accountant No. 6014 of EY Office Limited to be the auditors of the Company with the total audit fee of 1,650,000 Baht. Such matter was further proposed to the Annual

General Meeting of Shareholders

In this regard, the Audit Committee has performed its duties carefully and independently and expressed opinions in a straightforward manner without limitations in information access. In addition, the Audit Committee also pay attention to the good corporate governance in accordance with principles set by the Stock Exchange of Thailand to ensure that it is carried out transparently and ethically in order to create confidence to shareholders, investors, customers, and all related parties. In 2022, the Company had correct and reliable accounting system and financial reports with sufficient and appropriate internal control with Good Corporate Governance, compliance with laws, regulations and rules related to the Company's business operation.

On behalf of the Audit Committee



(Mr. Natthaphon Lilawattananun)

Chairman of the Audit Committee

Report of Nomination, Remuneration, Corporate Governance Committee

The Nomination, Remuneration, and Corporate Governance Committee of QTC Energy PCL is comprised of 3 independent directors 1 executive director and 1 director. Mr. Norachit Sinhaseni, the independent director, is the Chairman of the Nomination Committee while Dr. Kamol Takabut, Mrs. Wasara Chotithammarat, the independent director, Mr. Poonphiphat Tantanasin, the executive director, and Mr. Preedee Ngamsantikul have the director, scopes of duties and responsibilities according to the Charter of the Nomination, Remuneration and Corporate Governance Committee Charter.

In 2022, the Nomination, Remuneration and Corporate Governance Committee held 3 meetings. All members of the Committee attended such meetings to monitor and consider important matters as assigned by the Board of Directors, which could be summarized as follows:

1. Considering the performance evaluation results of directors, sub-committees, and top executives
2. Selection of persons for holding the position of sub-committee and replacing resigned committees was considered under the Criteria on Corporate Governance for proposing to the Board of Directors to consider and appoint the committees and sub-committees in the meetings of shareholders
3. Considering, reviewing, and updating the good corporate governance policy for building value leading to sustainable business.
4. Considering, reviewing, and updating the Code of Conduct to be consistent with current situations
5. Considering and reviewing the sustainability development policy
6. Considering and reviewing Nomination, Remuneration, Corporate Governance Committee Charter
7. Considering remuneration of the directors, executive directors, and sub-committees and bonus of employees by considering suitability for assigned duties and responsibilities, the Company's operating results, and overall economic conditions before presenting to the Board of Directors and shareholders for consideration and approval
8. The progress of preparation of succession plan of Top Managers and Career Path was acknowledged whereas retention plan was prepared.

On behalf of the Nomination, Remuneration, and Corporate Governance Committee



(Mr. Norachit Sinhaseni)

Chairman of the Nomination, Remuneration, and Corporate Governance Committee

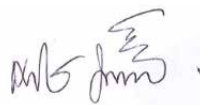
Report on Responsibilities for Financial Reports of the Board of Directors

To shareholders

The Board of Directors is responsible for the consolidated financial statements of QTC Energy (Public) Company Limited, including financial information appeared in the Company's annual report and financial statements. The Board of Directors was of opinion that the Company's financial statements for the year ended December 31, 2022, were prepared in accordance with generally accepted accounting principles by applying proper accounting policies under conservatism concept and consistently adhering to them. Moreover, the Company carefully exercised discretion with reasonable estimations for such preparation and also disclosed information in Notes to Financial Statements sufficiently. Hence, such financial statements were completely audited and unqualified opinions were expressed by the independent certified public accountant.

The Board of Directors supports the Company to provide good corporate governance and the development of the structure of the Board of Directors in order to promote the good governance continuously and create efficient operations with transparency and reliability. The Board of Directors appointed the Audit Committee, comprised of 3 independent directors, who are responsible for reviewing the financial reports and the internal control and internal audit systems. The Audit Committee expressed the opinions on such matters in the Audit Committee's report as shown in the Form 56-1 One Report.

The Board of Directors was of opinion that the Company's internal control system was sufficient and appropriate. Moreover, it could build reasonable confidence in the reliability of the Company's financial statements for the year ended December 31, 2022.



(Mr. Krirk-krai Jirapaet)

Chairman of the Board of Directors



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

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