



QTC ENERGY PCL.

56-1
One Report
2021

STABLE POWER
FOR SUSTAINABLE FUTURE

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Messages from the Chairman of the Board of Directors

“ However, with stable foundation integrated with determination to operate business and adjustment of operational strategy to meet with situation, QCT was able to overcome and generate satisfying income in this year. ”



Over 2 years with COVID-19 pandemic, all industrial sectors and economy of all countries throughout the world have been affected. In 2021, COVID-19 pandemic was occurred in numerous waves delaying recovery of Thai economy. However, in the last quarter of the year, vaccination was highly progressed leading to lower number of infected persons and preventive measures unwinding to be consistent with pandemic situation. Consequently, economic activities could be operated again. In overview, Thai economy in 2021, therefore, tended to slightly grow by 1.2% from severe contraction in 2020 by -6.1%

During 26 years, QTC Energy (Public) Company Limited has to encounter with many economic crises, for example, The Asian Crisis of 1997 and emerging epidemic crisis. However, with stable foundation integrated with determination to operate business and adjustment of operational strategy to meet with situation, QTC was able to overcome and generate satisfying income in this year.

For tendency of Thai economy in 2022, it is expected that Thai economy will be able to be recovered by 3 - 4%. Therefore, the Company adjusts business plan as well as prepare internal and external strategy to use this opportunity to achieve strategic goals by preparing potential and skillful team as well as lowering production cost with new products development and research to respond to demands of customers. Moreover, the Company also plans to expand market in Thailand and overseas.

Moreover, the Company's Board of Directors highly emphasizes on Good Corporate Governance as well. In 2021, the Company has obtained the score on Corporate Governance Assessment in excellent level for 7 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. Krirk-krai Jirapaet)

Chairman of the Board of Directors

Messages from the Chief Executive Officer

“ We must learn, adjust ourselves, and live with COVID-19 safely without suspending our business. ”



To All Stakeholders

From COVID-19 Delta variant pandemic in 2021 that has been severe up till now, some economic activities were controlled by Public Health Measures. Moreover, such pandemic also suspended manufacturing sector of some industries and some SME entrepreneurs had to close down their businesses. Construction sector had to slow down due to super spreading that must be controlled for stopping pandemic. As a result, business operation of private sector in 2021 was difficult leading to low growth rate of Thai economy in 2021.

“QTC” is also another company that has been affected by COVID-19 pandemic directly and indirectly. Although we already assessed risks and prepared supporting plan in advance, the Company had to surrender without any ability to control such situation, for example, the lack of materials that had been occurred throughout the world causing higher price of major materials used in manufacturing like copper and silicon leading to higher production cost, variance of exchange rate causing higher financial cost, the lack of carriers and containers causing delay of exportation, investment of government sector causing lower number of transformer bidding projects of Provincial Electricity Authority and Metropolitan Electricity Authority, suspension of construction projects affecting to handover.

However, “QTC” has overcome all obstacles through good cooperation of all employees who agree to comply with hedging plan, profession of management team, trust and confidence of all stakeholders in our products and services. We are required to keep going, learn, and adjust ourselves to live with COVID-19

safely and sustainably without suspending our business. In 2021, the Company’s structure was adjusted for flexibility in management and the Company also move assets from mai to be traded in SET in order to increase opportunities for shareholding of institutional investors and funds. To strengthen our business, the Company also registered new company’s establishment to operate a business as the distributor of products on electrical and energy equipment on behalf of QTC Marketing Company Limited or QTCM with registered capital of 5 million baht under supervision of QTC Global Power Company Limited or QTCGP. For business profits at the end of 2021, our business gained increased income over than 18% from delivering transformers to overseas and selling products in solar business group whereas profit margin was reduced from 2020 over than 40% or net profit around 9% from sale volume. For performance of Q Solar 1 Company Limited in 2021, net income and profit was reduced from 2020 because selling unit price was reduced by the agreement made with Provincial Electricity Authority. For economic condition in 2022, it is expected that COVID-19 pandemic will be able to be controlled and there will be some measures to stimulate economy in all sectors appropriately. We expect that we will be able to grow from 2021 over than 10%.

In 2021, internal management was operated carefully and thoroughly in order to safe employees and their families from COVID-19 by providing alternative vaccines to voluntary employees and promoting employees to choose vaccination provided by the government as proper. The Company also strengthened Measures on Prevention of COVID-19. All operations may affect to the rights of customers to accept products at the laboratory or materials delivery



process of suppliers or rights and freedom or some entitled rights on welfares of employees. The Company already made understanding with affected persons in all groups and gained good cooperation from related persons. However, the Company still emphasized on personnel development and promoted Best Practice on environment, society, and governance (ESG), trainings on knowledge and skills development via online media while reducing face to face communication in order to reduce the risk of exposure to infection.

For management on work safety that is the important risk of the Company in 2021, the number of accidents was reduced from 2020 over than 37% due to earnest on operation under safety measures and other promotion measures in order to reduce accidents whereas the Company still attached to the goal of Zero Accident.

For participation in community development in 2021, all social projects were required to be suspended due to COVID-19 pandemic. However, the Company still emphasized on and provided support to communities in the form of donation that could build public benefits consecutively while reducing close contact, for example, provision of Sinopharm Vaccine to stakeholders in communities based on voluntariness and donation of transformers for learning benefit of students, etc.

Lastly, on behalf of the Board of Directors, executives, and all employees, we would like to express gratitude to all shareholders, customers, business partners, public, and stakeholders from all groups for supporting and encouraging us consecutively. We would like to promise that we will perform all operations under provided vision, missions, and sustainable development framework as well

as determine and devote in developing process, tools, machines, and human capital to be able to survive under economic and social changes stably and sustainably.

(Mr. Poonphiphat Tantanasin)

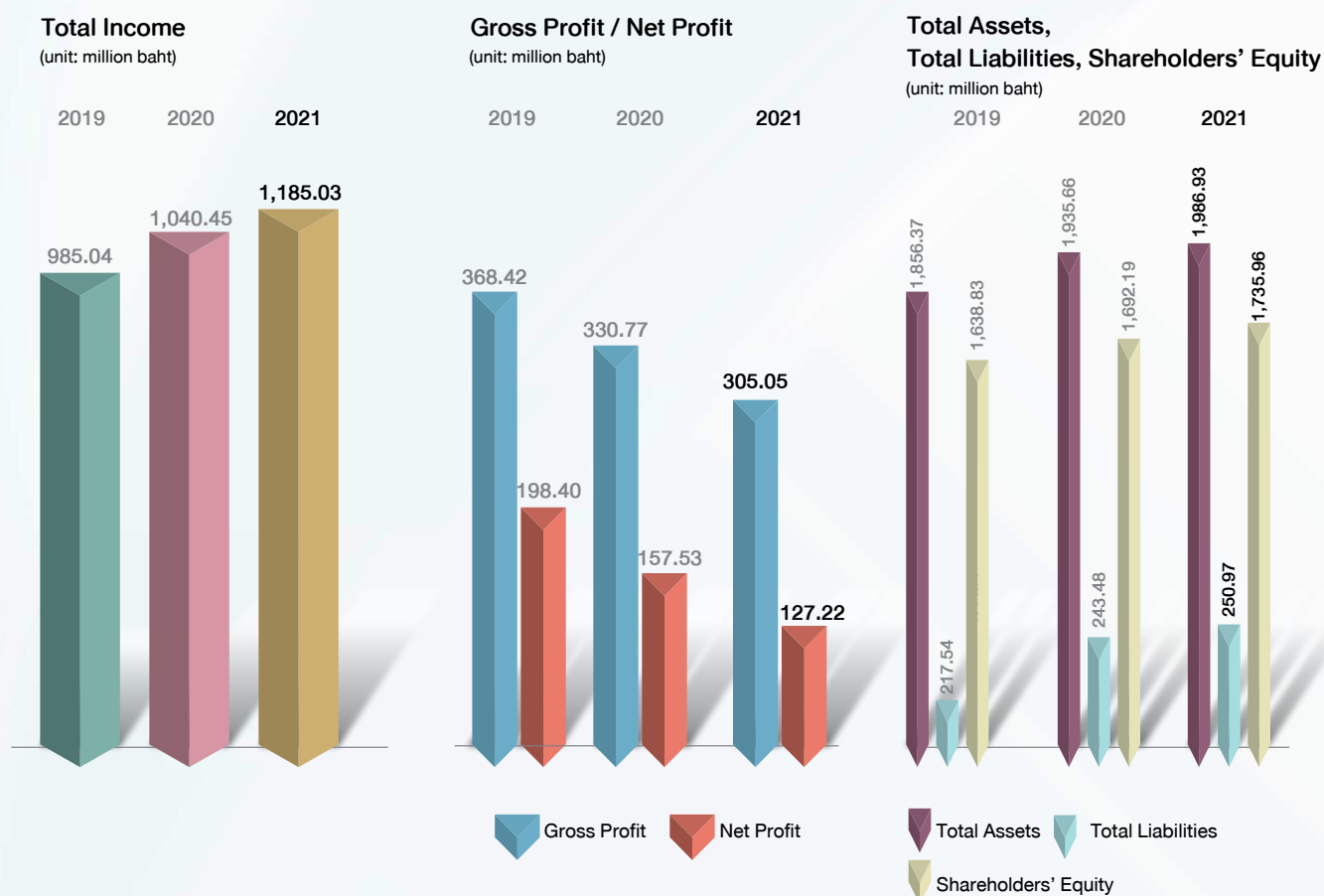
Chief Executive Officer

Financial Highlights

(Unit: Million Bath)

Financial	2019	2020	2021
Revenues from sales and services	965.17	1,019.49	1,171.99
Total revenues	985.04	1,040.45	1,185.03
Cost of sales and services	(615.25)	(706.47)	(878.37)
Gross margin	368.42	330.77	305.05
Selling and administrative expenses	(153.17)	(146.50)	(145.47)
Profit before interest and income tax	217.62	187.48	161.19
Net profit	198.40	157.53	127.22
Comprehensive income for the year	197.18	157.68	130.53
Net earnings per share	0.578	0.462	0.373
Dividend per share	0.15	0.40	0.20*
	(341,092,557)	(341,092,557)	(341,092,557)
Total assets	1,856.37	1,935.66	1,986.93
Total liabilities	217.54	243.48	250.97
Shareholders' equity	1,638.83	1,692.19	1,735.96

Remarks: * Pending for an approval from the 2022 Annual General Meeting of Shareholders



The Board of Directors



1. Mr. Krirkkrai Jirapaet
Chairman, Board of Director



2. Mr. Natthaphon Lilawatthanun
Director



3. Mr. Norachit Sinhaseni
Director



4. Dr. Kamol Takabut
Director



5. Mrs. Wasara Chotithammarat
Director



6. Mr. Suroj Lamsam
Director



7. Mr. Preedee Ngamsantikul
Director



8. Mr. Phairoj Boonpan
Director



9. Dr. Apichart Sramoon
Director



10. Mr. Pornthep Panyarachun
Director



11. Mr. Poonphiphat Tantanasin
Director



12. Mr. Ruangchai Kritsnakriengkrai
Director

1.Mr. Krirk-krai Jirapaet

Position	Chairman of the Board of Directors
Age	79 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 Chairman Program (RCP), Class 11/2005• Director Certification Program (DCP, Class 61/2005• Audit Committee Program, Class 8/2005
Work Experience	<ul style="list-style-type: none">• Chairman / Independent Director 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. Natthaphon Lilawathananun

Position	Director
Age	64 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">• Director and Member of the Audit committee of QTC Energy (Public) Company Limited• Director of Unimit Engineering (Public) Company Limited• Director of Excellent Business Management Company Limited• 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

3. Mr. Norachit Sinhaseni

Position	Director
Age	68 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 "Leaders in Development" course, Executive Program of The John F Kennedy School of Government, Harvard 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	<ul style="list-style-type: none"> 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 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	<ul style="list-style-type: none"> Independent Director / Chairman of the Nomination and Remuneration 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 Councillor of Office of the Council of State Honorary Member in Political Science of the Public Sector Development Commission 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

4. Dr. Kamol Takabut

Position	Director
Age	72 Years
Educational Background	<ul style="list-style-type: none">• Doctor of Engineering in Thermodynamiques & Energetique, Faculty of Engineering, Perpignan 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• Chief Executive Officer of Italian Thai Power Company Limited• Coordinating Committee for the Preparation of Basic Nuclear Power Project
Current Position	<ul style="list-style-type: none">• Director/ Independent Director/ Member of the Audit committee/ Member of Nomination and Remuneration Committee of QTC Energy (Public) Company Limited• Independent Director/ Audit committee/ Chairman of the Risk Management/ Member of Nomination 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	57 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
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
Current Position	<ul style="list-style-type: none">• Independent Director / Member of the Audit committee of QTC Energy (Public) Company Limited• Accounting Director, Summit Group, Summit Auto body Industry Company Limited• Independent Director / Member of the Audit committee of Lease IT (Public) Company Limited• Director of Supamitr Food Company Limited (2014)• Director of Supamitr Food Company Limited (2015)• Director of Supamitr Food Company Limited (2017)
Activity with listed companies	QTC Energy (Public) Company Limited/ Lease IT (Public) Company Limited
Activity with non-listed companies	Supamitr Food Company Limited (2014) / Supamitr Food Company Limited (2015) / Supamitr Food Company Limited (2017) / Summit Auto body Industry Company Limited
Date of appointment	September 13, 2016
Company's securities holding	None

6. Mr. Suroj Lamsam

Position	Director
Age	56 Years
Educational Background	<ul style="list-style-type: none"> Master of Business Administration in Management. Sasin Graduate Institute of Business Administration of Chulalongkorn University 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 40/2548
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	46 Years
Educational Background	<ul style="list-style-type: none">Master of Economics, Faculty of Economics, Srinakharinwirot UniversityBachelor 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 BASFOverseas Sales Manager of Southeast Asia Region of Thai Master Builder CompanySales Manager of UGCSales Manager of Degussa Construction Chemical (Thailand) CompanyManaging Director of Keeree Solution CompanySoutheast Asia Region Manager of Promsang Company LimitedChairman of Advisor of ILF Consultant Engineers (Asia) LTD.Former Assistant Managing Director of RNC Engineering Company LimitedField Engineer at Lumpini Station, MRT Project, Joint Venture Company, BCKT, MRTA Initial System Project Underground StructuresCivil Engineer of Hopewell (Thailand) CompanyStructural Engineer of Asia Ice Company Limited
Current Position	<ul style="list-style-type: none">Director of QTC Energy (Public) Company LimitedAcademic Committee, Concrete Structure of Thailand Concrete Association (TCA)Managing Director of CSE (Thailand) Company LimitedDirector of iGL Synergy Company LimitedDirector of Nam Theun 1 Power Company LimitedVice President - International Affair, Thailand Underground and Tunnelling Group, The Engineering Institute of ThailandRegional Advisor of ILF Consulting Engineers (Asia) LimitedManaging 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. Mr. Phairoj Boonpun

Position	Director
Age	78 Years
Educational Background	<ul style="list-style-type: none">Bachelor of Accountancy, Ramkhamhaeng University
Directorship Training	<ul style="list-style-type: none">Director Accreditation Program (DAP), Class 164/2019
Work Experience	<ul style="list-style-type: none">Director of Administration Audit Department, Internal Audit Department, Metropolitan Electricity Authority (MEA)Translating internal audit recommendations by using the Risk Oriented Audit System for Touch Ross Consulting Company LimitedAdvisor of Mindmerge Consultant Company Limited
Current Position	<ul style="list-style-type: none">Director of QTC Energy (Public) Company Limited
Activity with listed companies	QTC Energy (Public) Company Limited
Activity with non-listed companies	-
Date of appointment	June 7, 2019
Company's securities holding	None

9. Dr. Apichart Sramoon

Position	Director
Age	52 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 • Director of Geotechnical & Foundation Engineering Company Limited • Chairman of Board of World Credit Foncier Company Limited • Director of TEAM Construction Management Company Limited • Director 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%

10. Mr. Pornthep Panyarachun

Position	Director
Age	50 Years
Educational Background	<ul style="list-style-type: none"> • Master of Business Administration (Finance and Investment), The George Washington University, USA • Bachelor's Degree, Bachelor of Engineering (Electronic Engineering), King Mongkut's Institute of Technology Ladkrabang
Directorship Training	<ul style="list-style-type: none"> • Director Accreditation Program (DAP) Class 18/2021
Work Experience	<ul style="list-style-type: none"> • Sub-committee on Consideration of Regulations on Issuance and Offering of Debt Securities, Derivatives and Structured Products, The Securities and Exchange Commission, Thailand • Executive Director, Audit Committee and Chief Financial Officer, AQ Estate Public Company Limited • Assistant Managing Director, The Siam Commercial Bank Public Company Limited
Current Position	<ul style="list-style-type: none"> • Director, QTC Energy Public Company Limited • Management Committee member, Business Development Committee Member, Don Muang Tollway Public Co. Ltd
Activity with listed companies	QTC Energy (Public) Company Limited/ Don Muang Tollway Public Co. Ltd
Activity with non-listed companies	-
Date of appointment	April 23, 2021
Company's securities holding	None

11. Mr. Poonhiphat Tantanasin

Position	Director
Age	69 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
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 Advisor 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
Company's securities holding	598,600 ordinary shares, representing 0.18%

12. Mr. Ruangchai Kritsnakriengkrai

Position	Director
Age	56 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
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 QTC Marketing Company Limited• Director of PPWE 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/ Director of QTC Marketing Company Limited/ PPWE Company Limited
Date of appointment	September 13, 2016
Company's securities holding	None

MANAGEMENT TEAM



1. Mr.Poonphiphat 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 46 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 46 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.

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. A 540 W solar panel will soon be launched and sold in Thailand, which currently the available maximum capacity is 450 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.

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 560 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.

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 industry 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 industry
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 2022 was revised and approved by the Board of Directors on December 16, 2021 so that the vision and mission is consistent with current economic situations.

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 1,500 million Baht by 2024. 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.

The Company focuses on the importance of valuable human resources, so it has invested in personnel by emphasizing on the development of human capital that will develop personnel in connection with the strategies and corporate strategies to be able to compete with the global market and accelerate the development of the supply chain management. International movement of raw materials in the AEC group has been exempted from tariffs and reduced to 0%. Each country has the policy to reduce logistics costs. The Company also prepares to handle with the movement of goods between the AEC countries that will be convenient, fast, and free of customs duty to increase the competitiveness. In addition, the Company pays attention to improving the quality and service efficiency, including processes by applying the Total Quality Management (TQM) system, enabling personnel to work systematically and efficiently.

In 2020-2021, the Company adjusted its structures and strategies, such as sales process, production process to reduce costs, debt collection process to be consistent with the current economic situations, circumstances, or crises. With the availability of personnel and technology, the Company has competitive advantages and is able to create the maximum customer satisfaction. Regarding the organization management to achieve the abovementioned goal, the Company has adhered to the principle of business operation under the concept of "Quality of Details", the principles of good governance, and the code of conduct for the Company's sustainable growth.

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

Year 2017 >>

- In January, the Company established the important foundation (Phase 4) 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 invested to increase the production line of amorphous transformer.
 - In May, the Company purchased 15% of shares of Green Earth Energy (Thailand) Company Limited to co-invest in the Minbu solar power plant project in Myanmar.
 - In June, the Company issued and offered warrants to purchase new ordinary shares (QTC-W1) to existing shareholders based on the proportion of shareholding of not exceeding 67,500,000 Baht and increased its registered capital from 270 million Baht to 337.50 million Baht.
 - In August, the Company acquired all shares of L Solar 1 Company Limited and increased its registered capital from 337.50 million Baht to 359.24 million Baht.
 - In October, the Company allocates the newly issued shares in the amount of 70 million Baht for the purpose of private placement and increased its registered capital from 359.24 million Baht to 429.24 million Baht.
 - In October, the Company received 5S Award for Silver level.
 - In December, the Company received the Business Ethics Standard Test Award 2017 from Thai Chamber of Commerce.
 - In December, the Company was awarded the Sustainability Report Award 2017 organized by the CSR Club, Thai Listed Companies Association.
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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.
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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.
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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 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.

1.2 Nature of Business Operation

1.2.1 Revenue Structure

Type of Revenue	2019		2020		2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Revenue from sales of transformers	815.55	82.71	786.41	75.59	792.91	66.95
- Revenue from domestic sales of transformers	539.73	54.74	467.84	44.97	423.47	35.78
- Revenue from international sales of transformers	240.62	24.40	272.09	26.15	317.37	26.78
- Revenue from sales of raw materials ¹⁾	7.19	0.73	4.24	0.41	10.44	0.88
- Revenue from Services ²⁾	28.01	2.84	42.24	4.06	41.63	3.51
Revenue from sales of Busduct, Inverter and PV Panel	0.93	0.09	86.31	8.30	245.58	20.72
Revenue from sales of solar power business	148.69	15.08	146.77	14.11	133.51	11.27
Total Revenue from Sales and Services	937.16	95.04	977.25	93.93	1,130.36	95.39
Other revenues ³⁾	20.88	2.12	20.96	2.01	13.04	1.10
Total Revenues	986.05	100	1,040.45	100	1,185.04	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 enamelled 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 into 5 types 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.



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. **BUSDUCT** : It is a device that is used to replace wires to distribute power to various loads. It is commonly used in high-rise buildings and large industrial plants. It is sold under the brand of DE BUSDUCT. QTC is appointed to be the sole distributor in Thailand by DYNAMIC ELECTRICAL SDN. BHD., Malaysia. DE BUSDUCT passed the conductivity test for both copper and aluminum conductors. In addition, DE BUSDUCT's insulation is also available in the form of Mylar insulation and Hybrid insulation (Mira + Epoxy insulation) to suit a wide range of applications in the contractor group. It has an advantage in power distribution because it has a low electric potential difference drop and the power system is more stable than general cables.
3. **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.
4. **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.



1.2 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 2021, the Company's total budget was more than 7.3 million Baht as follows:

1. Project of Auto Pouring Machine	2,500,000
2. Project of Smart Transformer Monitoring System	-
3. JIG assembly of transformer tank and cover development project	1,900,000
4. AGV	427,700
5. Project of Solar Rooftop 145kW at the factory in Rayong Province	not incurred expenses
6. Robotic welding of transformer fins development project	-
7. Amorphous transformer assembly table (Super Low Loss Transformer)	540,000
8. Automatic Amorphous metal core annealing oven	1,780,000
9. Other	158,810
Total	7,306,510

2. Marketing and Competition in the Transformer Business

Domestic Market

Transformer manufacturing industry is an industry that is related to electric power both in the production and distribution of electricity, which is essential to the daily life and economic development of the country, because transformers are the main equipment for increasing or decreasing the voltage to suit the needs of power users, whether it is a residence, industrial factory, shopping malls, as well as buildings such as hotels, condominiums, office buildings, etc. Therefore, population expansion, industrial expansion, and economic expansion, as well as the amount of electricity demand each year, are the main factors affecting the expansion of the transformer industry.

Due to the impact of the Covid-19 epidemic in 2021, the economy has slowed down widely, reflected from the GDP growth rate of 3Q21, a negative 0.3% compared to the same period last year. The Thai economy in the third quarter was impacted by the COVID-19 epidemic and the private investment index fell 3.2%, public investment contracted by 6%, causing overall the first nine months of 2021 the Thai economy expanded 1.3%. The components of economic expansion have been adjusted to align with the actual data for the first three quarters of 2021, and key projection assumptions have been revised, such as the implementation of the Open Country Policy to accept foreign tourists. Moreover, the volume of exports of goods and services in 2021 is expected to grow by 10%, an increase compared to 9.6% in the previous estimate. As a result, in the year 2022, the economy is expected to expand 3.5-4.5%. The Thai economy is likely to recover clearly following a low base expansion in 2021, supported by significant improvements in domestic demand following the easing of the epidemic and the continually spreading more vaccine coverage. In addition, the Thai economy is driven by the government, both from government disbursement. At the same time, it is driven by the expansion of the export and manufacturing sectors. However, the industry sector remains at risk of being affected by the protracted limitations in international production and logistics chains and the risks of global economic and financial volatility amid higher inflation pressures.

It is estimated that the impact of the COVID-19 epidemic will last two to three years, causing a slowdown in private sector projects as well as the cancellation of a number of projects which have both direct and indirect effects to the electricity industry. Nevertheless, the government has tried to push large projects to develop the economy in the long run, such as the investment promotion of the Eastern Economic Corridor (EEC) project, community power plants, and rail transit development projects, including the policy to drive the production of electric vehicles (EV Car) and electric charging stations (EV Charging Station), etc. Therefore, the direction of the transformer industry will continue to grow in the future.

Domestic Electricity Consumption

With the impact of the aforementioned Covid-19 epidemic and the government's announced lockdown policies in many areas, it has severely affected many sectors such as tourism, and many sectors have temporarily stopped or shut down. The table below shows the electricity consumption in 2021 (Jan-Jun) by type of electricity users. Compared to 2020, the largest decrease was in the business sector with 20,943 GWh, a decrease of 5%, followed by a decrease in household electricity consumption at 26,985 GWh, a decrease of 1.9%. On the contrary, it was found that the industrial sector used more electricity at 43,082 GWh, an increase of 6.1% of the total electricity consumption in the country.

Field	Electricity Consumption (GWh)				2021 (Jan-Jun)	
	2018	2019	2020	2021 (Jan-Sep)	growth (%) YoY	share (%)
Household	45,205	49,202	52,860	26,985	-1.9	29
Business	46,764	49,128	43,950	20,943	-5.0	22
Industry	87,829	86,104	82,158	43,082	6.1	45
Others	8,034	8,526	8,078	4,116	1.3	4
Total	187,832	192,960	187,046	95,126	1.0	100

* Non-profit organization, water pumping for agriculture, temporary power, public lighting, and others (excluding EV Charging Station)

Source: Energy Policy and Planning office (EPPO) Ministry of Energy

In addition to the economic growth factors that affect electricity demand as mentioned above, population growth is another important factor determining the amount of electricity demand. As a result, the Provincial Electricity Authority (PEA) and the Metropolitan Electricity Authority (MEA), which are responsible for the distribution of electricity to domestic electricity users, have to invest more in distribution systems, resulting in increased demand for the transformer which is the main device in the electrical distribution system. As mentioned above that electric power is a necessary basic energy, if there is not enough to meet the demand, it will affect the well-being of people and the overall business of various businesses as well as the national economy. Therefore, the Ministry of Energy together with The Electricity Generating Authority of Thailand (EGAT) has therefore formulated the power development plan of Thailand, the latest version is the Electric Power Development Plan of Thailand 2018-2037, the 1st revision (PDP2018 Revision 1).

Thailand Power Development Plan 2018 (2018–2037) Revision 1 (PDP 2018 Revision 1)

Thailand Power Development Plan 2018 (2018–2037) Revision 1 (PDP2018 Revision 1) will provide the power generation capacity in the systems of EGAT, MEA and PEA at the end of the year 2037, totaling 77,211 MW, consisting of the power generation capacity at the end of 2017 equal to 46,090 MW. The total capacity of the new power plants was 56,431 MW and 25,310 MW of old power generation capacity expired during 2018 – 2037 was canceled.

Power Generation Capacity During 2018 -2037

- Power generation capacity in December, 2017	40,090	MW
- New power generation capacity during 2018 -2037	56,431	MW
- Electricity capacity distributed from the system during 2018 -2037	- 25,310	MW
- Total power generation capacity at the end of the year 2037	77,211	MW

New Power Generation Capacity During 2018 -2037 Equal to 56,431 MW

It is categorized by the type of power plant as follows:

Renewable energy power plant	18,833	MW
Community power plant	1,933	MW
Pumped storage hydro power plant	500	MW
Cogeneration power plant	2,112	MW
Combined-cycle power plant	15,096	MW
Coal / Lignite Power Plant	1,200	MW
International power purchase	5,687	MW
New / replacing power plant	6,900	MW
Energy conservation measures	4,000	MW
Total	56,431	MW

International Market

The impact of the Covid-19 epidemic has resulted in a global recession as well as a severe shortage of containers for imports and exports at the end of the year and has resulted in more than five-fold increase in shipping costs. In addition, international travel throughout the year 2021 is not feasible, resulting in the delay of 2021 deliveries and being postponed until the beginning of 2022. In this regard, goods exports have been pushed and driven by controlling the epidemic in key production bases, accelerating the resolution of limitations and obstacles in goods transportation, solving the problem of foreign workers shortage in the production sector, driving exports to the main markets with a clear economic recovery and creating new markets for potential products, taking advantage of the Regional Comprehensive Economic Partnership (RCEP) framework and developing economic and trade cooperation and accelerating free trade negotiations, which are in negotiation and study process for negotiating with new key trading partners.

Major commercial partners in Japan are growing from solar farm installation projects and those in Australia are growing mining industry with increasing demand. This resulted in an increase in overall deliveries in 2021 compared to 2020, as well as a large number of backlog orders to be delivered in 2022.

Competition

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.

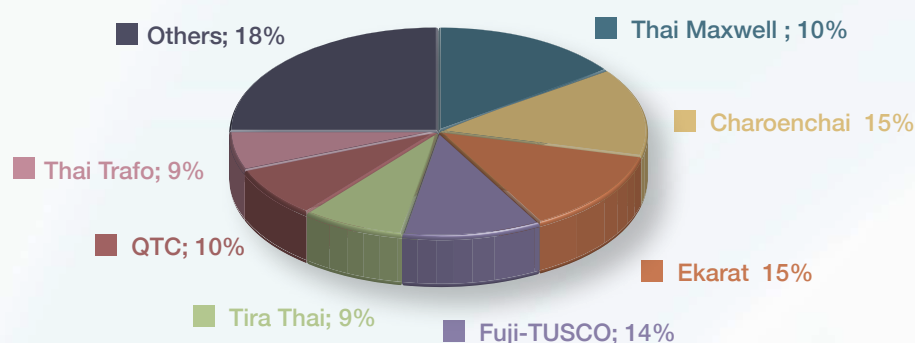
It is difficult to enter into the business of a new manufacturer and to develop and improve the transformer production process to obtain quality products according to international standards because it requires the high cost of investment in machinery. Importantly, it also relies on knowledge and advanced 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.

Market Share

In 2020, the overview of the total market value was still close to that of the year 2019. Each manufacturer has the market share as follows:

Transformer Market Share 2020



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

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 46 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 2021, the Company's revenue from transformer sales was approximately 14.91% of the revenue from the total sales. It derived from sales through domestic and international distributors. As at December 31, 2021, 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 a 2-year 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 60.61%.

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 2019		Year 2020		Year 2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Revenue from domestic sales						
(1) Government agencies and state enterprises	271.52	34.79	207.15	28.00	115.07	15.53
(2) Distributor	12.71	1.63	12.17	1.64	15.53	2.10
(3) Private sector	255.50	32.74	248.52	33.59	292.87	39.53
Total revenue from domestic sales	539.73	69.17	467.84	63.23	423.47	57.16
Revenue from international sales						
(1) Distributor	103.56	13.27	116.77	15.78	94.91	12.81
(2) Private sector	137.06	17.56	155.32	20.99	222.46	30.03
Total revenue from international sales	240.62	30.83	272.09	36.77	317.37	42.84
Total revenue from sales	780.35	100.00	739.94	100.00	740.84	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, 2021, 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.

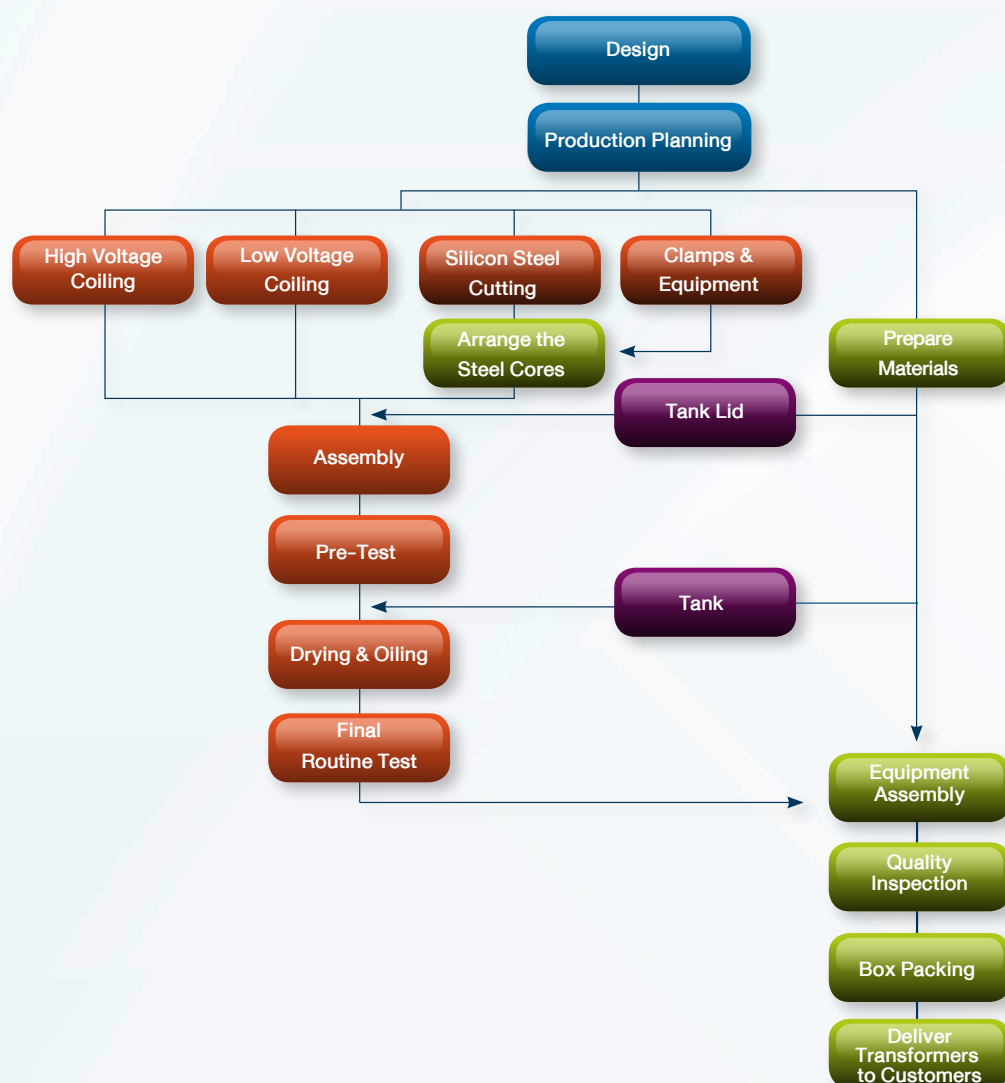
In 2021, the Company is still committed to applying the TQM system to improve production processes and production planning continuously. The main goal is to reduce the production period in order to increase production volumes and adjust production processes to create a line balance and reduce losses, 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

	2014	2015	2016	2017	2018	2019	2020	2021
Capacity of Plants (KVA)	1,701,000	1,715,000	1,722,000	1,694,000	1,715,000	1,708,000	1,722,000	1,715,000
Power Generation Volume (KVA)	1,322,535	1,791,847	1,148,604	1,659,651	1,490,595	1,206,278	1,218,528	1,256,785
Capacity Utilization Rate (%)	77.75	104.48	66.70	97.97	86.92	70.63	70.76	73.28

In 2021, the Company's power generation volume increased by 3.14% from the year 2020.

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 2021, 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 32% 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 2019		Year 2020		Year 2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Domestic Material Purchases	397.58	69.40	305.78	76.9	417.71	67.91
International Material Purchases	142.65	31.60	91.84	23.1	197.41	32.09
Total Material Purchases	540.23	100	397.62	100	615.13	100

The Company's main materials are detailed as follows:

1. Silicon Steel

Silicon steel is considered an important material for the manufacturing of transformers, accounting for 15.56% and 21.18% of the total material purchase value in 2020 and 2021, 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 2021, the company's new body manufacturing plant continues to be in full capacity. Laser cutting machine, replacing plasma steel cutting machine, has been used to cut thicker steel. 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.

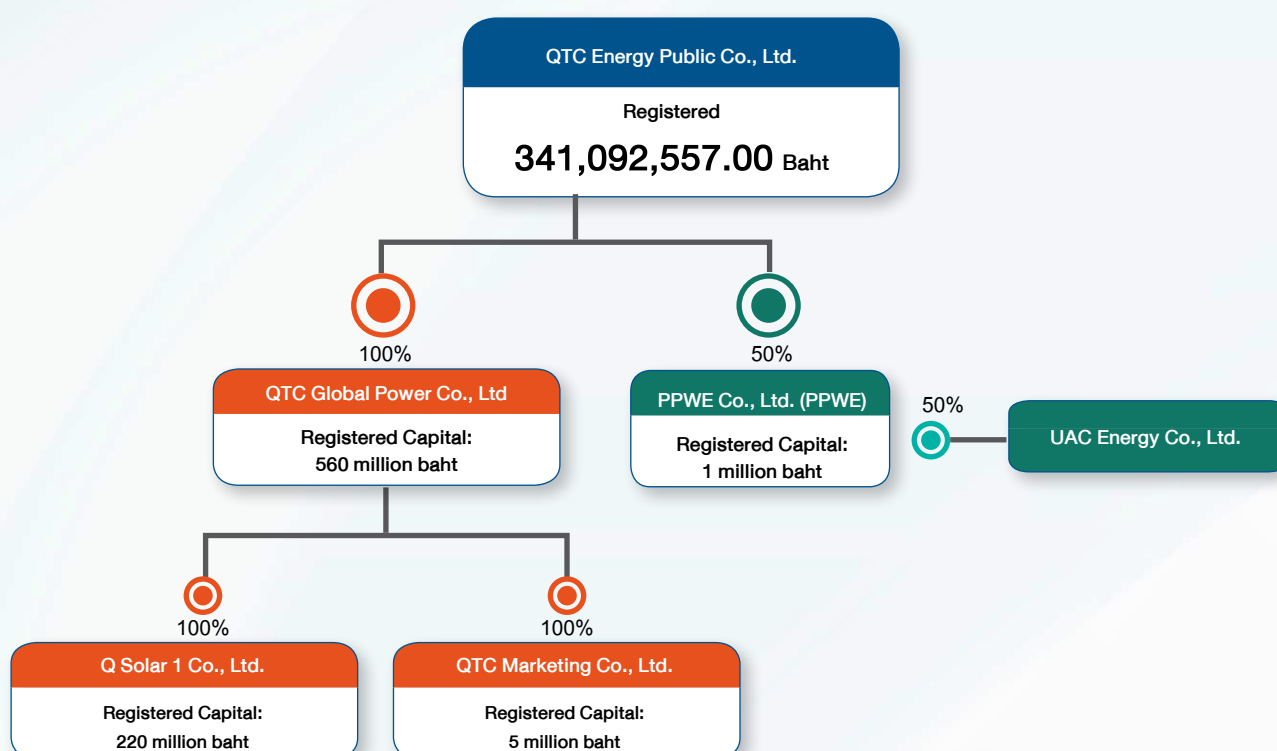
4. Transformer Oil

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 560 million Baht

QTC Global Power Company Limited (Head Office)
2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road,
Huamark, Bangkapi, 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, 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, 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 24, 2021, which is the book closing date, are detailed as follows:

Top Ten Major Shareholders as at December 24, 2021			
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 Pravoraxay	40,000,000	11.73
	Total number of shares held by a group of foreign investors	82,500,000	24.19
2	Group of Mr. Poonphiphat Tantanasin		
	2.1 Miss Sasikarn Tantanasin	54,317,855	15.92
	2.2 Mr. Patcharapong Tantanasin	716,000	0.21
	2.3 Mrs. Alisara Charuenvanich	602,600	0.18
	2.4 Mr. Poonphiphat Tantanasin	598,600	0.18
	Total number of shares held by the group of Mr. Poonphiphat Tantanasin	56,235,055	16.49
3	Mr. Aphichat Samul	42,501,000	12.46
4	Mr. Teerapol Noppharampha	20,000,000	5.86
5	LOXLEY PUBLIC COMPANY LIMITED	17,019,702	4.99
6	Thai NVDR Co., Ltd.	13,304,790	3.90
7	Miss Lertluck Ulist	12,340,000	3.62
8	Mr. Peeranat Tantipoj	9,000,000	2.64
9	Mr. Thiradech Cheraprabkhai	5,764,900	1.69
10	LEONICS CO., LTD.	3,890,273	1.14
	Other Shareholders	78,536,837	23.03
	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	2018	2019	2020
1. Net profit (Loss profit)	4,096,941	122,178,972	178,133,880
2. Retained earnings (Deficits)	(64,698,956)	54,606,015	120,053,038
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		51,163,883.55	51,163,883.55
• Annual Dividends (Baht/Shares)	non-payment	non-payment	0.25
Amount of the money			85,273,139.25
5. Total amount of dividends paid	N/A	51,163,883.55	136,437,022.80
6. Percentage of the annual net profit (%)	N/A	93.70 percent	71.03 percent

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 • Requesting for Green Label Transformer Certification to enhance competitiveness according to the conditions of government agencies; Currently, there are 6 kVA green labeled transformers targeted to be auctioned off. <ul style="list-style-type: none"> ➡ In 2021, there are private green label transformers worth more than 12 million baht, For the government sector, there is no auction of green label transformers from PEA. • 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 <ul style="list-style-type: none"> ➡ In 2021, the Company generated revenues from <ul style="list-style-type: none"> - 442 Super Low Loss transformers, worth 78,578,364.48 Baht, increased by over 300% from the year 2020. - 7 Smart Transformers, worth 483,000 Baht, decreased by 100% from the year 2020. • Expanding customer base for transformer maintenance services; <ul style="list-style-type: none"> ➡ In 2021, the revenues from such services in the amount of more than 41 million Baht, decreased by 10.87% % from the year 2020. <p>Due to the epidemic situation of Covid-19, customers postpone the transformer maintenance.</p> • Restructuring the organization in the sales line, adding the product development department to take care of customers and provide coordination regarding new products that the Company is the distributor in Thailand, including Busduct products from DYNAMIC ELECTRICAL SDN. BHD., Solar Inverter from Huawei Technology (Thailand) Co., Ltd., PV Panel from LONGI Solar Technology Co, Ltd. sold under the brand of LONGI and from Trina Solar Co.,Ltd sold under the brand of Trina <ul style="list-style-type: none"> ➡ In 2020, the Company generated revenues from sales of new products in the amount of more than 245 million Baht, growth more than 180% from the year 2020.
<p>Investment in Other Businesses</p>	<ul style="list-style-type: none"> • 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. • 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 • Any investment in other businesses shall go through the approval process from the Board of Directors and the shareholders' resolution. <ul style="list-style-type: none"> ➡ In 2021, there were 1 studies for the investment in solar power generation business, No conclusions yet for decision making.

2. Financial Risk

Risk Issues	Measures and Performances
<p>Fluctuation of Foreign Exchange Rate and Fluctuation of Material Prices</p>	<ul style="list-style-type: none"> 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: <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 In 2021, The baht's depreciation continued since the beginning of the year due to the COVID-19 situation. Until the end of the year, the baht's appreciation returned, but still resulted in the company's foreign exchange loss of 3,071,986 baht.
<p>Risk from Debtor Management</p>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Setting aside allowance for doubtful accounts (as an accounting expense); If there is outstanding debt for more than 1 year, the policy on credit for customers shall be amended. 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. In 2021, The company was able to control the repayment period to 61 days, continuously decreasing from 2020 and 2019. Net trade accounts receivable (before deducting allowance for impairment losses) 182.97 million baht, decreased from the year 2020 which was 212.56 million baht, decreased by 13.92 percent. <p>In addition, the above-1-year receivables overdue decreased from the year 2020 by 2.62 million baht, and the allowance for impairment losses decreased from the year 2020 by 9.45 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>➡ In 2021, The number of accidents decreased from 2020 by 37.14%, but did not meet the Zero Accident goal. Details and preventive measures can be found in the sustainability 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. <p>Create organization happiness following the Happy 8 guideline.</p> <p>➡ In 2021, The employee turnover rate of 19.85% is within the target setting.</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> <p>Succession plan preparations and successor selection.</p> <ul style="list-style-type: none"> • Promotion of leadership and successor skill development along the career path. • Marketing promotion using product brands and factory standards to lead. <p>➡ In 2021, The company has appointed personnel to succeed some key positions as needed urgently for the flexibility of business operations. And there are also some pending positions for developing leadership and other necessary skills.</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>➡ In 2021, 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 2021 under "Waste and Leftover Materials from Production (Garbage)".</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>➡ In 2021, 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.</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). <ul style="list-style-type: none"> ➡ In 2021, The 1st CAC Membership Renewal has been carried out which has now been reviewed by the CAC Board. Continuing membership will be effective from 21 March 2022 to 31 March 2025. Official membership certificate awarding ceremony has been awaited.

5. Business continuity management risk

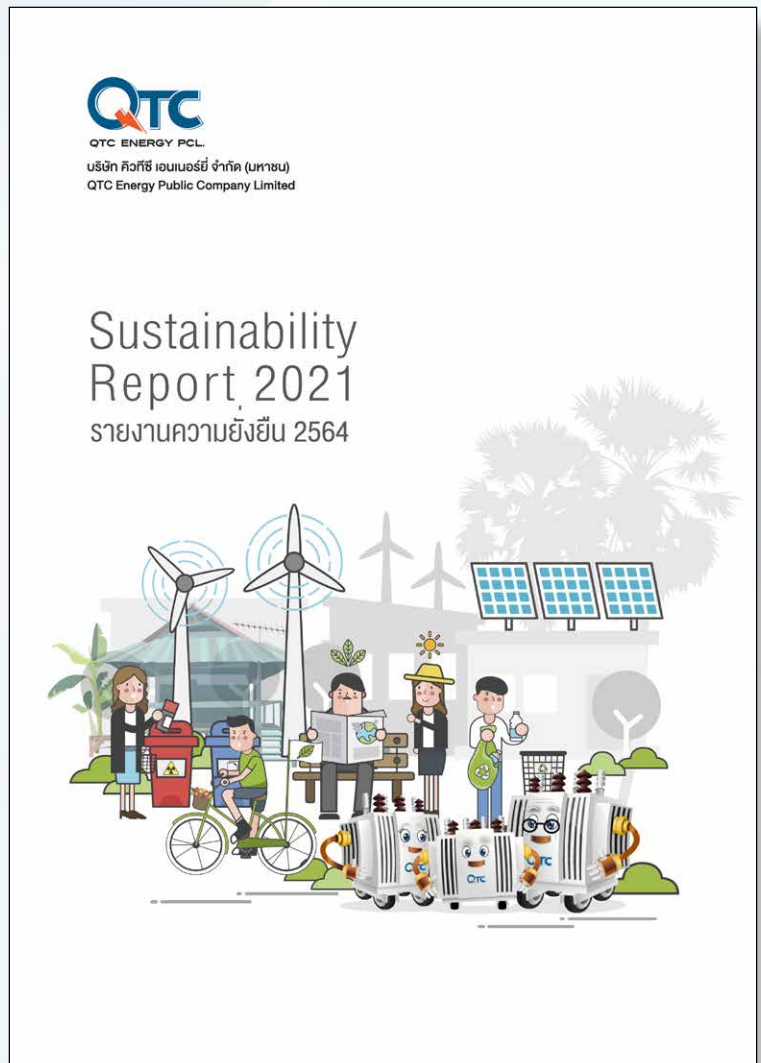
Risk Issues	Measures and Performances
Emergencies	<p>Emergencies are risks from disasters such as flooding at the Bangkok main office, fires at the main office or the Rayong factory or any subsidiary. The Company laid down the following preventive measures and emergency preparations:</p> <ul style="list-style-type: 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. <ul style="list-style-type: none"> ➡ In 2021, the Company had no emergencies with effects causing business interruptions in the Company and subsidiaries. Furthermore, the Company followed measures strictly and consistently.
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> <ul style="list-style-type: none"> ➡ In 2021, Employee comprehension is tested. Phishing mail is sent out to catch trapped employees and get them retrained. Implementation is 100% complete. During the year, there were 2 external phishing mails entering the system, but they were able to be intercepted and manipulated, thus causing no damage to the system and data.

Risk Issues	Measures and Performances
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/

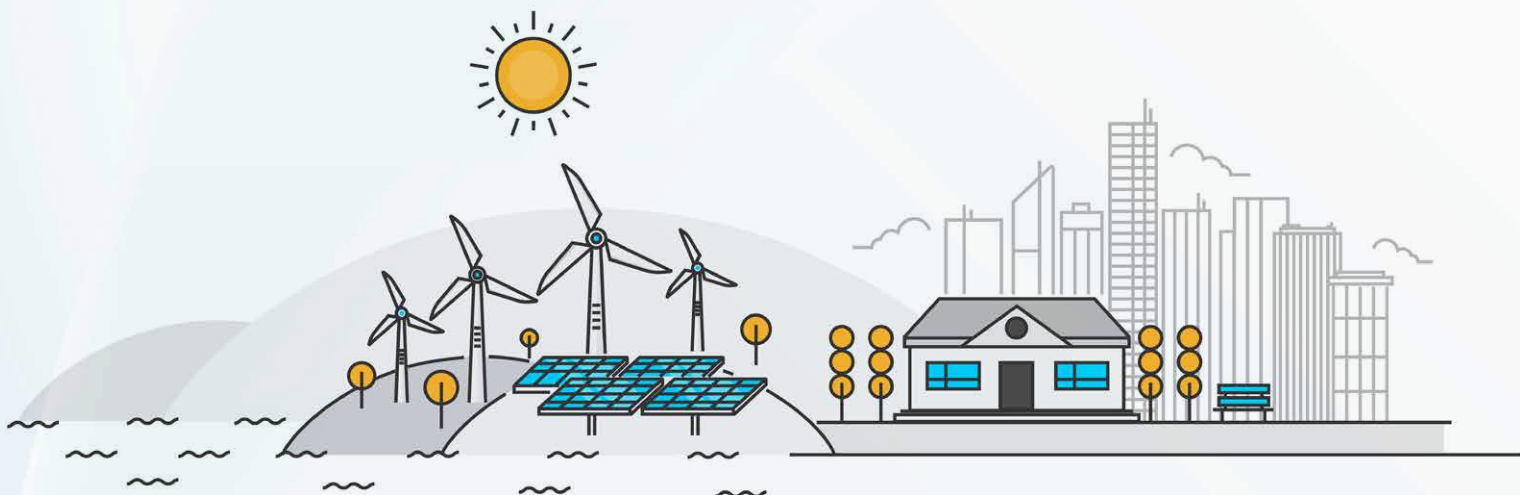
3. Driving Business towards Sustainability

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 2021 Sustainability Report



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





4. Management Discussion and Analysis (MD&A)

Financial Position and Operating Results

1 Summary of Audit Report

- (A) The financial statements for the year 2019 were audited by Mr. Narin Joramongkon, 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, 2019, 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 2020 were audited by Mr. Narin Joramongkon, 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.

- (C) 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.

2 Table of Summary of Financial Position and Operating Results

Statement of Financial Position

	Year 2019 (Consolidated Financial Statement)		Year 2020 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement)	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Assets						
<i>Current Assets</i>						
Cash and Cash Equivalents	144.23	7.77	152.32	7.87	347.43	17.49
Temporary Investments	517.48	27.88	613.20	31.68	350.00	17.62
Trade Receivables						
- General Receivables – Net	123.00	6.63	179.68	9.28	159.54	8.03
- Related Companies Other Receivables	1.05	0.06	1.31	0.07	-	-
General Receivables						
- Other Receivables	0.94	0.05	0.64	0.03	0.60	0.03
- Related Companies	0.20	0.01	0.45	0.02	-	-
Inventory– Net	198.50	10.69	166.54	8.60	322.21	16.22
VAT Refundable	26.54	1.43	20.63	1.07	36.22	1.82
Prepaid Expenses	8.00	0.43	6.31	0.33	4.23	0.21
Other Current Assets	13.18	0.71	15.06	0.78	11.78	0.59
Total Current Assets	1,033.12	55.65	1,156.14	59.73	1,232.01	62.01
<i>Non-Current Assets</i>						
Restricted Bank Deposits	21.60	1.16	0.10	0.01	0.10	0.01
Loans Provided to Related Companies – Net	-	-	-	-	-	-
Investments in Associated Companies – Net	-	-	-	-	7.36	0.37
Collectible Security Deposit for Investment Project Feasibility Study	-	-	-	-	-	-
Property, Plant and Equipment - Net	666.01	35.88	633.32	32.72	616.75	31.04
Rights of Use Assets - Net	-	-	13.11	0.68	11.84	0.60
Computer Software Power Grid Connection Service Fees – Net	4.51	0.24	5.96	0.31	5.52	0.28
	3.93	0.21	3.60	0.19	3.27	0.16
Electricity Sales Contract – Net	100.49	5.41	92.06	4.76	83.64	4.21
Deferred Income Tax Assets	17.04	0.92	17.32	0.89	13.94	0.70
Non-Current Assets	9.67	0.52	14.05	0.73	12.50	0.63
Total Non-Current Assets	823.25	44.35	779.52	40.27	754.92	37.99
Total Assets	1,856.37	100.00	1,935.66	100.00	1,986.93	100

Statement of Financial Position (continued)

	Year 2019 (Consolidated Financial Statement)		Year 2020 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement)	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Liabilities and Shareholders' Equity						
Current Liabilities						
Overdraft and Short-Term Loans from Financial Institutions	77.04	4.15	-	-	-	-
Trade Payables	43.82	2.36	104.83	5.42	121.24	6.10
Other Payables	7.11	0.38	12.57	0.65	19.98	1.01
Current Portion of Long-Term Loans	24.30	1.31	-	-	-	-
Current Portion of Payables under Hire Purchase Contract	1.55	0.08	4.19	0.22	3.78	0.19
Employee Benefit Obligation Liabilities	0.87	0.05	1.21	0.06	0.17	0.01
Income Tax Payable	3.95	0.21	14.19	0.73	12.29	0.62
Accrued Expenses	20.82	1.12	18.08	0.93	18.45	0.93
Security Deposits for Goods Received	9.11	0.49	42.24	2.18	14.99	0.75
Value Added Tax Payable	-	-	-	-	-	-
Other Current Liabilities	11.29	0.61	21.86	1.13	31.84	1.60
Total Current Liabilities	199.86	10.77	219.17	11.32	222.74	11.21
Non-Current Liabilities						
Long-Term Loans – Net	-	-	-	-	-	-
Payables under Hire Purchase Contract – Net	1.95	0.11	7.59	0.39	6.45	0.32
Employee Benefit Obligation Liabilities	15.74	0.85	16.72	0.86	16.31	0.82
Other non-current liabilities	-	-	-	-	5.47	0.28
Total Non-Current Liabilities	17.69	0.96	24.31	1.25	28.23	1.42
Total Liabilities	217.55	11.73	243.48	12.57	250.97	12.63
Shareholders' Equity						
Capital Stock						
Registered Capital	341.09	18.37	341.09	17.62	341.09	17.17
Issued and Paid-up Capital	341.09	18.37	341.09	17.62	341.09	17.17
Premium on Ordinary Shares	1,178.87	63.50	1,178.87	60.90	1,136.57	57.20
Share premium on business combination					42.30	2.13
Retained Earnings						
Allocated – Legal Reserve	22.87	1.23	31.78	1.64	34.11	1.72
Unallocated	96.84	5.22	141.72	7.32	181.89	9.15
Other Components of Shareholders' Equity	(2.54)	(0.14)	(2.88)	(0.15)	-	-
Total Shareholders' Equity of the Company	1,637.13	88.18	1,690.58	87.33	1,735.96	87.37
Noncontrolling interest in Subsidiaries	1.69	0.09	1.60	0.08	-	-
Total Shareholders' Equity	1,638.82	88.27	1,692.18	87.41	1,735.96	87.37
Total Liabilities and Shareholders' Equity	1,856.37	100.00	1,935.66	100.00	1,986.93	100

Comprehensive Income Statement

	Year 2019 (Consolidated Financial Statement)		Year 2020 (Consolidated Financial Statement)		Year 2021 (Consolidated Financial Statement)	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
<u>Revenue</u>						
Revenue from Sale	937.16	95.04	977.25	93.93	1,130.36	95.39
Revenue from Service	28.01	2.84	42.24	4.06	41.63	3.51
Other Revenues	20.88	2.12	20.96	2.01	13.04	1.10
Total Revenues	986.05	100.00	1,040.45	100.00	1,185.03	100
<u>Costs and Expenses</u>						
Cost of Sales	(598.36)	(60.68)	(676.22)	(64.99)	(854.43)	(72.10)
Cost of Services	(16.89)	(1.71)	(30.25)	(2.91)	(23.94)	(2.02)
Selling and Administrative Expenses	(153.18)	(15.53)	(146.50)	(14.08)	(145.47)	(12.28)
Total Expenses	(768.43)	(77.92)	(852.97)	(81.98)	(1,023.84)	(86.40)
Profit (loss) Before Finance Cost and Income Tax	217.62	22.07	187.48	18.02	161.19	13.60
Finance Cost	(8.87)	(0.90)	(2.33)	(0.22)	(1.26)	(0.11)
Corporate Income Tax	(8.69)	(0.88)	(27.44)	(2.64)	(20.57)	(1.74)
Profit (Loss) Shares of Associated Companies under the Equity Method	-	-	-	-	(12.14)	(1.02)
Losses of Discontinued Operations	(1.66)	(0.17)	(0.18)	(0.02)	-	-
Net Profit (Loss) for the Year	198.40	20.12	157.53	15.14	127.22	10.73
Other Comprehensive Profits (Losses) for the Year						
Actuarial Losses	-	-	0.54	0.05	0.43	0.04
Exchange Differences on Translating Financial Statement	(1.22)	(0.12)	(0.39)	(0.04)	2.88	0.24
Total Comprehensive Profits (Losses) for the Year	(1.22)	(0.12)	0.15	0.01	3.31	0.28
Basic Earnings (Loss) per Share Net Profit (Baht per Share)	197.18	20.00	157.68	15.15	130.53	11.01
Basic Earnings (Loss) per Share						
Net Profit (Baht per Share)	0.582	-	0.462	-	0.373	-
Par Value (Baht)	1.00		1.00		1.00	

Statement of Cash Flow

(Unit: Million Baht)	Year 2019 (Consolidated Financial Statement)	Year 2020 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement)
Cash Flow from Operating Activities			
Net Profit before Income Tax	207.09	184.97	147.79
Adjustments to reconcile net profit to cash derived from operating activities			
Depreciation and Amortization	77.16	81.15	82.16
Allowance for Doubtful Accounts	1.42	(0.20)	(3.69)
Allowance for (Reversal of Allowances) Obsolete Inventory	(6.91)	1.86	0.60
Profit (Loss) from Disposal of Assets	(1.84)	(1.23)	(1.39)
Loss from Amortization of Assets	-	0.48	-
Amortize uncollectible bad debts	-	(1.67)	(5.75)
Profit (Loss) from Disposal of Intangible Assets	0.01	0.02	0.99
Unrealized Loss (Profit) from Exchange Rate	0.19	0.02	0.54
Profit from Unrealized Investment Adjustment	(5.40)	(1.25)	-
Profit from Sale of Temporary Investments	(1.09)	(1.97)	(1.80)
Reverse lease debt on contract termination	-	-	(0.58)
Share of Loss of Associated Companies under Equity Method	-	-	12.14
Allowance for Employee Benefit Obligations	4.97	1.67	1.53
Allowance for Impairment of Loans provided to Associated Companies	3.90	-	-
Allowance for Impairment of Assets (Reversing Entries)	-	(0.10)	(10.90)
Gain on dissolution of a subsidiary	-	-	(1.61)
Amortize right-of-use assets	-	-	0.71
Interest Expenses	8.87	2.33	1.26
Cash Received from Operations before Changes in Operating Assets and Liabilities Decrease (Increase) in Operating Assets	288.37	267.75	227.75
Trade Receivables – General Receivables	131.97	(59.14)	23.75
Trade Receivables – Related Companies	(0.34)	(0.26)	1.31
Other Receivables – General Receivables	0.20	0.29	0.04
Other Receivables – Subsidiaries	(0.05)	(0.25)	0.45
Inventory	(16.33)	30.10	(156.26)
VAT Refundable	3.14	5.91	(15.60)
Prepaid Expenses	(3.88)	1.69	2.08
Other Current Assets	(0.07)	(1.88)	3.40
Other Non-Current Assets	(5.52)	(4.26)	1.56
Decrease (Increase) in Operating Liabilities			
Trade Payables	(55.24)	60.98	15.96
Other Payables			
- General Traders	(3.94)	5.12	(6.70)
- Related Companies	0.01	0.33	(0.31)
Accrued Expenses	(2.18)	(2.74)	0.37
Security Deposit for Goods Received	(7.31)	33.13	(27.25)
Other Current Liabilities	(0.15)	(0.45)	(10.12)
Liabilities Paid under Employee Benefit Obligations	-	-	(2.79)

Statement of Cash Flow (Continued)

(Unit: Million Baht)	Year 2019 (Consolidated Financial Statement)	Year 2020 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement)
Cash Received from Operating Activities	328.68	336.32	57.64
Tax Paid	(5.50)	(16.97)	(18.36)
Interest Paid	(8.35)	(2.00)	(0.92)
Income Tax Refund	-	-	-
Net Cash Provided by (Used in) Operating Activities	314.83	317.35	38.36
<u>Cash Flow from Investing Activities</u>			
Decrease (Increase) in Restricted Bank Deposits	(0.29)	21.50	-
Decrease (Increase) in Temporary Investment	(44.64)	(92.50)	265.00
Increase in Short-Term Loans – Associated Companies	3.00	0.10	10.90
Cash Paid for Purchase of Investments in Indirect Subsidiaries	-	-	-
Increase in Investments in Associated Companies	-	-	(19.50)
Increase in Investments in Indirect Associated Companies	-	-	-
Collectible Security Deposit for Investment	-	-	-
Project Feasibility Study	-	-	-
Cash Received from Sale of Indirect Associated Companies	-	-	-
Cash Received from Disposal of Assets	3.57	1.25	1.76
Cash Received from Disposal of Intangible Assets	0.06	-	-
Payment for Purchase of Other Fixed Assets	(44.58)	(39.63)	(30.93)
Purchase of Computer Software	(2.09)	(3.02)	(2.70)
Net Cash Provided by (Used in) Investing Activities	(84.97)	(112.30)	224.53
<u>Cash Flow from Financing Activities</u>			
Increase (Decrease) in Overdraft and Short-Term Loans from Financial Institutes)	(125.04)	(77.04)	-
Long-term Loans from Banks	-	-	-
Repayment of Long-term Loans from Banks	(75.24)	(24.30)	-
Repayment of Liabilities Under Hire Purchase Contracts	(2.62)	(3.97)	(4.75)
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)
Net Cash Provided by (Used in) Financing Activities	(202.90)	(196.47)	(69.80)
Difference from Translation of Foreign Currency Financial Statement of Subsidiaries	(1.52)	(0.49)	2.02
Increase (Decrease) in Cash and Cash Equivalents – Net	25.44	8.09	195.11
Cash and Cash Equivalents as at January 1	118.79	144.23	152.32
Cash and Cash Equivalents as at December 31	144.23	152.32	347.43

3 Table of Summary of Significant Financial Ratio

Item		Year 2019 (Consolidated Financial Statement)	Year 2020 (Consolidated Financial Statement)	Year 2021 (Consolidated Financial Statement)
<u>Liquidity Ratio</u>				
Liquidity Ratio	(Times)	5.17	5.28	5.53
Quick Ratio	(Times)	3.94	4.32	3.85
Cash Flow Liquidity Ratio	(Times)	0.98	1.51	0.17
Account Receivable Turnover Ratio	(Times)	4.36	5.51	5.91
Average Collection Period	(Days)	83.81	66.41	61.80
Inventory Turnover	(Times)	3.06	3.58	3.39
Average Inventory Period	(Days)	119.32	102.15	107.57
Payable Turnover Ratio	(Times)	6.32	5.46	5.49
Payment Period	(Days)	57.75	67.00	66.47
Cash Cycle	(Days)	145.38	101.57	102.89
<u>Profitability Ratio</u>				
Gross Profit Margin	(%)	36.25	30.70	25.05
Operating Profit Margin	(%)	22.55	18.39	13.75
Other Profit Margin	(%)	1.22	1.79	0.86
Cash to Profit Ratio	(%)	158.68	201.45	30.16
Net Profit Margin	(%)	20.12	15.14	10.74
Return on Equity	(%)	12.88	9.46	7.42
<u>Operating Efficiency Ratio</u>				
Returns on Assets	(%)	10.51	8.31	6.49
Returns on Fixed Assets	(%)	40.40	36.09	32.55
Asset Turnover	(Times)	0.52	0.55	0.60
<u>Financial Policy Ratio</u>				
Debt to Equity Ratio	(Times)	0.13	0.14	0.14
Interest Coverage Ratio	(Times)	33.22	115.29	193.28
Debt Service Coverage Ratio	(Times)	2.42	1.23	0.31
Dividend Payout Ratio	(%)	25.79	57.87	51.14

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 2019, the Company earned revenues from transformers and transformer repair and maintenance services, including electricity sales in the total amount of 965.17 million Baht, or a growth rate of 0.74% from the year 2018. In the meantime, the gross profit in 2019 amounted to 349.92 million Baht, increased by 66.40% from the year 2018, due to effective management of production cost control and material procurement control continuing from the year 2018. In addition, material costs declined due to the appreciation of Thai Baht currency, causing material prices to decrease.

In 2019, the Company's net profit from operations amounted to 198.40 million Baht. In 2018, the Company had a loss of 0.12 million Baht, resulting from modifications to strategic plans since 2018. In 2019, the Company established strategic plans in all aspects, including financial strategies, marketing strategies, and management strategies. As a result, the Company has capacity to earn profits and manage finances to create liquidity and also improves work processes to reduce errors that occurred in the past.

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%.

(A) Revenues

The Company's total revenues were 989.05 million Baht, 1,040.45 million Baht, and 1,185.03 million Baht in 2019, 2020, and 2021, respectively. Revenues in 2021 was divided into revenue from transformer sales in the amount of 740.84 million Baht, revenue from electricity sales in the amount of 133.51 million Baht, revenue from service in the amount of 41.63 million Baht, revenue from the sales of solar panels in the amount of 245.58 million Baht, and other revenues in the amount of 23.47 million Baht. Details of revenues from transformer sales can be summarized as follows:

Revenues from Transformer Sales

Type of Customer	Year 2019			Year 2020			Year 2021		
	Million Baht	Proportion (%)	Growth (%)	Million Baht	Proportion (%)	Growth (%)	Million Baht	Proportion (%)	Growth (%)
Government Agencies and State Enterprises	271.52	34.79	49.52	207.15	27.99	(23.71)	115.07	15.53	(44.45)
Distributor	116.27	14.90	(36.06)	128.94	17.43	10.90	110.44	14.91	(14.35)
Private Sector	392.56	50.31	(7.26)	403.84	54.58	2.87	515.33	69.56	27.61
Total Revenue from Sales	780.35	100.00	(0.81)	739.94	100.00	(5.18)	740.84	100	0.12

In 2019, the Company's revenues from sales of transformer were 780.35 million Baht, decreased by 0.81% from the year 2018. Revenues from transformer sales to government agencies and state enterprises increased from 181.59 million Baht in 2018 to 271.52 million Baht in 2019, representing a decrease of 49.52%. This was caused by revenues from government agencies and state enterprises which slowed down their investments in any projects. Revenues from transformer sales to private and export sectors increased from 554.17 million Baht in 2017 to 605.11 million Baht in 2018, representing an increase of 9.19%, as a result from the expansion of policies on investment in infrastructure of government agencies and state enterprises. Revenues from domestic and international sales of transformer in the private and export sectors decreased from 605.11 million Baht in 2018 to 508.83 million Baht in 2019, representing a decrease of 15.91%, as a result from the control of transformer sales to domestic private sector customers with an emphasis on customers' solvency rather than the sales due to the domestic economic recession.

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.

Revenues from Services

The Company's revenues from services during the year 2019 – 2021 amounted to 28.01 million Baht, 42.24 million Baht, and 41.63 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 2021 is considered,

they consist of revenues from transformer repairs in the amount of 23.01 million Baht, accounting for 55.27% of revenues from services, revenues from providing transformer inspection and maintenance services in the amount of 12.38 million Baht, accounting for 29.74% of revenues from services, revenues from transportation in the amount of 0.33 million Baht, accounting for 0.79% of revenues from services, revenues from transformer leases in the amount of 0.29 million Baht, accounting for 0.70% of revenues from services, and revenues from other services in the amount of 5.62 million Baht, accounting for 13.50% 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 2019 – 2021, the Company had other revenues in the amount of 20.88 million Baht, 20.96 million Baht, and 13.04 million Baht, respectively. In 2021, other revenues consisted of revenues from sales of scraps in the amount of 2.67 million Baht, revenues from short-term investments in the amount of 1.80 million Baht, gain on foreign exchange in the amount of 1.61 million Baht, profits from disposal of fixed assets in the amount of 1.39 million Baht, and other revenues in the amount of 5.57 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 2019 – 2021, the Company's total expenses amounted to 777.30 million Baht, 855.30 million Baht, and 1,025.10 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 615.25 million Baht in 2019, 706.47 million Baht in 2020, and 878.37 million Baht in 2021, accounting for 79.15%, 82.60%, and 85.69% 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 63.74%, 69.30% and 74.95% of the revenues from sales and services, respectively, or representing the gross profit margin of 36.25%, 30.70% and 25.05%, 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.
2. In 2019, the proportion of transformer sales to government agencies and state enterprises increased from 23.08% in 2018 to 34.79% in 2019 due to the expansion 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 decreased from 53.81% in 2018 to 50.31% in 2019, causing the gross profit margin to increase from 21.95% in 2018 to 36.25% in 2019.

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.

3. 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 2019, material costs still declined from the year 2018 due to the appreciation of Thai Baht currency, causing the material prices from the domestic and international purchases to be lower. The amount of material and supplies used in 2019 was 418.76 million Baht, decreased from 550.51 million Baht in 2018, or a decrease of 23.93%.

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.

Selling and Administrative Expenses

The Company's selling and administrative expenses were 153.18 million Baht in 2019, 146.50 million Baht in 2020, and 145.47 million Baht in 2021, accounting for 15.53%, 14.08% and 12.28% of the total revenues, respectively.

In 2019, the Company's selling and administrative expenses were 153.18 million Baht, accounting for 21%, decreased from the year 2018, because the Company controlled the selling and administrative expenses and established the policy on loan provision, causing the doubtful accounts of trade receivable in 2019 to decrease. In 2019, there was no provision for allowance for impairment of assets.

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%.

Interest Expenses

During the year 2019 – 2021, the Company interest expenses amounted to 8.87 million Baht, 2.33 million Baht, and 1.26 million Baht, respectively. It can be seen that the interest expenses decreased significantly due to the efficient financial management in 2021, 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 2019 – 2021, the Company had net profit amounting to 198.40 million Baht, net profit amounting to 157.53 million Baht, and net profit amounting to 127.22 million Baht, respectively, accounting for the net profit of 20.12%, 15.14%, and 10.74%, 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 2019, the Company had the net loss of 198.40 million Baht, increased from the year 2018 to 198.52 million Baht. This was because the Company controlled production, selling prices, and loan provision, developed the information system and human resources, and supervise selling and operating expenses by mainly taking into account the economic benefits.

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.

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 2019-2021 were 12.88%, 9.46%, and 7.42%, respectively. The Company's return on equity decreased, when compared with that of the year 2020, because the Company's performance in 2021 had the decreasing net profit. The main reason was the decline in gross profit margins which was the result of the domestic competition in the selling price of transformers. In the meantime, the Company continues focusing on the development of work systems and human resources to achieve effective management. This can be seen from the decrease in the selling and administrative expenses and the finance cost from the year 2020.

2 Financial Position

(A) Assets

As at the end of the year 2019–2021, the Company's total assets amounted to 1,856.37 million Baht, 1,935.66 million Baht, and 1,986.93 million Baht, respectively. The Company's significant assets consist of property, plant, and equipment, trade receivables, inventory, and temporary investments. In 2021, the ratio of such significant assets to total assets were at 72.91%. 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 128.01 million Baht at the end of the year 2019, 187.13 million baht at the end of the year 2020, and 166.43 million baht at the end of the year 2021, representing 7.34%, 10.04% and 8.87% of the total assets (separate financial statements), respectively. At the end of the year 2021, Trade accounts receivable declined from 2020 at a rate of 11.06%. Trade accounts receivable in the "not yet due" period and debt over 12 months have declined from 2020.

The Company still focuses on the debt collection management by strictly complying with the credit policy and adjusting strategies to suit the current economic situations. As a result, the Company had the average collection period of 83.81 days for the year 2019, 66.41 days for the year 2020, and 61.80 days for the year 2021.

Overdue Period	As at December 31, 2019		As at December 31, 2020		As at December 31, 2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Undue	74.67	58.33	145.24	77.61	109.69	65.91
Overdue						
Not exceeding 3 months	9.80	7.66	6.41	3.43	23.64	14.21
3-6 months	-	-	-	-	5.86	3.52
6-12 months	11.72	9.15	6.14	3.28	0.52	0.31
Exceeding 12 months	31.82	24.86	29.34	15.68	26.72	16.06
Trade Receivable Before Allowance for Doubtful Accounts	128.01	100	187.13	100	166.43	100
Less: Allowance for Doubtful Accounts	(32.07)		(32.88)		(23.44)	
Trade Receivable - Net	95.94		154.25		142.99	

According to the above table, the Company's undue trade receivables as at the end of the year 2019–2021 were at the rate of 58.33%, 77.61%, and 65.91% of the trade receivables before allowance for doubtful accounts, respectively. When account receivable aging in each aging range is taken into account, it was found that most trade receivable were in the “undue” aging. The proportion is as high as 65.91% for 2021. which was considered to have a very low risk of bad debts in the future.

As at the end of the year 2019–2021, the Company's ratios of overdue trade receivables for more than 1 year were 24.86%, 15.68% and 16.06% of the trade receivable before allowance for doubtful accounts, respectively. In 2021, overdue trade receivable for more than 1 year accounted for 8.92%, decreased from the year 2020. This was because the Management still paid attention to the collection of outstanding debt for more than 1 year by strictly following up and providing measures on debt acceleration under the legal framework against all debtors with non-performing loans (NPLs). As a result, the Company received debt repayment from the overdue trade receivables for more than 1 year.

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 2021 was set in the amount of 32.88 million Baht and 23.44 million Baht, respectively.

Inventory

At the end of the year 2019 – 2021, the Company's inventory before allowance for deteriorating inventories and diminution in value of inventories dropped by 203.78 million Baht, 173.69 million Baht, and 329.95 million Baht, respectively. The highest number of the component of inventories during the year 2020 – 2021 was finished goods, accounting for 48.40%, 47.67%, and 36.41% 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, 2019		As at December 31, 2020		As at December 31, 2021	
	Million Baht	Percentage	Million Baht	Percentage	Million Baht	Percentage
Materials	82.08	40.28	69.53	40.03	150.32	45.56
Work in Progress	17.72	8.69	21.30	12.26	52.91	16.04
Finished Goods	98.63	48.40	82.80	47.67	120.12	36.41
Goods in Transit	5.35	2.63	0.06	0.03	6.60	2.00
Total Inventory	203.78	100	173.69	100	329.95	100
Less: Allowance for deteriorating inventories and diminution in value of inventories	(5.28)		(7.15)		(7.74)	
Inventory – Net	198.50		166.54		322.21	

The ratios of finished goods to inventory at the end of the year 2019-2021 were 48.40%, 47.67%, and 36.41%, respectively, while the average inventory periods were 119.32 days, 102.15 days, 107.57 days, respectively. It can be seen that the average inventory period in 2021 increased by 5.42 days from the year 2020. This was due to an increase in production raw materials to deliver transformers according to orders received in the 4th quarter of 2021.

In 2021, the Company's inventory before allowance for deteriorating inventories and allowance for diminution in value of inventories were 329.95 million Baht, increased from 173.69 million Baht at the end of the year 2020. Inventory before deducting such allowances consisted of material in the amount of 150.32 million Baht, increased from 69.53 million Baht at the end of the year 2020, accounting for 116.18%, work in progress in the amount of 52.91 million Baht, increased from 21.30 million Baht at the end of the year 2020, accounting for 148.46%, and finished goods in the amount of 120.12 million Baht, increased from 82.80 million Baht at the end of the year 2020, accounting for 45.08%. This is due to the preparation to support orders received in the 4th quarter of 2021, with production and delivery in 2022.

Property, Plant, and Equipment

The Company's net property, plant, and equipment at the end of the year 2019-2021 amounted to 666.01 million Baht, 633.32 million Baht, and 616.75 million Baht, respectively, accounting for a ratio to total assets of 35.88%, 32.72%, and 31.04%, respectively.

In 2019, the Company's net property, plant, and equipment decreased by 23.29 million Baht due to the disposal of vehicle assets and the change of policy for rental instead.

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's net property, plant, and equipment decreased by 16.57 million Baht due to the disposal of some assets and the diminution in value of fixed assets according to the accounting policy.

(B) Liquidity

Cash Flow

In 2019, the Company's net cash flow provided by operating activities amounted to 314.83 million Baht, increased from the year 2018, due to the effective management of trade receivables, resulting in financial liquidity. The Company's net cash flow used in investing activities dropped to 84.97 million Baht and the Company's net cash flow provided by financing activities declined to 202.90 million Baht, causing the Company's cash flow to increase by 25.44 million Baht.

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.

(Unit: Million Baht)	Year 2019	Year 2020	Year 2021
Net cash provided by (used in) operating activities	314.83	317.35	38.36
Net cash provided by (used in) investing activities	(84.97)	(112.30)	224.53
Net cash provided by (used in) financing activities	(202.90)	(196.47)	(69.80)
Increase (Decrease) in Net Cash and Cash Equivalents	25.44	8.08	195.11

Liquidity Ratio

At the end of 2019-2021, the company's liquidity ratios were 5.17 times, 5.28 times, and 5.53 times, respectively, and the quick liquidity ratios were 3.94 times, 4.32 times, and 3.85 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 2021, the inventory turnover rate was 3.39 times, a decrease of 3.58 times from 2020, bringing the turnover time to 107.57 days, while 2020 was 102.15 days.

The Company's cash cycles during the year 2019-2021 were 145.38 days, 101.57 days, and 102.89 days, respectively. The Company's average collection period during the year 2019-2021 were 83.81 days, 66.41 days, and 61.80 days, respectively.

In 2019, the Company's collection period decreased from the year 2018. In 2019, the Company's collection period was 83.81 days while it was 113.02 days in 2018. 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 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.

	Year 2019	Year 2020	Year 2021
Liquidity Ratio (Times)	5.17	5.28	5.53
Quick Ratio (Times)	3.94	4.32	3.85
Average Collection Period (Days)	83.81	66.41	61.80
Average Inventory Period (Days)	119.32	102.15	107.57
Payment Period (Days)	57.75	67	66.47
Cash Cycle (Days)	145.38	101.57	102.89

(C) Sources of Capital

Liabilities

At the end of the year 2019 – 2021, the Company's total liabilities amounted to 217.55 million Baht, 243.48 million Baht, and 250.97 million Baht, respectively. Total liabilities in 2021 increased by 3.08% from the year 2020.

The Company's current liabilities were 199.86, 219.17, and 222.74, respectively. When calculating as the ratio to total liabilities, at the end of the year 2019-2021, it amounted to 91.87%, 90.02, and 88.75%, respectively. Significant current liabilities were trade payables, accounting for 48.31 of the total liabilities at the end of the year 2021. 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 2019, the Company's shareholders' equity amounted to 1,638.83 million Baht, increased by 197.19 million Baht from the end of the year 2018, due to the annual net profit of 198.40 million Baht in 2019.

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.

At the end of the year 2021, the Company's shareholders' equity amounted to 1,735.96 million Baht, increased by 43.77 million Baht from the end of the year 2020, due to the annual net profit of 127.22 million Baht in 2021.

Suitability of Capital Structure

The Company had the debt to equity ratio of 0.41times 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 2019, the debt to equity decreased from the year 2018 because the trade receivables and inventory was managed during the year, resulting in the continuous cash inflows. This created liquidity which resulted in the decrease in short-term loans because there was the cash flow that can be used to repay short-term debts.

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.

4. 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.

5. Audit Fee

In the fiscal year ended December 31, 2021, the Company paid audit fees to the Company's auditor, Grant Thornton Company Limited, in the amount of 1,605,000.00 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	: Mr. Narin Churamongkol, Certified Public Accountant No. 8593 or Miss Kanyanat Sriratchatchaval, Certified Public Accountant No. 6549 or Mr. Somkid Tiattrakul, Certified Public Accountant No. 2785
Company Name	: Grant Thornton Company Limited
Location of Office	: 87/1 All Seasons Place, 18th Floor, Wireless Road, Lumpini, Pathumwan, Bangkok 10330
Telephone	: 0-2205-8222
Facsimile	: 0-2654-3339

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-

คิดถึงโซลาร์ คิดถึง QTC

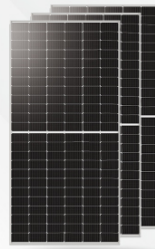
Commercial & Industrial
Residential
Utilities



Huawei Inverter



Huawei Battery
luna 2000



LONGi Longi Solar Panel



Trina Solar Vertex



QUALITY OF DETAILS

คุณภาพแห่งความประณีต

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ติดต่อเพิ่มเติม

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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 2021, the Board of Directors considered and reviewed the implementation of the principles according to the CG Code 2017, which consisted of 8 principles and guidelines, to the Company's business context in order to be consistent with the Stock Exchange of Thailand at the Board of Directors' meeting. 9/2021 held on December 16, 2021, with the following details. However, the corporate governance policy of the Company is available on the website: <https://investor.qtc-energy.com/en/corporate-governance/corporate-governance-policy>, and 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 written 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 April 1, 2021. 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 36 days from March 18, 2021, 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 and dividend payment derived 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 36 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 18, 2021.
- 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 23, 2021. 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 2021, it was published on the website on May 16, 2021.
- 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.

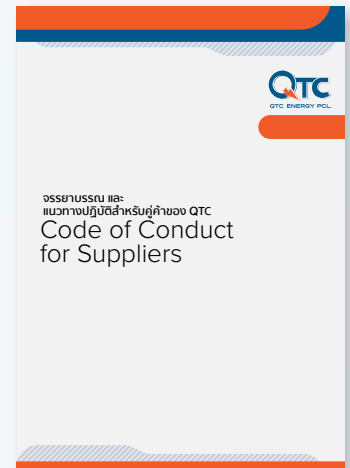
The Company allows shareholders to propose matters to be included in the meeting agendas and nominate persons to be elected as a director at the shareholders' meeting in advance according to the rules set by the Company. Details are published on the Company's website, <http://www.qtc-energy.com>. Such matters shall be submitted to the Company at least 60 days in advance before the date of shareholders' meeting from October 5, 2021 to December 3, 2021.

- In 2021, 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), and Annual 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.
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) and the Annual Report (Form 56-2).
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 2021, such meeting was held once on March 18, 2021.
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
 9. 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.
 10. 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.
 11. 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 2021, the Company provided the orientation to 1 new directors, namely, Mr. Pornthep Panyarachun. The secretary prepared information that the directors were required to be aware of and comply with rules and regulations, including policy on securities trading and Code of Conduct. In addition, both directors also visited the transformer manufacturing factory in Rayong.

- **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 2021, there were directors attending trainings and seminars as follows:

Name-Surname	Training Course	Institute
1. Mr. Ruangchai Kritsnakriengkrai	1. Corruption Risk and Control Workshop (CRC)	IOD
	2. Boardroom for Business Breakthrough (DRP1)	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.

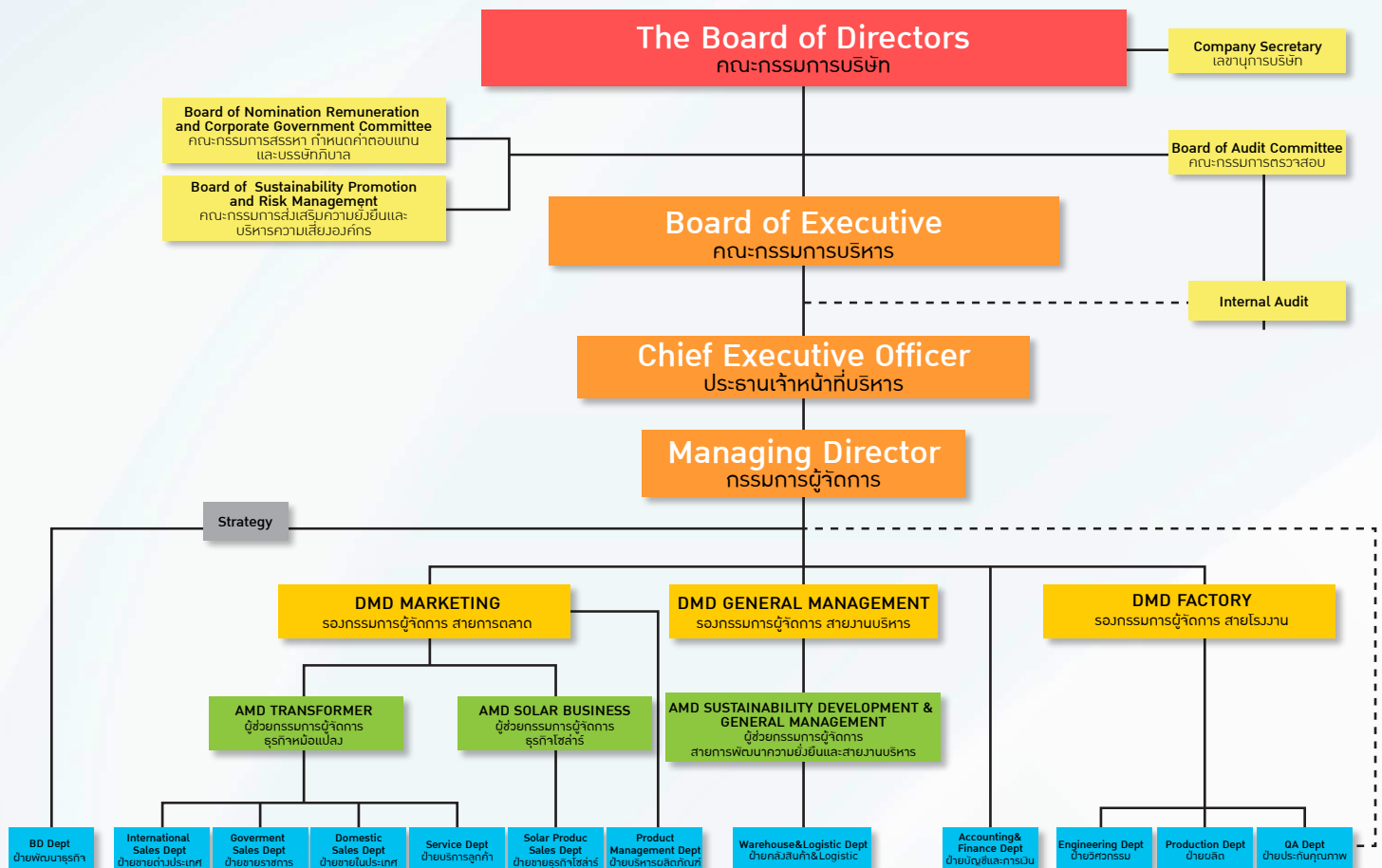
5.3 Stake Holding Reporting

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 2021, 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. 9/2021 on December 16, 2021.

7. Structure of Corporate Governance and Information of Board of Directors

7.1 Structure of Corporate Governance

As at August 1, 2021, 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 currently 12 directors, consisting of 2 executive directors and 10 non-executive directors. 5 of them are independent directors and all of them are independent from the Management and major shareholders of the Company.

Independent directors account for 41.66% 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 12 members as follows:

Name-Surname	Position
1. Mr. Krirk-Krai Jirapaet	Chairman of the Board and Independent Director
2. Mr. Natthaphon Lilawattananun	Independent Director and Chairman of the Audit Committee
3. Mr. Norachit Sinhaseni	Independent Director and Chairman of the Nomination, Remuneration, and Corporate Governance Committee
4. Mrs. Wasara Chotithammarat	Independent Director 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
8. Mr. Phairoj Boonpun	Director
9. Dr. Apichart Sramoon	Director
10. Mr. Pornthep Panyarachun*	Director
11. Mr. Poonphiphat Tantanasin	Director and Member of the Nomination, Remuneration, and Corporate Governance Committee
12. Mr. Ruangchai Kritsnakriengkrai	Director

Remarks: * Mr. Pornthep Panyarachun had been appointed as the Company's director at the 2021 Annual General Meeting of Shareholders, on 23 April 2021.

Miss Pakanat Tungtrakul is the corporate 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. Information of the directors and controlling persons of the Company is shown in Attachment 1.

Scope of Authority and Duties of Board of Directors

- 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.
- The Board of Directors shall organize the annual general meeting of shareholder within 4 months from the end of the Company's accounting period.
- The Board of Directors shall arrange the Board of Directors' meeting at least once every 3 months.
- 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.
- 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.
- 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.

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.

7. 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.
8. The Board of Directors shall constantly monitor performance according to the action plans and budgets.
9. 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.

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.

10. 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	/	/		/	/		/	/	/	/
Mr. Phairoj Boonpun	/			/		/				
Dr. Apichart Sramoon	/		/	/			/		/	
Mr. Norachit Sinhaseni	/			/	/			/		/
Mr. Pornthep Panyarachun	/		/	/	/	/	/	/	/	
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.

Miss Boonnee Kusolsopit 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 it in the Company's Annual Registration Statements (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 businesses
 - 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 annual registration statements (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 consists of

Name-Surname	Position
1. Mr. Norachit Sinhaseni	Chairman of Nomination, Remuneration, and Corporate Governance Committee
2. Dr. Kamol Takabut	Member of Nomination, Remuneration, and Corporate Governance Committee
3. Mr. Poonphiphat Tantanasin	Member of Nomination, Remuneration, and Corporate Governance Committee

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 Annual Registration Statements (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. Kitti Achariyaboonyong	Member of the Committee
4. Mr. Charoensak Sarawong	Member of the Committee
5. Mr. Phot Wongkham	Member of the Committee
6. Mr. Nipat Chingchamikor	Member of the Committee
7. Miss Sureeporn Mitdhammana	Member of the Committee
8. Miss Kobpetch Chuphemporn	Member of the Committee
9. Miss Suanya Noochapun	Member of the Committee
10. Mr. Chanchai Thanawan	Member of the Committee
11. 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. Kittti 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 12 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. Kitti 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
10. Miss Suanya Noochapun	Manager of Domestic Sales Department
11. Mr. Chanchai Thanawan	Manager of Production Department
12. Miss Pakanat Tungtrakul	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	-	Not exceeding 2 million Baht	Not exceeding 3 million Baht	Not exceeding 24 million Baht	Exceeding 24 million Baht
- Purchases of machinery based on investment budgets	-	Not exceeding 2 million Baht	Not exceeding 3 million Baht	Not exceeding 24 million Baht	Exceeding 24 million Baht
- Purchases of other assets	-	Not exceeding 2 million Baht	Not exceeding 3 million Baht	Not 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:

1. 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).
2. 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.
3. 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 2020 and 2021, the Company paid remuneration for executives in the amount of 34.81 million Baht and 36.83 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 2021, the Company paid the contributions to the provident fund for 12 executives in the total amount of 1,172,592 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, 2021, the Company had a total of 247 employees (excluding 12 executives), consisting of 244 regular employees and 3 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	6	-	6
Customer Service Department	22	-	22
Solar Product Sales Department	5	-	5
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	10	-	10
Warehouse & Logistics Department	15	1	16
Human Resources Division	4	-	4
CSR Division	4	-	4
MIS Division	3	-	3
System Development Division	3	-	3
Production Department	125	1	126
Engineering Department	12	-	12
QA Department	13	1	14
Procurement Division	3	-	3
Research & Development and Production Process Division	2	-	2
Security Section	1	-	1
Total	244	3	247

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 = 138 Person	53.7%
With PVD	QTCGP = 1 Person	50%
With PVD	QSolar1 = 5 Person	26.3%

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 247 employees. In 2021, the Company paid remuneration in the amount of 106.81 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 10.50 million Baht.

2021	QTC Energy PCL	QTC Global Power Co., Ltd. and Q Solar 1 Co., Ltd.
Operating Employees (Person)	247	19
Executive Employees (Person)	12	2
Total	259	21
Remuneration for Employees and Executives (Million Baht)	144.81	10.50

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 266,028 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 Tungtrakul to be the company secretary. The qualifications of a person holding the position of company secretary are shown in Attachment 1.

The Company assigned Miss Boonnee Kusolsopit 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 Tuntrakul 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	1,605,000
QTC Global Power Co., Ltd.	470,000
Q Solar 1 Co., Ltd.	380,000

(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, 2020	Number of Ordinary Shares as at Dec 30, 2021	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
Mr. Phairoj Boonpun	Director	No	0	0	0
Dr. Apichart Sramoon	Director	Yes	42,501,000	42,501,000	0
Mr. Norachit Sinhaseni	Director	No	0	0	0
Mr. Pornthep Panyarachun	Director	No	0	0	0
Mr. Poonphiphat Tantanasin	Director / Chief Executive Officer	Direct	598,600	598,600	0
		Indirect (Wife)	602,600	602,600	0
Mr. Ruangchai Kritsnakriengkrai	Director / Managing Director	No	0	0	0
Miss Boonpa Ruddist	Executive	No	0	0	0
Mr. Kitti Achariyaboonyong	Executive	No	0	0	0
Mr. Charoensak Sarawong	Executive	No	0	0	0
Mr. Phot Wongkham	Executive	No	1,000	1,000	0
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 holds 9 meetings in 2021 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 also establish corrective approaches in the case of non-compliance, and supervise the potential risk management, such as the COVID-19 outbreak situation, by planning to accept various risks. All directors have performed their duties based on their own responsibilities with full effort so, in 2021, the Company had profits in the amount of 127.22 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 2021, 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 2021, 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 2021 can be summarized as follows:

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

- Remarks: 1. * Mr. Pornthep Panyarachun had been appointed as the Company's director at the 2021 Annual General Meeting of Shareholders, on 23 April 2021.
2. Directors who are unable to attend the meeting due to other errands

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 12 directors; two of them are executive directors, five of them are non-executive directors, and five of them are independent directors, accounting for more than 41.66% 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 2021	Next Appointment
1. Mr. Krirk-Krai Jirapaet	2016	2021	Independent Director	Yes	2024
2. Mr. Natthaphon Lilawattananun	2011	2021	Independent Director	Yes	2024
3. Dr. Kamol Takabut	2016	2019	Independent Director	No	2022
4. Mrs. Wasara Chotihammarat	2016	2021	Independent Director	Yes	2024
5. Mr. Suroj Lamsam	2017	2020	Director	No	2023
6. Mr. Preedee Ngamsantikul	2019	2019	Director	No	2022
7. Mr. Phairoj Boonpun	2019	2019	Director	No	2022
8. Mr. Norachit Sinhaseni	2020	2020	Independent Director	No	2023
9. Dr. Apichart Sramoon	2020	2020	Director	No	2023
10. Mr. Pornthep Panyarachun	2021	2021	Director	Yes	2024
11. Mr. Poonphiphat Tantanasin	2011	2019	Executive Director	No	2022
12. Mr. Ruangchai Kritsnakriengkrai	2016	2020	Executive Director	No	2023

Remarks: -

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

1. Remuneration for Directors

Monetary Remuneration

At the 2021 Annual General Meeting of Shareholders held on April 23, 2021, a resolution was passed on the determination of the directors' remuneration for the year 2021 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 5,936,842 Baht with the following details:

Name-Surname	Position	Total Meeting Allowances in 2021			Total Monthly Remuneration	Annual Remuneration in 2021	Total Amount Paid (Baht)
		Director	Member of Audit Committee	Member of Nomination Committee			
1. Mr. Krirk-krai Jirapaet	Chairman of the Board of Director	160,000	-	-	300,000	1,136,842	1,596,842
2. Mr. Natthaphon Lilawatthananon	Chairman of Audit Committee/ Director	120,000	75,000	-	240,000	568,421	1,003,421
3. Mr. Norachit Sinhaseni	Chairman of Nomination Committee/ Director	120,000	-	45,000	240,000	568,421	973,421
4. Dr. Kamol Takabut	Director/Nomination Committee/ Audit Committee	120,000	50,000	30,000	240,000	568,421	1,008,421
5. Mrs. Wasara Chotithammarat	Director/Audit Committee	120,000	50,000	-	240,000	568,421	978,421
6. Mr. Suroj Lamsam	Director	105,000	-	-	240,000	505,263	850,263
7. Mr. Preedee Ngamsantikul	Director	120,000	-	-	240,000	568,421	928,421
8. Mr. Phairoj Boonpun	Director	120,000	-	-	240,000	568,421	928,421
9. Dr. Aphichat Sramoon	Director	120,000	-	-	240,000	568,421	928,421
10. Mr. Pornthep Panyarachun*	Director	75,000	-	-	165,333	315,789	556,122
11. Mr. Poonphiphat Tantanasin	Director/Nomination Committee	120,000	-	30,000	-	-	150,000
12. Mr. Ruangchai Kritsnakriengkrai	Director	120,000	-	-	-	-	120,000
Total		1,420,000	175,000	105,000	2,385,333	5,936,842	10,022,174

Remarks: 1. * Mr. Pornthep Panyarachun had been appointed as the Company's director at the 2021 Annual General Meeting of Shareholders, on 23 April 2021.

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:

- 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 560 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.
- 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 2021, 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 2021, 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 2021, the Company's 2021 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 2021 with the overall average score of 96%, which was the excellent CG Scoring for the 7th 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 2021, 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 16, 2021.

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.

3. Policy on Anti-Corruption

The Board of Directors passes the resolution to approve the Anti-Corruption Policy and reviews it annually. In 2021, the resolution was approved on December 16, 2021. 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, 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, Bangkapi, 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. 1/2021 on February 11, 2021 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 not established its own internal audit department, therefore, at the Audit Committee's Meeting No. 5/2019 on December 16, 2019, BK IA & IC Company Limited was appointed to audit the internal control system of the Company for the year 2021. 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 BK IA & IC Company Limited and Boonnee Kusolsopit charity 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 for 24 years.

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	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 ex-wife and child of Mr. Poonphiphat Tantanasin holds a total of 7.01% of the Company's shares.
Mr. Poonphiphat Tantanasin	Holding the position of Chairman of the Board of Executive and Chief Executive Officer; The ex-wife and child of Mr. Poonphiphat Tantanasin holds a total of 7.01% 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

2 Descriptions of Related Transactions

In 2021 and 2020, 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 2021	Year 2020	
QTC Service Chiang Mai Company Limited ("QTC Chiang Mai") engaging in the business of electrical system service	Sales of Products and Services Trade Receivables	4.72	4.14 1.31	The Company sells transformers and materials that are components of transformers, such as transformer oil, low-voltage terminal tugs, bushing gasket set, etc., and provides services of transformer repair to QTC Service Chiang Mai, which is a distributor of the Company. 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.

(2) Transaction of Selling and Administrative Expenses

Persons with Potential Conflicts	Nature of Transaction	Value of Related Transaction (Million Baht)		Necessity and Rationale of Transaction
		Year2021	Year 2020	
QTC Service Chiang Mai Company Limited ("QTC Chiang Mai") engaging in the business of electrical system service	Purchase of Products and Services	0.24	0.21	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.
PPWE Company Limited engaging in the business of investment in energy business	Interest received	0.59	0.60	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.
	Other receivables	-	0.45	
	Short-term loan	-	10.90	
QTC Global Power Company Limited engaging in the business of investment in renewable energy business	Other receivables	0.21	1.73	The company charges administrative expenses from QTC Global Power Company Limited.
	Administrative expenses	0.49	0.52	

In 2021, 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.

ระบบ

SMART TRANSFORMER

Monitoring System

ระบบอัจฉริยะที่ติดตามการทำงานของหม้อแปลง
ด้วยระบบ sensor ที่ติดตามตัวแปรสำคัญ



SMART BOX

ระบบส่งต่อข้อมูลตัวแปรผ่าน

3G และ 4G

ทำให้ผู้ดูแลรักษาสามารถดูข้อมูล
ได้ตลอด 24 ชั่วโมง





Financial Reports 2021

Independent Auditor's Report

To the Shareholders of QTC Energy Public Company Limited

Opinion

I have audited the consolidated and separate financial statements of QTC Energy Public Company Limited and its subsidiaries (the "Group"), which comprise the consolidated and separate statement of financial position as at 31 December 2021, and the consolidated and separate statements of profit or loss and other comprehensive income, statement of changes in shareholders' equity and statement of cash flows for the year then ended, and notes to the consolidated and separate financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the consolidated and separate financial position of QTC Energy Public Company Limited and its subsidiaries as at 31 December 2021, and the consolidated and separate financial performance and its consolidated and separate 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 consolidated and separate Financial Statements section of my report. I am independent of the Group in accordance with the Federation of Accounting Professions' Code of Ethics for Professional Accountants that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key audit matters

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

Key audit matter	How the matter was addressed in the audit
<p><i>Impairment of investments in subsidiary and associated companies</i></p> <p>As at 31 December 2021, the Company has investments in subsidiary and associated companies - at cost of Baht 699.99 million and Baht 19.99 million, respectively, and allowance for impairment of investments in subsidiary and associated companies of Baht 125.24 million and Baht 12.64 million, respectively.</p> <p>The impairment test of investments in subsidiary and associated companies require significant judgment and assumption of management with complex consideration, specifically the assumption about the cash flows projection of business and the consideration of discount rate for determining of projected cash flows which may affect by changes in the economic condition, market situation and specific risk of assets.</p> <p>Refer to the notes 11 and 12 to financial statements and significant accounting policies.</p>	<p>I assessed the reasonableness of assumptions and methodology that management applied to estimate expected future cash flows by comparing with current and historical operations.</p> <p>I discussed with management for the basis of assumptions used and future business plan, including reviewing underlying supporting documentation.</p> <p>I evaluated the reasonableness of the discount rate applied to calculate future cash flows and tested calculation for recoverable amount from the investments.</p> <p>I verified the mathematical accuracy of the model and inspecting inputs with supporting documents.</p> <p>I also considered the adequacy and appropriateness of disclosures in the notes to financial statements.</p>

Other matter

The consolidated and separate statements of financial position of QTC Energy Public Company Limited and subsidiaries for the year ended 31 December 2020, presented as comparative information, were audited by another auditor who used to be in the same office as mine who issued his audit report dated 11 February 2021 and expressed an unmodified opinion with emphasis of matter about the change in accounting policy during the year for the recognition of allowance for impairment loss of trade accounts receivable in accordance with TFRS 9 from the adoption date.

Other Information

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

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

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

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

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

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

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's 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 Consolidated and Separate Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 consolidated and separate financial statements.

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

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

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

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



Ms. Kanyanat Sriratchatchaval
Certified Public Accountant
Registration No. 6549

Grant Thornton Limited
Bangkok
10 February 2022

Statements of Financial Position

(Unit : Baht)

		Consolidated F/S		Separate F/S	
	Notes	31 December 2021	31 December 2020	31 December 2021	31 December 2020
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	5	347,430,673	152,317,224	215,053,291	76,248,261
Temporary investments	6	350,000,000	613,202,223	200,000,000	468,411,092
Trade accounts receivable and contract assets					
- general customers - net	7	159,535,895	179,677,523	142,995,435	152,942,222
- related company	7, 8	-	1,308,610	-	1,308,610
Other accounts receivable - general customers		602,998	643,735	10,155	42,390
- related companies	8	-	451,678	209,764	2,177,992
Inventories - net	9	322,207,874	166,541,370	322,207,874	166,543,843
Refundable value added tax		36,221,996	20,625,530	33,316,189	17,798,539
Prepaid expenses		4,235,240	6,313,748	4,215,114	6,281,106
Other current assets		11,780,224	15,058,900	11,296,528	14,655,274
Total current assets		1,232,014,900	1,156,140,541	929,304,350	906,409,329
NON-CURRENT ASSETS					
Restricted deposit with bank	10	101,244	100,994	-	-
Investments in					
- subsidiary companies - net	11	-	-	574,755,513	583,993,909
- associated company - net	12	7,359,458	-	7,359,458	-
Loans to related company - net	8	-	-	-	-
Property, plant and equipment - net	14	616,746,081	633,321,682	325,666,024	327,767,248
Right-of-use asset - net	15	11,842,282	13,111,129	11,842,282	13,111,129
Computer software - net	16	5,522,735	5,961,075	5,513,883	5,943,642
Interconnection charge - net	17	3,267,137	3,596,283	-	-
Power purchase agreement - net	18	83,643,905	92,057,100	-	-
Deferred income tax asset	19	13,937,901	17,320,571	10,019,737	13,915,338
Other non-current assets		12,496,994	14,053,229	10,944,763	12,830,756
Total non-current assets		754,917,737	779,522,063	946,101,660	957,562,022
TOTAL ASSETS		1,986,932,637	1,935,662,604	1,875,406,010	1,863,971,351

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

Statements of Financial Position (Continue)

(Unit : Baht)

		Consolidated F/S		Separate F/S	
	Notes	31 December 2021	31 December 2020	31 December 2021	31 December 2020
LIABILITIES AND SHAREHOLDERS' EQUITY					
CURRENT LIABILITIES					
Trade accounts payable		121,243,296	104,830,804	121,243,296	104,830,804
Other accounts payable - general suppliers		19,934,002	12,212,469	19,469,898	11,742,946
Other accounts payable - related company	8	44,000	357,004	44,000	357,004
Current portion of :					
- Lease liabilities	15	3,782,758	4,191,760	3,782,758	4,141,907
- Liabilities under employee benefits obligation	8, 21	168,322	1,213,473	168,322	1,213,473
Accrued income tax		12,293,787	14,192,748	7,730,950	9,777,131
Accrued expenses	20	18,451,723	18,077,696	17,543,550	17,034,795
Advance from customers		14,987,554	42,235,801	14,987,554	42,235,801
Other current liabilities	25	31,837,783	21,861,446	30,142,819	20,298,379
Total current liabilities		222,743,225	219,173,201	215,113,147	211,632,240
NON-CURRENT LIABILITIES					
Lease liabilities - net	15	6,454,370	7,587,273	6,454,370	7,587,273
Liabilities under employee benefits obligation - net	8, 21	16,305,691	16,716,824	15,241,651	15,253,447
Other non - current liabilities		5,469,806	-	-	-
Total non-current liabilities		28,229,867	24,304,097	21,696,021	22,840,720
TOTAL LIABILITIES		250,973,092	243,477,298	236,809,168	234,472,960

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

Statements of Financial Position (Continue)

(Unit : Baht)

		Consolidated F/S		Separate F/S	
	Note	31 December 2021	31 December 2020	31 December 2021	31 December 2020
LIABILITIES AND SHAREHOLDERS' EQUITY (Continued)					
SHAREHOLDERS' EQUITY					
Share capital : common share, Baht 1 par value					
Registered 341,092,557 shares		341,092,557	341,092,557	341,092,557	341,092,557
Issued and fully paid-up 341,092,557 shares		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
Premium on common shares from					
business combination		42,294,921	42,294,921	-	-
Retained earnings					
- Appropriated for legal reserve	24	34,109,256	31,780,695	34,109,256	31,780,695
- Unappropriated		181,890,710	141,716,730	126,822,928	120,053,038
Other components of equity		-	(2,877,143)	-	-
Total equity of the Company's shareholders		1,735,959,545	1,690,579,861	1,638,596,842	1,629,498,391
Non-controlling interests		-	1,605,445	-	-
Total shareholders' equity		1,735,959,545	1,692,185,306	1,638,596,842	1,629,498,391
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY					
		1,986,932,637	1,935,662,604	1,875,406,010	1,863,971,351

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

Statements of Profit or Loss and Other Comprehensive Income

For the year ended 31 December

(Unit : Baht)

	Notes	Consolidated F/S		Separate F/S	
		2021	2020	2021	2020
Income from sales and services					
Income from sales		1,130,364,594	977,254,599	996,882,972	830,481,571
Income from services		41,629,647	42,238,199	41,733,247	42,336,099
Total income from sales and services	8, 22, 29	1,171,994,241	1,019,492,798	1,038,616,219	872,817,670
Cost of sales and services					
Cost of sales	9	(854,428,510)	(676,216,781)	(817,763,690)	(635,092,775)
Cost of services		(23,938,399)	(30,250,770)	(23,938,399)	(30,250,770)
Total cost of sales and services	27, 29	(878,366,909)	(706,467,551)	(841,702,089)	(665,343,545)
Gross profit		293,627,332	313,025,247	196,914,130	207,474,125
Gain on dissolution of a subsidiary	11	1,605,445	-	387,443	-
Other income		11,427,069	17,747,071	14,379,213	20,996,010
Dividend income	8, 11	-	-	40,599,998	102,899,996
Profit before expenses		306,659,846	330,772,318	252,280,784	331,370,131
Selling expenses	27	(41,957,858)	(36,446,163)	(41,957,858)	(36,446,163)
Administrative expenses	8, 27	(115,032,487)	(110,363,467)	(100,027,018)	(99,619,684)
Gain (loss) on exchange rate		(3,071,986)	3,210,315	(3,071,986)	3,204,087
Allowance for impairment of investment in associated company	12	-	-	(12,140,542)	-
Reversal of allowance for impairment loss of financial assets	7, 8	14,592,715	304,996	14,592,715	304,996
Total expenses		(145,469,616)	(143,294,319)	(142,604,689)	(132,556,764)
Profit before finance costs and income tax		161,190,230	187,477,999	109,676,095	198,813,367
Finance costs	29	(1,259,020)	(2,330,222)	(1,223,352)	(2,028,966)
Profit from operations		159,931,210	185,147,777	108,452,743	196,784,401
Share of loss from investments in associated company	12	(12,140,542)	-	-	-
Profit before income tax		147,790,668	185,147,777	108,452,743	196,784,401
Income tax	19	(20,573,173)	(27,438,308)	(14,206,128)	(18,650,521)
Profit before discontinuing operations		127,217,495	157,709,469	94,246,615	178,133,880
Loss from discontinued operations	13, 29	-	(176,423)	-	-
Profit for the year		127,217,495	157,533,046	94,246,615	178,133,880
Other comprehensive income					
Item that will be reclassified subsequently to profit or loss					
Translation adjustments for foreign currency					
financial statement - net of income tax	19	2,877,143	(395,664)	-	-
Item that will not be reclassified subsequently to profit or loss					
Actuarial gain - net of income tax					
	19	433,210	543,504	-	543,504
Other comprehensive income for the year - net of income tax		3,310,353	147,840	-	543,504
Total comprehensive income for the year		130,527,848	157,680,886	94,246,615	178,677,384

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

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

For the year ended 31 December

		(Unit : Baht)			
Note	Consolidated F/S		Separate F/S		
	2021	2020	2021	2020	
Profit (loss) attributable to:					
Portion of the Company's shareholders	127,217,495	157,559,509	94,246,615	178,133,880	
Portion of non-controlling interests in subsidiaries	-	(26,463)	-	-	
	<u>127,217,495</u>	<u>157,533,046</u>	<u>94,246,615</u>	<u>178,133,880</u>	
Comprehensive income attributable to:					
Portion of the Company's shareholders	130,527,848	157,766,699	94,246,615	178,677,384	
Portion of non-controlling interests in subsidiaries	-	(85,813)	-	-	
	<u>130,527,848</u>	<u>157,680,886</u>	<u>94,246,615</u>	<u>178,677,384</u>	
Basic earnings per share					
	23				
Profit of the Company's shareholders (Baht per share)	0.373	0.462	0.276	0.522	
Weighted average number of common shares (share)	<u>341,092,557</u>	<u>341,092,557</u>	<u>341,092,557</u>	<u>341,092,557</u>	

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

Statements Of Changes In Shareholders' Equity

For the year ended 31 December

Shareholders' equity of the Company										(Unit : Baht)	
	Notes	Issued and fully paid-up share capital	Premium on common shares	Premium on common shares from business combination	Retained earnings		Other components of equity		Total	Non-controlling interests' equity	Total shareholders' equity
					Legal reserve	Unappropriated	Translation adjustments for foreign currency financial statement				
Consolidated F/S											
Balance as at 1 January 2020											
	24	341,092,557	1,136,572,101	42,294,921	22,874,001	94,697,518	(2,540,829)		1,634,990,269	1,691,258	1,636,681,527
		-	-	-	8,906,694	(8,906,694)	-		-	-	-
	25	-	-	-	-	(102,177,107)	-		(102,177,107)	-	(102,177,107)
Transactions with shareholders											
		-	-	-	8,906,694	(111,083,801)	-		(102,177,107)	-	(102,177,107)
		-	-	-	-	157,559,509	-		157,559,509	(26,463)	157,533,046
		-	-	-	-	543,504	(336,314)		207,190	(59,350)	147,840
Total comprehensive income for the year											
		-	-	-	-	158,103,013	(336,314)		157,766,699	(85,813)	157,680,886
Balance as at 31 December 2020											
		341,092,557	1,136,572,101	42,294,921	31,780,695	141,716,730	(2,877,143)		1,690,579,861	1,605,445	1,692,185,306
Balance as at 1 January 2021											
		341,092,557	1,136,572,101	42,294,921	31,780,695	141,716,730	(2,877,143)		1,690,579,861	1,605,445	1,692,185,306
Dissolution of a subsidiary company											
	24	-	-	-	-	-	-		-	(1,605,445)	(1,605,445)
Appropriated for legal reserve											
	25	-	-	-	2,328,561	(2,328,561)	-		-	-	-
Dividend payment											
		-	-	-	-	(85,148,164)	-		(85,148,164)	-	(85,148,164)
Transactions with shareholders											
		-	-	-	2,328,561	(87,476,725)	-		(85,148,164)	(1,605,445)	(86,753,609)
Profit for the year											
		-	-	-	-	127,217,495	-		127,217,495	-	127,217,495
Other comprehensive income for the year											
		-	-	-	-	433,210	2,877,143		3,310,353	-	3,310,353
Total comprehensive income for the year											
		-	-	-	-	127,650,705	2,877,143		130,527,848	-	130,527,848
Balance as at 31 December 2021											
		341,092,557	1,136,572,101	42,294,921	34,109,286	181,890,710	-		1,735,959,545	-	1,735,959,545

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

Statements Of Changes In Shareholders' Equity

For the year ended 31 December

	Notes	Issued and fully paid-up share capital	Premium on common shares	Retained earnings		(Unit : Baht)
				Legal reserve	Unappropriated	
Separate F/S						Total
Balance as at 1 January 2020		341,092,557	1,136,572,101	22,874,001	52,459,455	1,552,998,114
Appropriated for legal reserve	24	-	-	8,906,694	(8,906,694)	-
Dividend payment	25	-	-	-	(102,177,107)	(102,177,107)
Transactions with shareholders				8,906,694	(111,083,801)	(102,177,107)
Profit for the year		-	-	-	178,133,880	178,133,880
Other comprehensive income for the year		-	-	-	543,504	543,504
Total comprehensive income for the year		-	-	-	178,677,384	178,677,384
Balance as at 31 December 2020		341,092,557	1,136,572,101	31,780,695	120,053,038	1,629,498,391
Balance as at 1 January 2021		341,092,557	1,136,572,101	31,780,695	120,053,038	1,629,498,391
Appropriated for legal reserve	24	-	-	2,328,561	(2,328,561)	-
Dividend payment	25	-	-	-	(85,148,164)	(85,148,164)
Transactions with shareholders				2,328,561	(87,476,725)	(85,148,164)
Profit for the year		-	-	-	94,246,615	94,246,615
Total comprehensive income for the year		-	-	-	94,246,615	94,246,615
Balance as at 31 December 2021		341,092,557	1,136,572,101	34,109,256	126,822,928	1,638,596,842

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

Statements of Cash Flows

For the year ended 31 December

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Cash flows from operating activities				
Profit before income tax	147,790,668	184,971,354	108,452,743	196,784,401
Adjustments to reconcile profit before income tax to net cash provided from (used in) operating activities				
Depreciation and amortization	82,157,744	81,154,601	52,212,684	51,118,950
Reversal of allowance for impairment losses of trade accounts receivable	(3,692,715)	(204,996)	(3,692,715)	(204,996)
Gain on disposal of fixed assets	(1,388,850)	(1,234,815)	(769,306)	(1,227,293)
Write-off of fixed assets	-	477,288	-	477,213
Allowance for obsolete and decline value of inventories	595,309	1,864,212	595,309	1,864,212
Loss from disposal and written off of intangible assets	992,467	22,385	992,467	-
Unrealized loss from exchange rate	536,585	23,220	536,585	23,220
Gain on disposal of temporary investments	(1,799,295)	(1,969,766)	(1,291,978)	(1,909,114)
Gain on change in fair value of investment	-	(1,253,129)	-	(447,944)
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 company	(1,605,445)	-	(387,443)	-
Allowance for impairment of investment in associated company	-	-	12,140,542	-
Share of loss from investments in associated company	12,140,542	-	-	-
Reversal of allowance for impairment of loan to associated company	(10,900,000)	(100,000)	(10,900,000)	(100,000)
Provision for employee benefits obligation	1,533,019	1,669,949	1,420,714	1,416,572
Dividend income	-	-	(40,599,998)	(102,899,996)
Interest expense	1,259,020	2,330,222	1,223,352	2,028,966
Cash provide from operations before changes in operating assets and liabilities	227,749,584	267,750,525	120,063,491	146,924,191
Decrease (increase) in operating assets				
Trade accounts receivable and contract assets - general customers	23,754,833	(59,138,714)	13,559,992	(60,516,632)
- related company	1,308,610	(261,807)	1,308,610	(261,807)
Other account receivable - general customers	40,737	292,515	32,235	(31,325)
- related companies	451,678	(247,801)	1,968,228	117,947
Inventories	(156,261,813)	30,095,421	(156,259,340)	30,092,948
Refundable value added tax	(15,596,466)	5,911,231	(15,517,650)	5,971,956
Prepaid expenses	2,078,508	1,687,687	2,065,992	1,692,033
Other current assets	3,397,044	(1,882,560)	3,835,118	(1,835,030)
Other non-current assets	1,556,235	(4,263,959)	1,885,993	(3,203,055)
Increase (decrease) in operating liabilities				
Trade accounts payable	15,955,416	60,977,697	15,955,416	61,077,695
Other accounts payable - general suppliers	(6,698,261)	5,123,196	(6,692,842)	4,951,794
- related company	(313,004)	335,871	(313,004)	335,871
Accrued expenses	374,027	(2,742,358)	508,755	(2,865,076)
Advances from customers	(27,248,247)	33,129,703	(27,248,247)	33,129,703
Other current liabilities	(10,118,227)	(447,373)	(10,250,124)	(48,148)
Paid for employee benefits	(2,789,867)	-	(2,789,867)	-
Cash provided from (used in) operations	57,640,787	336,319,274	(57,887,244)	215,533,065
Interest payment	(916,943)	(2,001,476)	(911,146)	(1,743,000)
Income tax payment	(18,360,758)	(16,966,458)	(12,356,708)	(11,875,848)
Net cash provide from (used in) operations activities	38,363,086	317,351,340	(71,155,098)	201,914,217

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

Statements of Cash Flows (Continue)

For the year ended 31 December

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Cash flows from investing activities				
Decrease (increase) in restricted cash deposits	(250)	21,496,814	-	-
Increase in temporary investment	(103,000,000)	(270,500,000)	(43,000,000)	(216,000,000)
Proceeds from sale of temporary investment	368,001,518	178,000,000	312,703,070	131,000,000
Increase in investments in associated company	(19,500,000)	-	(19,500,000)	-
Proceeds from dissolution of subsidiary	-	-	9,238,396	-
Decrease in loan to related company	10,900,000	100,000	10,900,000	100,000
Proceeds from sales of fixed assets	1,761,789	1,245,642	920,762	1,232,804
Purchases of assets	(30,933,415)	(39,627,082)	(29,457,493)	(36,928,035)
Purchases of computer software	(2,695,567)	(3,014,785)	(2,695,567)	(3,014,785)
Proceeds from dividend	-	-	40,599,998	102,899,996
Net cash provided from (used in) investing activities	224,534,075	(112,299,411)	279,709,166	(20,710,020)
Cash flows from financing activities				
Decrease in short-term loan from banks	-	(77,044,947)	-	(77,044,947)
Repayment of long-term loans from banks	-	(24,299,346)	-	(1,739,346)
Repayment of liabilities under lease agreement	(4,745,291)	(3,973,505)	(4,695,438)	(3,779,377)
Dividend payment	(65,053,600)	(91,157,155)	(65,053,600)	(91,157,155)
Net cash used in financing activities	(69,798,891)	(196,474,953)	(69,749,038)	(173,720,825)
Transtation adjustments for foreign currency				
financial statement	2,015,179	(494,580)	-	-
Net increase in cash and cash equivalents	195,113,449	8,082,396	138,805,030	7,483,372
Cash and cash equivalents at beginning of year	152,317,224	144,234,828	76,248,261	68,764,889
Cash and cash equivalents at end of year	347,430,673	152,317,224	215,053,291	76,248,261
Supplemental cash flows information				
Non cash transactions :				
Accrued dividend	20,094,564	11,019,952	20,094,564	11,019,952
Recognition of right-of-use asset and liability under lease agreement	3,783,357	12,250,984	3,783,357	12,250,984
Accounts payable from purchases of assets	14,419,794	-	14,419,794	-
Provision for decommissioning of assets	5,469,806	-	-	-

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

Note to Financial Statements

As at 31 December 2021 and 2020

1. GENERAL INFORMATION

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

The Company was listed on “MAI” of the Stock Exchange of Thailand (SET) on 28 July 2011 and has changed its securities from the Market for Alternative Investment (MAI) to trade in the Stock Exchange of Thailand (SET) on 29 July 2021 onwards.

As at 31 December 2021 and 2020, the Company’s major shareholders are:

	Percentage	
	2021	2020
Miss Sasikarn Tantanasin	15.92	12.72
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	-

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. 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.

Details of the Company’s subsidiaries are given in Note 11 to financial statement.

2. BASIS OF FINANCIAL STATEMENTS PREPARATION

2.1 Statement of compliance

The accompanying financial statements have been prepared in accordance with Thai Financial Reporting Standards (“TFRS”) issued under the Federation of Accounting Professions and the financial reporting requirements promulgated by the Securities and Exchange Commission under the Securities and Exchange Act. These financial statements are officially prepared in the Thai language. The translation of these financial statements to other languages must be in compliance with the official report in Thai.

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

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires management to use of certain critical accounting estimates and to exercise judgement in the process of applying the Group’s accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4 to financial statement.

2.2 Principles of consolidation

The consolidated financial statements include the financial statements of QTC Energy Public Company Limited and subsidiaries which the Company can exercise control or holding the voting shares more than 50 percentage of total voting shares as follows:

Subsidiaries	Country of Incorporation	Percentage of share held by the Company		Type of business
		2021	2020	
Direct subsidiaries				
QTC – Panco Co., Ltd.	Laos	-	85.00	Distributing of electric transformer
QTC Global Power Co., Ltd.	Thailand	99.99	99.99	Investing in renewable energy
Indirect subsidiaries				
Q Solar 1 Co., Ltd.	Thailand	100.00	100.00	Solar power plant
QTC Marketing Co., Ltd.	Thailand	100.00	-	Dealer distributing of electric transformer

Significant inter - company transactions with subsidiaries and indirect subsidiaries included in the consolidated financial statements have been eliminated.

The consolidated financial statements have been prepared using the same accounting policies for similar transactions or accounts of similar nature in the preparation of the Company's financial statements.

Significant changes during the year 2021 are as follows:

- QTC – Panco Co., Ltd. (“Subsidiary”) registered its dissolution with the Ministry of Industry and Commerce of the Lao People's Democratic Republic of Lao (PDR) on 5 June 2020. Subsequently, the subsidiary has completed the process of liquidation on 26 January 2021.
- The Company invested in QTC Marketing Co., Ltd., which is principally engaged in distribution of electricity transformers. The Company has investment portion of 100% and paid-up registered capital of Baht 2 million.

Subsidiary company

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

2.3 New and revised financial reporting standards, interpretations and guidance effective for the annual accounting period beginning on 1 January 2021

2.3.1 Thai Accounting Standard No.1 “Presentation of financial statements” and Thai Accounting Standard No. 8 “Accounting policies, Changes in Accounting Estimates and Errors”

The amendment definition of “Materiality” to comply with the Financial Reporting Standards and frameworks. Including the explanation that clarified the materiality application to Thai Financial Reporting Standard No.1. The amendment also makes consequential amendments to other TFRS including TAS 8, TAS 10, TAS 34 and TAS 37.

2.3.2 Thai Financial Reporting Standard No.3 “Business combinations”

This standard was amended to provide more consideration as follow;

- Provide an option for the entity to use “Concentration Test” that allows a simplified assessment of purchase whether it is considered as purchase of assets or business combination.
- Amend the definition of the term “Business” to define the business combination to include, at a minimum, an input and a substantive process that are collectively significant contribution to the ability to create outputs. Furthermore, amendment definition of “Outputs” which focusing on goods and services provided to customers and removing the reference to an ability to lower the costs.

2.3.3 Thai Financial Reporting Standard No.9 “Financial instruments” and Thai Financial Reporting Standard No.7 “Disclosure of Financial instruments”

Change in specific hedge accounting requirements for relief the uncertainties arising from impact of interest rate benchmark reform including the effects of changes to contractual cash flow or hedging relationships arising from the replacement of an interest rate benchmark with an alternative benchmark rate such as Interbank offer rates – IBORs. In addition, the amendment requires the entity to provide information of all hedging relationships directly affected by such uncertainty.

2.3.4 The Conceptual Framework for Financial Reporting

The amendment conceptual framework in definition of assets and liabilities and criteria for recognizing assets and liabilities in financial statements. The principles and practices are as following:

- Measurement including factors to be considered when selecting a benchmark basis
- Presentation and disclosure including classification of revenue and expenses in other comprehensive income.
- Derecognition assets and liabilities from financial statements.

In addition, this framework describes responsibilities, conservatism, and measurement uncertainty in preparation of financial reporting. The revised in conceptual framework that effect to revised in others framework including TAS 1, TAS 8, TAS 34, TAS 37, TAS 38, TFRS 2, TFRS 3, TFRS 6, TFRIC 12, TFRIC 19, TFRIC 20, TFRIC 22 and TSIC 32.

2.3.5 Thai Financial Reporting Standard No.16 “Lease”

This standard amends of Covid-19 related rent concessions which permits lessees, as a practical expedient, not to assess whether rent concessions that meet specified conditions are lease modification.

However, the Group has initially applied revised TFRS that are effective for annual periods beginning on or after 1 January 2021 and has not early adopted TFRS which are not yet effective. The application has no material impact on the financial statements.

2.4 Financial Reporting Standards and guidance which effective for the accounting period beginning on or after 1 January 2022

The Federation of Accounting Professions has issued the Notification regarding Thai Financial Reporting Standards that are relevance to the interest rate benchmark (IBOR) reform Phase 2 amendments (Phase 2 amendments). The Phase 2 amendments address issues that might affect financial reporting during the reform of an interest rate benchmark, including the effects of changes to contractual cash flow or hedging relationship arising from the change of interest rate benchmark to alternative benchmark rates. The impact financial reporting standards are as follows:

Financial reporting standard	Name of standard
Thai Financial Reporting Standard 4	Insurance contracts
Thai Financial Reporting Standard 7	Disclosure of financial instruments
Thai Financial Reporting Standard 9	Financial instruments
Thai Financial Reporting Standard 16	Lease
Accounting guidance	Financial instruments and disclosures for insurance business

The significant information are as follows:

- Applying a practical expedient on relief measurement when changing the basis for determining contractual cash flows for financial assets and financial liabilities (including lease liabilities), have to comply with 2 conditions are 1) the changes that are necessary as a direct result of the IBOR reform and 2) the new basis for determining contractual cash flows are considered economically equivalent, will not result in an immediate gain or loss in the statement of profit or loss. TFRS 16 has also been amended to require lessees to use a similar practical expedient when accounting for lease modifications that change the basis for determining future lease payments as a result of the IBOR reform.
- Hedge accounting relief measures will allow most TFRS 9 hedge relationships that are directly affected by the IBOR reform to continue. However, additional ineffectiveness might need to be recorded.

TFRS7 requires addition disclosures as follows:

- The nature and extent of risks arising from the IBOR reform including methods that the entity uses in managing for the transition to alternative benchmark rates.
- The quantitative information related to the financial instruments that have yet transitioning to an alternative benchmark rate as at the end of the reporting period, by separate significant benchmark rates under the IBOR reform.
- The changing to an entity's risk management strategies that the risk arising from financial instruments and transition to alternative benchmark rates.

In addition, the Federation of Accounting Professions has issued the Notification regarding the amendments to Thai Financial Reporting Standards and guidelines on accounting which have been announced in the Royal Gazette on 22 December 2021. Such Thai Financial Reporting Standards and guidelines on accounting are not applicable to the Group.

The Group's management will adopt such TFRSs in the preparation of the Group's financial statements when it becomes effective. The Group's management is in the process to assess the impact of these TFRSs on the financial statements of the Group in the period of initial application.

3. SIGNIFICANT ACCOUNTING POLICIES

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

Foreign currencies

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

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

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

Foreign subsidiary

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

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

Foreign exchange differences are recognized as other comprehensive income and presented in translation adjustments for foreign currency financial statement under shareholder's equity until disposal investment, except to extent that the translation difference is allocated to non-controlling interest.

Cash and cash equivalents

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

Related parties

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

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

Trade accounts receivable and 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.

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 recognized 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 recognizes 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 of 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 categorized 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 recognized 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 recognizes the expected credit loss by taking into account the past experience and anticipating the future. The recognized 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 profit or loss except for derivatives liabilities are measured at fair value through other comprehensive income (FVOCI).

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 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.

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

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 recognize loss from impairment as expense immediately in the profit or loss. The Company recognizes dividend income upon the subsidiary's declaration of the payment.

Investment in associated company

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

Investments in securities

Investments unit are classified as current assets and, stated at fair value. Any resultant gain or loss from changes in fair value recognized in profit or loss.

The fair value of investment unit calculated based on net asset value of investments unit.

Disposal of investments

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

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

Property, plant and equipment

Recognition and measurement

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

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 recognizes 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.

Computer software

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

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.

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.

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 amortized cost with any difference between cost and redemption value being recognised in profit or loss over the period of the borrowings on an effective interest basis.

Trade and other accounts payable

Trade and other accounts payable are stated at cost.

Advances received from customers

Advances received from customers is contract liabilities in respect of performance obligation with customer and presenting as "Advances from customer"

Revenue

Revenue is recognized 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.

Sales of goods and services rendered

Revenue from sales of goods is recognized 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 recognized to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur. Therefore, the amount of revenue recognized is adjusted for estimated returns, which are estimated based on the historical data.

Revenue for rendering of services is recognized over time as the services are provided. The stage of completion is assessed based on cost-to-cost method. 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

Sale of electric not yet been billed to the customer are presented as “Contract assets” in the statement of financial position.

Interest income

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

Finance costs

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

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

Income tax

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

Current income tax

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

Deferred income tax

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

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

Employee benefits

Short-term employment benefits

Salaries, wages, bonuses 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 trusted 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 recognized in other comprehensive income.

Segment reporting

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

Profit or loss from discontinued operations

A discontinued operation is a component of the Group that either has been disposed of, or is classified as held for sale. Profit or loss from discontinued operations comprises the profit or loss after tax of discontinued operations and disposal of assets classified as held for sale.

Basic earnings per share

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

Dividend payment

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

Provision for liabilities and expenses and contingent assets

Provisions for liabilities and expenses are recognized 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 recognized as a separate asset only when the realization is virtually certain

4. 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:

4.1 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 receivable. 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.

4.2 Allowance for obsolete and decline value of inventories

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

4.3 Plant, equipment and computer program

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

4.4 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 facts 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.

4.5 Impairment of investment

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.

4.6 Post–employment benefits

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

4.7 Deferred tax assets

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

4.8 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.

5. CASH AND CASH EQUIVALENTS

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Cash on hand	157,590	78,335	141,502	62,837
Cash at banks - current accounts	250,116,060	36,670,620	155,416,642	26,871,258
Cash at banks - saving accounts	97,157,023	115,568,269	59,495,147	49,314,166
Total	347,430,673	152,317,224	215,053,291	76,248,261

The currency denomination of cash and cash equivalents as at 31 December 2021 and 2020 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
THB	347,339,163	141,586,586	214,961,781	75,928,565
USD	3,310	231,723	3,310	231,723
AUD	88,200	87,973	88,200	87,973
LAK	-	10,410,942	-	-
Total	347,430,673	152,317,224	215,053,291	76,248,261

6. TEMPORARY INVESTMENTS

Movements during the years ended 31 December 2021 and 2020 are as follow:

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Balance as at 1 January	613,202,223	517,479,328	468,411,092	381,054,034
<u>Add</u> Addition investment	103,000,000	270,500,000	43,000,000	216,000,000
<u>Less</u> Cash proceed from disposal	(368,001,518)	(178,000,000)	(312,703,070)	(131,000,000)
<u>Add</u> Gain on disposal	1,799,295	1,969,766	1,291,978	1,909,114
<u>Add</u> Gain from change in fair value of investment	-	1,253,129	-	447,944
Balance as at 31 December	350,000,000	613,202,223	200,000,000	468,411,092

The Group has considered transfer partial temporary investment in the open-end mutual fund to deposit with the bank in saving and current accounts which gives the stable and higher return than the yields received from such open-end mutual funds. During the year 2021, the Group switch out the existing investment unit to others open-end funds which get higher yields.

7. TRADE ACCOUNTS RECEIVABLE AND CONTRACT ASSETS

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
<u>Accounts receivable (billed)</u>				
Other parties	178,879,838	199,186,387	166,432,954	185,826,381
Related parties	-	1,308,610	-	1,308,610
Total	178,879,838	200,494,997	166,432,954	187,134,991
<u>Contract assets (unbilled)</u>				
Other parties	4,093,576	13,375,295	-	-
Total	182,973,414	213,870,292	166,432,954	187,134,991
<u>Less</u> Allowance for impairment loss	(23,437,519)	(32,884,159)	(23,437,519)	(32,884,159)
Net	159,535,895	180,986,133	142,995,435	154,250,832

The outstanding balance of trade accounts receivable and contract asset as at 31 December 2021 and 2020 are classified by ages as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
<u>General customers – net</u>				
Not yet due	126,233,487	171,220,807	109,693,027	144,485,506
Past due :				
Less than 3 months	23,643,801	5,857,622	23,643,801	5,857,622
3 – 6 months	5,855,932	-	5,855,932	-
7 – 12 months	516,986	6,144,643	516,986	6,144,643
Over 12 months	26,723,208	29,338,610	26,723,208	29,338,610
Total	182,973,414	212,561,682	166,432,954	185,826,381
<u>Less Allowance for impairment loss</u>	(23,437,519)	(32,884,159)	(23,437,519)	(32,884,159)
Net	159,535,895	179,677,523	142,995,435	152,942,222
<u>Related companies</u>				
Not yet due	-	756,490	-	756,490
Past due :				
Less than 3 months	-	552,120	-	552,120
Total	-	1,308,610	-	1,308,610

The normal credit term granted by the Group company ranges from 30 days to 90 days. However, some trade accounts receivable which overdue 12 months are under process of the installment payments with the Company.

The currency denomination of trade accounts receivable as at 31 December 2021 and 2020 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
THB	150,568,483	156,120,240	134,028,023	129,384,939
USD	26,897,074	48,422,373	26,897,074	48,422,373
AUD	5,507,857	9,327,679	5,507,857	9,327,679
Total	182,973,414	213,870,292	166,432,954	187,134,991

The Company has movements in allowance for impairment loss for the years ended 31 December 2021 and 2020 are as follow:

	(Unit : Baht)	
	Consolidated and Separate F/S	
	2021	2020
Balance as at 1 January	32,884,159	34,754,844
<u>Less</u> Write-off uncollectible receivable	(5,753,925)	(1,665,689)
<u>Less</u> Reversal of allowance for impairment loss	(3,692,715)	(204,996)
Balance as at 31 December	23,437,519	32,884,159

8. RELATED COMPANIES TRANSACTIONS

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

Relationships with related companies were as follows:

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

The significant business transactions with related parties for the years ended 31 December 2021 and 2020 are as follow:

		(Unit : Baht)			
		Consolidated F/S		Separate F/S	
	Pricing Policy	2021	2020	2021	2020
<u>Income from sale</u>					
Related company	Market prices	4,706,050	4,137,200	4,706,050	4,137,200
Indirect subsidiary company	Market prices	-	-	51,305	514,752
Total		4,706,050	4,137,200	4,757,355	4,651,952

		(Unit : Baht)			
		Consolidated F/S		Separate F/S	
	Pricing Policy	2021	2020	2021	2020
<u>Income from service</u>					
Subsidiary company	Agreed price	-	-	358,878	384,000
Indirect subsidiary company	Agreed price	-	-	4,200,000	4,200,000
Related company	Agreed price	9,346	-	9,346	-
Total		9,346	-	4,568,224	4,584,000
<u>Other Income</u>					
Subsidiary company	Agreed price	-	-	134,400	134,400
Related company	Agreed price	6,000	1,750	6,000	1,750
Total		6,000	1,750	140,400	136,150
<u>Interest income</u>					
Associated company	5.09% - 5.50% per annum	593,085	602,016	593,085	602,016
<u>Dividend income</u>					
Subsidiary company	Board of director meeting's resolution	-	-	40,599,998	102,899,996
<u>Administrative expense</u>					
Related company	Agreed price	237,943	213,746	237,943	213,746
<u>Key management personnel compensation</u>					
Current employment benefits		28,573,319	29,436,920	26,653,319	27,516,920
Post-employment benefits		560,950	526,584	511,972	494,775
Total		29,134,269	29,963,504	27,165,291	28,011,695

Significant balances with related parties as at 31 December 2021 and 2020, are as follows:

		(Unit : Baht)			
		Consolidated F/S		Separate F/S	
		2021	2020	2021	2020
<u>Trade accounts receivable - related company</u>					
Related company		-	1,308,610	-	1,308,610

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
<u>Other accounts receivable - related companies</u>				
Subsidiary company	-	-	209,764	1,726,314
Associated company	-	451,678	-	451,678
Total	-	451,678	209,764	2,177,992
<u>Loans to related company</u>				
Associated company	-	10,900,000	-	10,900,000
<u>Less</u> Allowance for impairment loss for loan to related company	-	(10,900,000)	-	(10,900,000)
Loans to related company - net	-	-	-	-
<u>Other account payable – related company</u>				
Related company	44,000	357,004	44,000	357,004
<u>Key management personnel compensation</u>				
Post-employment benefits - key management	6,544,890	5,011,298	5,617,078	4,772,753

During the year 2021, the Company made additional investment in share capital of associated of Baht 19.50 million. Such associated used some cash received for debt settlement to the Company totaling Baht 12.44 million which the Company has previously recognized full allowance for impairment loss for such loans to associated company. The Company therefore reverses allowance for impairment loss for such transactions and considers to recognize additional allowance for impairment of investment on associated company as disclosed in Note 12.

Movements in loan to related companies for the years ended 31 December 2021 and 2020 are as follows:

	(Unit : Baht)	
	Consolidated and Separate F/S	
	2021	2020
Balance as at 1 January	10,900,000	11,000,000
<u>Add</u> Additional of loan	500,000	-
<u>Less</u> Receive payment of loan	(11,400,000)	(100,000)
Balance as at 31 December	-	10,900,000

The Company has movements in allowance for impairment loss for loan to related companies for the years ended 31 December 2021 and 2020 as follow:

	(Unit : Baht)	
	Consolidated and Separate F/S	
	2021	2020
Balance as at 1 January	10,900,000	11,000,000
Reversal of allowance for impairment loss	(10,900,000)	(100,000)
Balance as at 31 December	-	10,900,000

9. INVENTORIES

	(Unit: Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Raw materials	150,317,602	69,533,889	150,317,602	69,533,889
Work in process	52,914,205	21,296,828	52,914,205	21,296,828
Finished goods	120,115,986	82,795,699	120,115,986	82,798,172
Goods in transit	6,601,566	61,130	6,601,566	61,130
Total	329,949,359	173,687,546	329,949,359	173,690,019
<u>Less</u> Allowance for obsolete and decline value of inventories	(7,741,485)	(7,146,176)	(7,741,485)	(7,146,176)
Inventories – net	322,207,874	166,541,370	322,207,874	166,543,843

The Company has movements in allowance for obsolete and decline value of inventories for the years ended 31 December 2021 and 2020 as follows:

	(Unit : Baht)	
	Consolidated and Separate F/S	
	2021	2020
Balance as at 1 January	7,146,176	5,281,964
<u>Add</u> Allowance for obsolete and decline value of inventories	595,309	1,864,212
Balance as at 31 December	7,741,485	7,146,176

Cost of goods sold which record as expense for the years ended 31 December 2021 and 2020 as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	For the years ended 31 December			
	2021	2020	2021	2020
Cost of goods	853,833,201	674,352,569	817,168,381	633,228,563
Allowance for obsolete and decline value of inventories	595,309	1,864,212	595,309	1,864,212
Total	854,428,510	676,216,781	817,763,690	635,092,775

10. RESTRICTED DEPOSIT AT BANK

As at 31 December 2021 and 2020, the indirect subsidiary's deposit of Baht 0.10 million is restricted for usage from the pledge as collaterals for fuel cards with a bank.

11. INVESTMENTS IN SUBSIDIARIES

	Separate F/S						(Unit: Baht)		
	Paid-up share capital		Percentage of shareholding		Cost method			Dividend income	
	2021	2020	2021	2020	2021	2020		2021	2020
<u>Direct subsidiaries</u>									
QTC – Panco Co., Ltd.	-	21,947,200	-	85.00	-	18,655,120	-	-	
QTC Global Power Co., Ltd.	501,900,000	560,000,000	99.99	99.99	699,999,970	699,999,970	(40,599,998)	(102,899,996)	
Total					<u>699,999,970</u>	<u>718,655,090</u>	<u>(40,599,998)</u>	<u>(102,899,996)</u>	
<u>Less Allowance for impairment of investment in subsidiaries</u>					(125,244,457)	(134,661,181)	-	-	
Net					<u>574,755,513</u>	<u>583,993,909</u>	<u>(40,599,998)</u>	<u>(102,899,996)</u>	

QTC Global Power Co., Ltd (Direct subsidiary)

On 18 March 2021, the Board of Director of QTC Global Power Co., Ltd. approved to reduce the registered share capital of Baht 58.10 million, to reduce its deficit from Baht 560.00 million to Baht 501.90 million, by reducing the par value of the common share from Baht 8.00 par value to Baht 7.17 par value for 70.00 million common shares.

On 8 June 2021, the Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70.00 million common shares at rate of Baht 0.58 per share totalling to Baht 40.60 million. Interim dividend was paid to shareholders on 21 June 2021.

On 9 March 2020, Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70.00 million common shares at rate of Baht 0.67 per share totalling to Baht 46.90 million. Interim dividend was paid to shareholders on 16 March 2020.

On 22 May 2020, Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70.00 million common shares at rate of Baht 0.50 per share totalling to Baht 35.00 million. Interim dividend was paid to shareholders on 27 May 2020.

On 14 August 2020, Board of Director of QTC Global Power Co., Ltd. approved of interim dividend payment to QTC Energy Public Company Limited for 70.00 million common shares at rate of Baht 0.30 per share totalling to Baht 21.00 million. Interim dividend was paid to shareholders on 20 August 2020.

Q Solar 1 Co., Ltd (Indirect subsidiary)

On 28 April 2021, 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 46.00 per share totalling to Baht 101.20 million. Dividend was paid to shareholders on 27 May 2021.

On 3 February 2020, 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 22.72 per share totalling to Baht 50.00 million. Dividend was paid to shareholders on 12 February 2020.

On 5 May 2020, 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 16.82 per share totalling to Baht 37.00 million. Interim dividend was paid to shareholders on 22 May 2020.

On 7 August 2020, 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 10.46 per share totalling to Baht 23.01 million. Interim dividend was paid to shareholders on 13 August 2020.

QTC – Panco Co., Ltd. (Indirect subsidiary)

QTC – Panco Co., Ltd. registered its dissolution with the Ministry of Industry and Commerce of the Lao People's Democratic Republic of Lao (PDR) on 5 June 2020. Subsequently, the subsidiary has completed the process of liquidation on 26 January 2021, and refunds money to Company. The Company therefore, reverses of allowance for impairment in subsidiary of Baht 9.42 million. The Company recognized loss on dissolution of subsidiary of Baht 1.61 million and Baht 0.39 million in the consolidated and separate statement of profit or loss for the year ended 31 December 2021, respectively.

The Company has movement of investment in subsidiaries for the years ended 31 December 2021 and 2020 are as follow:

	(Unit :Baht)	
	Separate F/S	
	2021	2020
Balance as at 1 January	18,655,120	18,655,120
<u>Less</u> Proceeds from dissolution	(9,238,396)	-
<u>Less</u> Decrease from dissolution of a subsidiary company	(9,416,724)	-
Balance as at 31 December	-	18,655,120

The Company has movement in allowance for impairment of investment in subsidiaries for the years ended 31 December 2021 and 2020 are as follow:

	(Unit :Baht)	
	Separate F/S	
	2021	2020
Balance as at 1 January	134,661,181	134,661,181
Reversal of allowance for impairment	(9,416,724)	-
Balance as at 31 December	125,244,457	134,661,181

12. INVESTMENT IN ASSOCIATED COMPANIES

Type of business	Paid-up share capital		Percentage of shareholding		Consolidated F/S		Separate F/S	
	2021		2021		2021		2021	
	2020		2020		2020		2020	
<u>Direct associated company</u>								
PPWE Co., Ltd.	40,000,000	1,000,000	49.98	49.98	7,359,458	-	19,999,800	499,800
Production and distribution of electric power by alternative energy								
<u>Less</u> Allowance for impairment of investment on associated company					-	-	(12,640,342)	(499,800)
Net					7,359,458	-	7,359,458	-

The Company has movement of investment in associated company for the years ended 31 December 2021 and 2020 are as follow:

	Consolidated F/S		Separate F/S	
	2021		2021	
	2020		2020	
Balance as at 1 January	-	-	499,800	499,800
<u>Add</u> Additional investment during the year	19,500,000	-	19,500,000	-
<u>Less</u> Share of loss from associated company during the year	(951,812)	-	-	-
<u>Less</u> Unrecognize loss from associated company	(11,188,730)	-	-	-
Balance as at 31 December	7,359,458	-	19,998,800	499,800

The Company has movement in allowance for impairment of investment in associated in separate financial statement for the years ended 31 December 2021 and 2020 are as follow:

	(Unit : Baht)	
	Separate F/S	
	2021	2020
Balance as at 1 January	499,800	499,800
Allowance for impairment during the year	12,140,542	-
Balance as at 31 December	12,640,342	499,800

On 17 December 2021, the associated company has increased its share capital from Baht 1 million to Baht 40 million in order to invest in the charging station project and repayment loan including accrue interest to the shareholders. The Company made additional investment in share capital of associated company of Baht 19.50 million and also received debt settlement for principal and interest receivable from associated company totalling Baht 12.44 million which the Company had previously recognized full allowance for impairment loss of principal loans. The Company therefore reverses allowance for impairment loss for such transaction and considers recognizing allowance for impairment of investment in associated company during the year of Baht 12.14 million.

A reconciliation of the condensed financial information for the carrying amounts of the investment in associated company are as follows:

	(Unit : Baht)	
	2021	2020
Net assets	14,968,806	(22,386,414)
Proportion of ownership interests held by the Company (%)	49.98	49.98
Net assets by the Company's proportion	7,481,499	(11,188,730)
Other adjustment	(121,961)	11,188,730
Carrying amount of the investment in associated	7,359,458	-

During the year 2021 and 2020, an associated company has no dividend payment.

Unrecognized gain (loss) from associated company

	(Unit : Baht)	
	2021	2020
Unrecognized loss from associated company	-	(291,426)
Cumulative share of loss of associated company	-	(10,897,304)

Significant financial information of the associated company in the aggregate amounts are summarized as follows:

		(Unit : Baht)
	2021	2020
Current assets	15,157,124	447,422
Current liabilities	188,318	1,033,837
Non-current liabilities	-	21,800,000
Loss for the year	1,644,780	583,085

13. ASSETS HELD FOR DISCONTINUED OPERATIONS

As at 10 August 2018, the subsidiary's management resolved to cease its operations and plan for dissolution since it was concluded that business may no longer reach its commercial worthiness. Such subsidiary has registered its dissolution and already liquidated on 26 January 2021 as disclosure in Note 11 to financial statement.

Details of the financial position and operating result of subsidiary company included in the consolidated financial statements for the year ended 31 December 2020 as follows:

	Baht
Assets	
Cash and cash equivalent	10,410,942
Other current asset	6,760
Assets held for discontinued operations	10,417,702
Liability	
Other current liability	220,003
Liability held for discontinued operations	220,003
Operating result of discontinued operations	
Expenses	(176,423)
Loss for the year of discontinued operations	(176,423)

14. PROPERTY, PLANT AND EQUIPMENT

	Consolidated F/S						(Unit : Baht)
	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	
Cost							
1 January 2020	106,089,980	20,293,283	247,268,712	820,066,773	49,785,257	19,929,960	1,276,300,887
Acquisitions	-	466,806	2,440,654	12,287,527	5,103,220	2,519,564	40,754,118
Disposals	-	-	-	(1,029,130)	(2,443,036)	(3,766,208)	(7,238,374)
Transfer in / (out)	-	-	345,838	19,525,743	235,985	-	-
Transfer assets to right-of-use assets	-	-	-	-	-	(9,032,130)	(9,032,130)
31 December 2020	106,089,980	20,760,089	250,055,204	850,850,913	52,681,426	9,651,186	1,300,784,501
Acquisitions	-	641,603	5,794,056	16,579,871	3,818,548	68,487	50,823,015
Disposals	-	-	(704,757)	(767,694)	(1,777,831)	(1,181,647)	(4,431,929)
Transfer in / (out)	-	10,236	5,618,103	20,578,086	33,183	-	-
31 December 2021	106,089,980	21,411,928	260,762,606	887,241,176	54,755,326	8,538,026	1,347,175,587
Accumulated depreciation							
1 January 2020	-	7,095,548	106,789,442	439,018,742	41,786,398	12,692,730	607,382,860
Depreciation for the year	-	683,068	14,647,592	46,703,972	3,685,590	2,616,118	68,336,340
Depreciation for disposals	-	-	-	(907,503)	(2,431,364)	(3,766,197)	(7,105,064)
Cumulative depreciation for assets to right-of-use assets	-	-	-	-	-	(4,060,597)	(4,060,597)
31 December 2020	-	7,778,616	121,437,034	484,815,211	43,040,624	7,482,054	684,553,539
Depreciation for the year	-	692,887	14,891,351	46,887,390	3,877,860	582,776	66,932,264
Depreciation for disposals	-	-	(664,372)	(568,978)	(1,744,236)	(987,991)	(3,965,577)
31 December 2021	-	8,471,503	135,664,013	531,133,623	45,174,248	7,076,839	727,520,226

(Unit : Baht)

Consolidated F/S

	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	Total
Allowance for impairment								
As at 1 January 2021	-	-	-	2,909,280	-	-	-	2,909,280
Decrease	-	-	-	(2,909,280)	-	-	-	(2,909,280)
As at 31 December 2021	-	-	-	-	-	-	-	-
Net book value								
31 December 2020	106,089,980	12,981,473	128,618,170	363,126,422	9,640,802	2,169,132	10,695,703	633,321,682
31 December 2021	106,089,980	12,940,425	125,098,593	353,198,273	9,581,078	1,461,187	8,376,545	616,746,081
Depreciation for the year 2020								
Cost of sales								55,808,470
Administrative expense								12,527,870
Total								68,336,340
Depreciation for the year 2021								
Cost of sales								53,382,689
Administrative expense								13,549,575
Total								66,932,264

The costs amount of the Company's fully depreciated property, plant and equipment that are still in use as at 31 December 2021, amounted to Baht 168.00 million (2020: Baht 161.95 million).

(Unit : Bant)

Separate F/S

	Land	Land improvements	Building and factories	Machinery and factory equipment	Furniture and office equipment	Vehicle	Machinery and equipment under installation	Total
Cost								
1 January 2020	31,089,980	2,744,364	226,115,353	345,641,598	50,911,756	18,950,960	12,851,752	688,305,763
Acquisitions	-	-	2,169,660	12,129,396	3,459,188	2,519,565	17,777,262	38,055,071
Disposals	-	-	-	(1,029,130)	(1,790,745)	(3,766,206)	-	(6,586,081)
Transfer in / (out)	-	-	345,838	19,525,743	235,985	-	(20,107,566)	-
Transfer assets to right-of-use assets	-	-	-	-	-	(9,032,130)	-	(9,032,130)
31 December 2020	31,089,980	2,744,364	228,630,851	376,267,607	52,816,184	8,672,189	10,521,448	710,742,623
Acquisitions	-	589,090	5,794,056	10,644,483	2,970,213	-	23,879,445	43,877,287
Disposals	-	-	(704,757)	(767,694)	(1,272,092)	-	-	(2,744,543)
Transfer in / (out)	-	-	5,618,103	20,578,086	33,183	-	(26,229,372)	-
31 December 2021	31,089,980	3,333,454	239,338,253	406,722,482	54,547,488	8,672,189	8,171,521	75,175,367
Accumulated depreciation								
1 January 2020	-	179,153	92,706,651	199,136,741	41,816,782	12,573,793	-	346,413,120
Depreciation for the year	-	44,537	13,861,129	27,502,408	3,266,504	2,419,782	-	47,094,360
Depreciation for disposals	-	-	-	(907,503)	(1,797,808)	(3,766,197)	-	(6,471,508)
Cumulative depreciation for assets to right-of-use assets	-	-	-	-	-	(4,060,597)	-	(4,060,597)
31 December 2020	-	223,690	106,567,780	225,731,646	43,285,478	7,166,781	-	382,975,375
Depreciation for the year	-	44,417	14,101,224	27,683,825	3,388,373	520,286	-	45,738,125
Depreciation for disposals	-	-	(664,372)	(568,978)	(1,270,807)	-	-	(2,504,157)
31 December 2021	-	268,107	120,004,632	252,846,493	45,403,044	7,687,067	-	426,209,343

(Unit : Baht)

Separate F/S

	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 2020	31,089,980	2,520,674	122,063,071	150,535,961	9,530,706	1,505,408	10,521,448	327,767,248
31 December 2021	31,089,980	3,065,347	119,333,621	153,875,989	9,144,444	985,122	8,171,521	325,666,024
Depreciation for the year 2020								
Cost of sales								32,848,639
Administrative expense								14,245,721
Total								47,094,360
Depreciation for the year 2021								
Cost of sales								32,497,410
Administrative expense								13,240,715
Total								45,738,125

The costs amount of the Company's fully depreciated property, plant and equipment that are still in use as at 31 December 2021, amounted to Baht 163.67 million (2020 : Baht 157.35 million).

Changes in property, plant and equipment paid by cash during the year ended 31 December 2021 and 2020 are detailed as follows:

	(Unit: Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Purchases of assets	50,823,015	39,627,082	43,877,287	36,928,035
Changes in payables for purchases of assets	(14,419,794)	-	(14,419,794)	-
Provision for decommissioning of asset	(5,469,806)	-	-	-
Paid by cash	30,933,415	39,627,082	29,457,493	36,928,035

15. LEASE

15.1 Right-of-use-assets

	(Unit: Baht)		
	Consolidated F/S and Separate F/S		
	Land	Vehicles	Total
<u>Cost</u>			
As at 1 January 2020	702,970	17,516,523	18,219,493
Addition	-	1,459,371	1,459,371
As at 31 December 2020	702,970	18,975,894	19,678,864
Addition	-	3,783,357	3,783,357
Less from changes in lease agreements	-	(3,077,118)	(3,077,118)
As at 31 December 2021	702,970	19,682,133	20,385,103
<u>Accumulated depreciation</u>			
As at 1 January 2020	-	(4,060,597)	(4,060,597)
Amortization / depreciation for year (administrative expenses)	(325,680)	(2,181,458)	(2,507,138)
As at 31 December 2020	(325,680)	(6,242,055)	(6,567,735)
Amortization / depreciation for year (administrative expenses)	(324,790)	(4,016,909)	(4,341,699)
Less from changes in lease agreements	-	2,366,613	2,366,613
As at 31 December 2021	(650,470)	(7,892,351)	(8,542,821)

	(Unit: Baht)		
	Consolidated F/S and Separate F/S		
	Land	Vehicles	Total
Net book value			
As at 31 December 2020	377,290	12,733,839	13,111,129
As at 31 December 2021	52,500	11,789,782	11,842,282

15.2 Lease liabilities

	(Unit: Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Current portion of lease liabilities				
- Not over 1 year	3,984,186	4,436,971	3,984,186	4,386,766
- Over 1 year but not over 5 years	6,621,970	7,797,374	6,621,970	7,797,374
Total	10,606,156	12,234,345	10,606,156	12,184,140
<u>Less</u> Deferred interest	(369,028)	(455,312)	(369,028)	(454,960)
	10,237,128	11,779,033	10,237,128	11,729,180
<u>Less</u> Current portion	(3,782,758)	(4,191,760)	(3,782,758)	(4,141,907)
Net	6,454,370	7,587,273	6,454,370	7,587,273

The Group entered into lease agreements with certain local companies to lease vehicles for 36 - 60 months and the Company entered into land rental agreement for 36 months.

Lease payment not recognised as a liability

The Group has elected not to recognised a lease liability for short-term leases (leases with an expected term 12 month or less) or for leases of low value assets. Payments made under such leases are expensed in the accounting period in which the transaction occurs. In addition, certain variable lease payments are not permitted to be recognized as lease liabilities and are expensed as incurred.

The expenses related to the lease not included in the measurement of the lease liability is as follows:

	(Unit: Baht)	
	Consolidated F/S	Separate F/S
Leases of low value assets	800,640	355,800

16. COMPUTER SOFTWARE

		(Unit : Baht)
	Consolidated F/S	Separate F/S
<u>Cost</u>		
At 1 January 2020	20,929,745	20,727,231
Acquisitions	3,014,785	3,014,785
Disposals	(169,045)	(9,451)
At 31 December 2020	23,775,485	23,732,565
Acquisitions	2,695,567	2,695,567
Disposals	(1,077,800)	(1,077,800)
At 31 December 2021	25,393,252	25,350,332
<u>Amortisation</u>		
At 1 January 2020	(16,416,240)	(16,280,922)
Amortisation for the year (administrative expenses)	(1,544,830)	(1,517,452)
Amortisation for disposals	146,660	9,451
At 31 December 2020	(17,814,410)	(17,788,923)
Amortisation for the year (administrative expenses)	(2,141,440)	(2,132,859)
Amortisation for disposals	85,333	85,333
At 31 December 2021	(19,870,517)	(19,836,449)
<u>Net book value</u>		
At 31 December 2020	5,961,075	5,943,642
At 31 December 2021	5,522,735	5,513,883

17. INTERCONNECTION CHARGE

	(Unit : Baht) Consolidated F/S
<u>Cost</u>	
At 1 January 2020	6,588,543
At 31 December 2020	6,588,543
At 31 December 2021	6,588,543
<u>Amortization</u>	
At 1 January 2020	(2,662,212)
Amortization for the year (cost of sales)	(330,048)
At 31 December 2020	(2,992,260)
Amortization for the year (cost of sales)	(329,146)
At 31 December 2021	(3,321,406)
<u>Net book value</u>	
At 31 December 2020	3,596,283
At 31 December 2021	3,267,137

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.

18. POWER PURCHASE AGREEMENT

	(Unit : Baht) Consolidated F/S
<u>Cost</u>	
At 1 January 2020	119,467,371
At 31 December 2020	119,467,371
At 31 December 2021	119,467,371
<u>Amortisation</u>	
At 1 January 2020	(18,974,026)
Amortisation for the year (cost of sales)	(8,436,245)
At 31 December 2020	(27,410,271)
Amortisation for the year (cost of sales)	(8,413,195)
At 31 December 2021	(35,823,466)

	(Unit : Baht)
	Consolidated F/S
<u>Net book value</u>	
At 31 December 2020	92,057,100
At 31 December 2021	83,643,905

On 25 June 2010, the indirect subsidiary had entered into the power purchase agreement with PEA by specified quality which start sale power in June 2012. 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.

19. INCOME TAX

19.1 The movements in deferred income tax assets / liabilities for the years ended 31 December 2021 and 2020 are as follows:

	(Unit : Baht)		
	Consolidated F/S		
	Charged as income / (expense) in		
	1 January 2021	Profit or loss	Other comprehensive income
			31 December 2021
Deferred income tax assets			
From allowance for impairment loss	6,576,831	(1,889,328)	-
From allowance for obsolete and decline value of inventories	1,429,235	119,062	-
From depreciation for plant and equipment	162,651	(11,747)	-
From provision for warranty expenses	846,284	25,786	-
From employee benefits obligation	3,586,059	(182,954)	(108,303)
From temporary differences from business combination - revaluation of land improvement, building improvement and machinery	27,862,612	(1,556,890)	-
From translation adjustment	861,963	-	(861,963)
Total	41,325,635	(3,496,071)	(970,266)
Deferred income tax liability			
From right-of-use-asset	276,390	44,641	-
From temporary differences from business combination - revaluation of land	11,379,112	-	-
From power purchase agreement	12,349,562	(1,128,308)	-
Total	24,005,064	(1,083,667)	-
Deferred income tax assets - net	17,320,571	(2,412,404)	(970,266)

(Unit : Baht)

	Consolidated F/S		
	Charged as income / (expense) in		
	1 January 2020	Profit or loss	Other comprehensive income
			31 December 2020
Deferred income tax assets			
From allowance for impairment loss	6,950,968	(374,137)	-
From allowance for obsolete and decline value of inventories	1,056,393	372,842	-
From depreciation for plant and equipment	215,625	(52,974)	-
From provision for warranty expenses	948,109	(101,825)	-
From employee benefits obligation	3,088,752	633,183	(135,876)
From temporary differences from business combination - revaluation of land improvement, building improvement and machinery	29,419,502	(1,556,890)	-
From translation adjustment	763,047	-	98,916
Total	42,442,396	(1,079,801)	(36,960)
Deferred income tax liability			
From right-of-use-asset	-	276,390	-
From temporary differences from business combination - revaluation of land	11,379,112	-	-
From power purchase agreement	13,480,961	(1,131,399)	-
Total	24,860,073	(855,009)	-
Deferred income tax assets - net	17,582,323	(224,792)	(36,960)

(Unit : Baht)

	Separate F/S		
	Charged as income / (expense) in		
	1 January 2021	Profit or loss	Other comprehensive income
			31 December 2021
Deferred income tax assets			
From allowance for impairment loss	6,576,831	(1,889,328)	-
From allowance for obsolete and decline value of inventories	1,429,235	119,062	-
From impairment of investment in subsidiary company	1,883,344	(1,883,344)	-
From depreciation for plant and equipment	162,650	(11,747)	-
From provision for warranty expenses	846,284	25,786	-
From employee benefits obligation	3,293,384	(211,389)	-
Total	14,191,728	(3,850,960)	-
Deferred income tax liability			
From right-of-use-asset	276,390	44,641	-
Deferred income tax assets - net	13,915,338	(3,895,601)	-

(Unit : Baht)

	Separate F/S		
	Charged as income / (expense) in		
	1 January 2020	Profit or loss	Other comprehensive income
			31 December 2020
Deferred income tax assets			
From allowance for impairment loss	6,950,968	(374,137)	-
From allowance for obsolete and decline value of inventories	1,056,393	372,842	-
From impairment of investment in subsidiary company	1,883,344	-	-
From depreciation for plant and equipment	215,624	(52,974)	-
From provision for warranty expenses	948,109	(101,825)	-
From employee benefits obligation	3,088,753	340,507	(135,876)
Total	14,143,191	184,413	(135,876)
Deferred income tax liability			
From right-of-use-asset	-	276,390	-
Deferred income tax assets - net	14,143,191	(91,977)	(135,876)

19.2 Income tax expenses are as follows:

Income tax recognised in profit or loss

	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Current income tax				
Income tax under Revenue Code	(18,160,769)	(27,213,516)	(10,310,527)	(18,558,544)
Deferred income tax				
Movements in temporary differences	(2,412,404)	(224,792)	(3,895,601)	(91,977)
Total income tax	(20,573,173)	(27,438,308)	(14,206,128)	(18,650,521)

Income tax recognised in other comprehensive income

(Unit : Baht)

	Consolidated F/S					
	2021			2020		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Foreign currency translation differences for foreign operations	861,963	(861,963)	-	(494,580)	98,916	(395,664)
Defined benefit plan-actuarial gain	541,513	(108,303)	433,210	679,380	(135,876)	543,504
Total	1,403,476	(970,266)	433,210	184,800	(36,960)	147,840

(Unit : Baht)

	Separate F/S					
	2021			2020		
	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Defined benefit plan-actuarial gain	-	-	-	679,380	(135,876)	543,504

Temporary differences unrecognized as deferred tax assets in the financial statement are summarized as follows:

(Unit : Baht)

	Consolidated F/S		Separated F/S	
	2021	2020	2021	2020
<u>Temporary difference</u>				
From allowance for impairment of investment in related companies	-	-	138,384,599	126,244,057
From allowance for impairment of loan to related companies	-	10,900,000	-	10,900,000
Unused taxable losses carried forward	65,572,195	64,943,383	-	-
Total	65,572,195	75,843,383	138,384,599	137,144,057

The taxable losses of subsidiary will expire in 2021 to 2025.

19.3 Income tax recognized in profit or loss

Reconciliation of income tax expenses are as follows:

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Profit before tax	147,790,668	184,971,354	108,452,743	196,784,401
Applicable tax rate (%)	20	20	20	20
Tax multiplied by applicable tax rate	29,558,134	36,994,271	21,690,549	39,356,880
Effects :				
Adjustment for eliminate transaction	(2,293,896)	(3,285,976)	-	-
Tax on exempted revenue for Revenue Code and tax reduction for profit	(7,806,690)	(7,178,145)	(8,120,000)	(20,580,000)
Tax on non-deductible exempted revenue for Revenue Code	1,677,445	1,367,631	1,659,298	1,307,772
Exemption of additional expenses	(1,012,276)	-	(948,806)	(1,414,131)
Tax on unrecognized of current year with temporary different as deferred tax asset	2,428,108	(459,473)	2,428,108	(20,000)
Tax on unrecognized of previously with temporary different as deferred tax asset	(2,503,021)	-	(2,503,021)	-
Income tax of loss from subsidiary	525,369	-	-	-
Income tax expense	20,573,173	27,438,308	14,206,128	18,650,521

20. ACCRUED EXPENSES

			(Unit : Baht)	
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Accrued director and management remuneration	11,036,842	10,521,190	11,036,842	10,521,190
Accrued transportation	1,023,310	1,045,065	1,023,310	1,045,065
Accrued export expenses	1,334,510	1,881,868	1,334,510	1,881,868
Accrued commission	719,834	718,787	719,834	718,787
Others	4,337,227	3,910,786	3,429,054	2,867,885
Total	18,451,723	18,077,696	17,543,550	17,034,795

21. LIABILITIES UNDER EMPLOYEE BENEFITS OBLIGATION

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Statement of financial position				
Obligations for post-employment benefits	16,474,013	17,930,297	15,409,973	16,466,920
Statement of profit or loss and other comprehensive income:				
<i>Recognized in profit or loss:</i>				
Post-employment benefits	1,875,096	1,998,695	1,732,920	1,702,539
<i>Recognized in other comprehensive income:</i>				
Actuarial gain	541,513	679,380	-	679,380

The Company 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 end 31 December 2021 and 2020 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Beginning balance as at 1 January	17,930,297	16,610,982	16,466,920	15,443,761
<i>Recognised in profit or loss</i>				
- Current service costs	1,533,019	1,669,949	1,420,714	1,416,572
- Finance cost	342,077	328,746	312,206	285,967
<i>Recognized in other comprehensive income</i>				
- Actuarial gain	(541,513)	(679,380)	-	(679,380)
Benefit paid during the year	(2,789,867)	-	(2,789,867)	-
Balance as at 31 December	16,474,013	17,930,297	15,409,973	16,466,920
<u>Less</u> Current portion within one year	(168,322)	(1,213,473)	(168,322)	(1,213,473)
Net	16,305,691	16,716,824	15,241,651	15,253,447

Amounts recognized in other comprehensive income related to employee benefits obligation are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2564	2563	2564	2563
Actuarial loss from change in				
- Discount rate	18,147	2,294,788	-	2,294,788
- Salary growth rate	(19,091)	(1,530,841)	-	(1,530,841)
- Turnover rate	(51,851)	(2,721,559)	-	(2,721,559)
- Experience adjustments	(488,718)	1,278,232	-	1,278,232
Total recognized in other comprehensive income	(541,513)	(679,380)	-	(679,380)

Actuarial assumptions

The following are principal actuarial assumptions at the reporting date for the years end 31 December 2021 and 2020 are as follows:

	Consolidated F/S	Separate F/S
<u>Financial assumptions</u>		
Discount rate	1.91 - 3.13 percent per annum	1.91 percent per annum
Future salary average increment rate	5.00 - 7.37 percent per annum	6.52 percent per annum
<u>Demographic assumptions</u>		
Normal retirement age	60 years	60 years
Mortality rate	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 : Baht)			
	Effect to the defined benefit obligation			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Discount rate (0.5% increment)	(876,419)	(863,657)	(829,436)	(804,227)
Discount rate (0.5% decrement)	954,570	941,338	903,608	887,549
Future salary growth (0.5% increment)	1,015,918	946,070	961,764	875,625
Future salary growth (0.5% decrement)	(937,299)	(875,752)	(887,182)	(809,928)
Turnover rate (0.5% increment)	(1,126,576)	(1,049,696)	(1,063,720)	(969,081)
Turnover rate (0.5% decrement)	1,235,648	1,146,993	1,167,077	1,059,945

As at 31 December 2021, expected maturity of employee benefits obligation before discount are as follow:

	(Unit : Baht)	
	Consolidated F/S	Separate F/S
Within one year	341,624	341,624
Between 2 - 5 years	4,628,180	4,350,377
Between 6 - 15 years	16,246,046	14,512,317

22. REVENUE

The Group has revenue's structure arose from business as below. The management assesses the performance obligation as a single performance obligation and therefore recognizes revenues as point in time.

Revenue from manufacturing and electric transformers for sales

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

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

Revenues from sales of electric equipment

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. A 540 W solar panel will soon be launched and sold in Thailand, which currently the available maximum capacity is 450 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.

Revenues from manufacturing and sale electricity

The indirect subsidiary is engaged principally in the manufacturing and sale electricity from solar energy.

Revenues from services

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

Details of revenue are disclosed in Note 29 to financial statement.

23. EARNING PER SHARE

The calculation of basic earning per share for years ended 31 December 2021 and 2020 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Basic earning per share				
Profit attributable to share holder of the Company (Baht)	127,217,495	157,559,509	94,246,615	178,133,880
Weighted average number of common shares (Share)	341,092,557	341,092,557	341,092,557	341,092,557
Earning per share (Baht)	0.373	0.462	0.276	0.522

24. LEGAL RESERVE

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

25. DIVIDEND

At the Annual General Meeting of Shareholders for the year 2021 held on 23 April 2021, the shareholder has a resolution to approve the dividend payment from operating result for the year 2020 at Baht 0.25 per share, common shares of 341.09 million shares, totaling Baht 85.27 million. The dividends had paid to the list of shareholders who are entitled to receive dividends totaling Baht 85.15 million. The dividend was paid on 19 May 2021.

At the board of directors meeting no. 5/2020 held on 1 April 2020, the board has a resolution to approve the interim dividend payment in cash form from the net profit for the year ended 31 December 2019 at Baht 0.15 per share, common shares of 341.09 million shares, totaling Baht 51.16 million. The dividend was paid on 30 April 2020.

At the board of directors meeting no. 8/2020 held on 17 June 2020, the board has a resolution to approve the interim dividend payment in cash form from the net profit for the period from 1 January 2020 to 31 May 2020 at Baht 0.15 per share, common shares of 341.09 million shares, totaling Baht 51.16 million. The dividend was paid on 15 July 2020.

As at 31 December 2021, the Company has accrued dividend of Baht 20.09 million. (2022: Baht 11.02 million).

26. PROVIDENT FUND

The Company and employee have established a contributory Provident Fund. This Provident Fund has already been registered under the Provident Fund Act, B.E. 2530. Under the Fund plan, employee has to contribute to the fund at the specific rate and will be entitled to receive the fund when staff is no longer member in accordance with regulation of the fund. The Company's contribution to the Fund for the year 2021 amounted to Baht 2.72 million (2020 : Baht 2.47 million).

27. EXPENSES BY NATURE

Significant expenses by nature for the years ended 31 December 2021 and 2020 are as follows:

	(Unit : Baht)			
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Raw materials and supplies used	741,666,272	482,690,157	741,666,272	482,690,157
Changes in finished goods and work in process	(68,937,664)	12,259,876	(68,935,191)	12,257,403
Salaries, wages and other employee benefits	162,264,114	159,720,314	150,218,424	150,396,289
Depreciation and amortization	82,157,744	81,154,601	52,212,684	51,118,950
Repair and maintenance expenses	12,778,684	15,347,413	11,938,134	10,470,837
Electric expense	7,509,751	6,842,539	7,261,859	6,521,520
Transportation expense	8,929,570	5,897,723	8,927,190	5,881,564
Marketing expense	3,715,204	3,735,341	3,715,204	3,735,341
Warranty expenses	3,451,728	5,571,301	3,451,728	5,571,301
Commission expense and sales promotion	9,171,246	9,420,605	9,171,246	9,420,605
Professional fee	5,616,401	6,972,458	4,658,499	4,061,334
Travelling expense	3,236,144	4,382,840	3,033,818	4,168,732
Bank fee	2,298,868	1,861,545	2,297,706	1,837,412
Others	61,499,192	57,420,468	54,069,392	53,277,947

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 21 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.

The Company business operations categorized by nature of business and geophysical for the years ended 31 December 2021 and 2020 are as follows:

Consolidated F/S							
For the years ended 31 December							
	Manufacturing and sale electric transformers			Sale electric equipment		Manufacturing and sale electricity	
	Domestic		Export	Domestic		Domestic	
	2021	2020	2021	2020	2021	2020	Total
Income from sales	429,758,320	483,006,196	321,523,350	261,077,257	245,576,056	86,302,158	
Cost of sales	(380,446,870)	(380,680,967)	(235,460,010)	(182,679,018)	(201,856,810)	(71,732,790)	
Gross profit	49,311,450	102,325,229	86,063,340	78,398,239	43,719,246	14,569,368	
Income from service	41,629,647	42,238,199	-	-	-	-	
Cost of service	(23,938,399)	(30,250,770)	-	-	-	-	
Gross profit	17,691,248	11,987,429	-	-	-	-	
Revenue classified by revenue recognition							
Point in time	429,758,320	483,006,196	321,523,350	261,077,257	245,576,056	86,302,158	
Interest expense							
Depreciation and amortization expenses							
Profit before income tax from discontinuing operations							
Loss from discontinued operations							
Share of loss from investments in associated							
Profit before income tax							
Total Assets							

For the year ended 31 December 2021 and 2020, the Group's major revenues arose from sales to Government enterprises and private companies amounted to Baht 537.76 million and Baht 611.63 million, respectively.

30. COMMITMENTS AND CONTINGENT LIABILITIES

As at 31 December 2021, the Company and the indirect subsidiary has obligations under a domestic bank guarantees for performance bonds required in the normal course of businesses approximately Baht 22.80 million and Baht 0.02 million, respectively.

31. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The changes in the Group's liabilities arising from financing activities can be classified as follows;

(Unit : Baht)

	Consolidated F/S			
	Short-term loans from banks	Long-term loans from banks	Lease liabilities	Total
1 January 2020	77,044,947	24,299,346	3,501,554	104,845,847
Cash-flows:				
Repayment	(77,044,947)	(24,299,346)	(3,973,505)	(105,317,798)
Non-cash:				
Additional lease liabilities from				
TFRS 16 adoption	-	-	10,646,734	10,646,734
Acquisition	-	-	1,604,250	1,604,250
31 December 2020	-	-	11,779,033	11,779,033
Cash-flows:				
Repayment	-	-	(4,745,291)	(4,745,291)
Non-cash:				
Acquisition	-	-	3,783,357	3,783,357
Cancellation contract	-	-	(579,970)	(579,970)
31 December 2021	-	-	10,237,129	10,237,129

(Unit : Baht)

	Separate F/S			
	Short-term loans from banks	Long-term loans from banks	Lease liabilities	Total
1 January 2020	77,044,947	1,739,346	3,257,573	82,041,866
Cash-flows:				
Repayment	(77,044,947)	(1,739,346)	(3,779,377)	(82,563,670)
Non-cash:				
Additional lease liabilities from				
TFRS 16 adoption	-	-	10,646,734	10,646,734
Acquisition	-	-	1,604,250	1,604,250
31 December 2020	-	-	11,729,180	11,729,180
Cash-flows:				
Repayment	-	-	(4,695,438)	(4,695,438)
Non-cash:				
Acquisition	-	-	3,783,357	3,783,357
Cancellation contract	-	-	(579,970)	(579,970)
31 December 2021	-	-	10,237,129	10,237,129

32. CONTRACT ASSETS AND CONTRACT LIABILITIES

The Group has an outstanding balances of contract assets and contract liabilities with customers as follows:

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Contract assets				
Unbilled revenues	4,093,576	13,375,295	-	-
Total of contract assets	4,093,576	13,375,295	-	-
Contract liabilities				
Advance from customer	14,987,554	42,235,801	14,987,554	42,235,801
Total of contract liabilities	14,987,554	42,235,801	14,987,554	42,235,801

32.1 Revenue recognized in relation to contract balances

During the year 2021, the Group recognized revenues which was included in the contract liabilities balance at the being period of Baht 42.24 million (Separate F/S : Baht 42.24 million).

32.2 Revenue to be recognized for the remaining performance obligations

As at 31 December 2021, the Group expects to recognized revenue in the future in respect of performance obligations which are unsatisfied with customers for the sales and services contract which has duration within one-year or less than that.

32.3 Contract assets – unbilled receivable

As at 31 December 2021, the Group has balances of unbilled receivables amounted to approximately Baht 4.09 million is expected to bill with customers within 1 year.

33. FINANCIAL INSTRUMENTS

33.1 The outstanding of financial assets and financial liabilities as at 31 December 2021 and 2022 as follows:

(Unit : Baht)				
	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Financial assets				
<i>Financial assets measured at amortized cost</i>				
Cash and cash equivalents	347,430,673	152,317,224	215,053,291	76,248,261
Trade accounts receivable - net	155,442,319	167,610,838	142,995,435	154,250,832
Other accounts receivable - net	602,998	1,095,413	219,919	2,220,382
Restricted deposits with banks	101,224	100,994	-	-
<i>Financial assets measured at fair value through profit or loss (FVPL)</i>				
Temporary investments	350,000,000	613,202,223	200,000,000	468,411,092
Total Financial assets	853,577,214	934,326,692	558,268,645	701,130,567

(Unit : Baht)

	Consolidated F/S		Separate F/S	
	2021	2020	2021	2020
Financial liabilities				
<i>Financial liabilities measured at amortized cost</i>				
Trade and other accounts payable	141,221,298	117,400,277	140,757,194	116,930,754
Lease liabilities	10,237,128	11,779,033	10,237,128	11,729,180
<i>Financial liabilities measured at fair value through profit or loss (FVPL)</i>				
Other current liabilities (Forward contract)	25,635	213,269	25,635	213,269
Total Financial liabilities	151,484,061	129,392,579	151,019,957	128,873,203

33.2 Financial risk management

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

Credit Risk

The Company provides credit term on its trade transactions. The Company manages its exposure to credit risk by closely monitoring collection of accounts receivable and focuses on overdue accounts. The Company 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 recognizes.

The Group has loans to related parties measured at amortized cost. The Group recognizes expected credit losses over the next 12 months on loans that do not incur a significant credit risk increase. The Company has recognized the expected credit loss over the life of the loans with significant increase in credit risk.

Market risk

Interest Rate Risk

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

(Unit : Baht)

Consolidated F/S					
2021					
	Floated rate	Fixed rate	No interest	Total	Interest rate (%) (Per annum)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	347,273,083	-	157,590	347,430,673	0.25%- 0.35%
Temporary investment	-	350,000,000	-	350,000,000	0.50%
Trade accounts	-	-	155,442,319	155,442,319	-
Other account receivable	-	-	602,998	602,998	-
Restricted deposit at bank	101,244	-	-	101,244	-
Trade accounts payable and other payable	-	-	141,221,298	141,221,298	-
Lease liabilities	-	10,237,128	-	10,237,128	0.59% - 5.52%

(Unit : Baht)

Consolidated F/S					
2020					
	Floated rate	Fixed rate	No interest	Total	Interest rate (%) (Per annum)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	152,238,889	-	78,335	152,317,224	0.25%
Temporary investment	-	-	613,202,223	613,202,223	-
Trade accounts	-	-	167,610,838	167,610,838	-
Other account receivable	-	-	1,095,413	1,095,413	-
Restricted deposit at bank	100,994	-	-	100,994	-
Trade accounts payable and other payable	-	-	117,400,277	117,400,277	-
Lease liabilities	-	11,779,033	-	11,779,033	0.59% - 5.52%

(Unit : Baht)

Separate F/S					
2021					
	Floated rate	Fixed rate	No interest	Total	Interest rate (%) (per annum)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	214,911,789	-	141,502	215,053,291	0.25% - 0.35%
Temporary investment	-	200,000,000	-	200,000,000	0.50%
Trade accounts	-	-	142,995,435	142,995,435	-
Other account receivable	-	-	219,919	219,919	-
Trade accounts payable and other payable	-	-	140,757,194	140,757,194	-
Lease liabilities	-	10,237,128	-	10,237,128	0.59% - 5.52%

(Unit : Baht)

	Separate F/S				
	2020				
	Floated rate	Fixed rate	No interest	Total	Interest rate (%) (per annum)
<u>Financial assets/ liabilities</u>					
Cash and cash equivalents	76,185,424	-	62,837	76,248,261	0.25%
Temporary investment	-	-	468,411,092	468,411,092	-
Trade accounts receivable	-	-	154,250,832	154,250,832	-
Other account receivable	-	-	2,220,382	2,220,382	-
Trade accounts payable and other payable	-	-	116,573,750	116,573,750	-
Lease liabilities	-	11,729,180	-	11,729,180	0.59% - 5.52%

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.

As at 31 December 2021 and 2020, the balances of financial assets and liabilities denominated in foreign currencies as follows:

	Consolidated F/S and Separate F/S			(Unit : Baht)
	EUR	USD	AUD	
Trade accounts receivable	-	26,897,074	5,507,857	
Trade account payable	26,138	13,067,215	17,414	

Forward foreign exchange contracts

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

As at 31 December 2021, the Company has open forward contracts for the collection from trade accounts receivable which settlement dates are ranging between 1 month and 3 months as follows:

	Foreign currencies	Contracts rates (Baht)
<i>Forward contracts</i>		
AUD (Sell)	230,980	23.63
USD (Sell)	490,800	33.65 – 33.74

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 Company periodically assesses the financial viability of customers.

As at 31 December 2021 and 2020, the financial instrument classified by the periods of time from the date on the statements of financial position to their maturity dates are as follows:

	(Unit : Baht)			
	Consolidated F/S			
	2021			
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	347,430,673	-	-	347,430,673
Temporary investment	-	350,000,000	-	350,000,000
Trade accounts receivable	155,442,319	-	-	155,442,319
Other account receivable	602,998	-	-	602,998
Restricted deposit at bank	-	101,244	-	101,244
Trade accounts payable and other payable	141,221,298	-	-	141,221,298
Lease liabilities	-	3,782,758	6,454,370	10,237,128

(Unit : Baht)

Consolidated F/S				
2020				
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	152,317,224	-	-	152,317,224
Temporary investment	613,202,223	-	-	613,202,223
Trade accounts receivable	167,610,838	-	-	167,610,838
Other account receivable	1,095,413	-	-	1,095,413
Restricted deposit at bank	-	100,994	-	100,994
Trade accounts payable and other payable	117,400,277	-	-	117,400,277
Lease liabilities	-	4,191,760	7,587,273	11,779,033

(Unit : Baht)

Separate F/S				
2021				
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	215,053,291	-	-	215,053,291
Temporary investment	-	200,000,000	-	200,000,000
Trade accounts receivable	142,995,435	-	-	142,995,435
Other account receivable - related companies	219,919	-	-	219,919
Trade accounts payable and other payable	140,757,194	-	-	140,757,194
Lease liabilities	-	3,782,758	6,454,370	10,237,128

(Unit : Baht)

Separate F/S				
2020				
	At call	Within 1 year	Over 1 year	Total
<u>Financial assets/ liabilities</u>				
Cash and cash equivalents	76,248,261	-	-	76,248,261
Temporary investment	468,411,092	-	-	468,411,092
Trade accounts receivable	154,250,832	-	-	154,250,832
Other account receivable - related companies	2,220,382	-	-	2,220,382
Trade accounts payable and other payable	116,930,754	-	-	116,930,754
Lease liabilities	-	4,141,907	7,587,273	11,729,180

33.3 Fair value of financial instruments

The financial instruments which measurement at fair value as at 31 December 2021 and 2020 are as follows:

(Unit : Baht)

Consolidated F/S as at 31 December 2021				
Level 1	Level 2	Level 3	Total	
<u>Financial liabilities</u>				
Derivative liabilities	-	25,635	-	25,635

(Unit : Baht)

	Consolidated F/S as at 31 December 2020			
	Level 1	Level 2	Level 3	Total
Assets				
<u>Financial assets</u>				
Temporary investment	-	613,202,223	-	613,202,223
<u>Financial liabilities</u>				
Derivative liabilities	-	213,269	-	213,269

(Unit : Baht)

Separate F/S as at 31 December 2021				
Level 1	Level 2	Level 3	Total	
<u>Financial liabilities</u>				
Derivative liabilities	-	25,635	-	25,635

(Unit : Baht)

	Separate F/S as at 31 December 2020			Total
	Level 1	Level 2	Level 3	
Assets				
<u>Financial assets</u>				
Temporary investment	-	468,411,092	-	468,411,092
<u>Financial liabilities</u>				
Derivative liabilities	-	213,269	-	213,269

34. APPROVAL OF FINANCIAL STATEMENTS

These financial statements were authorized by the Company's director on 10 February 2022.



Attachments

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	79	Master of Economics, University of Sydney, Australia • Director Certification Program (DCP), Class 61/2005 • Audit Committee Program (ACP), Class 8/2005 • Role of 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	Independent Director	National Reform Council	
					2014-2015	Member of the National Reform Council	Bank of Thailand	Finance
					2009-2011	Member of the Monetary Policy Committee	Ministry of Commerce	
					2008 -Present	Director and Member of Audit Committee	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
Mr. Natthaphon Lilawathananun Director and Chairman of the Audit Committee July 28, 2011	64	• 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	-	-	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 and Member of Audit Committee	Unimit Engineering (Public) Company Limited	Production of Gas Storage Tank
					2005 - Present	Director and Managing Director	NBS Research & Consulting Company Limited	Business and Research Consultant
					2003 - Present	Director and 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

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. Norachit Sinhaseni Director and Chairman of the Nomination, Remuneration, and Corporate Governance Committee July 30, 2020	68	<ul style="list-style-type: none"> Master of Arts in International Relations, The Fletcher School of Law and Diplomacy, United States Director Certification Program (DCP), Class 113/2552 Role of the Chairman Program (RCP), Class 46/2563 Advanced Audit Committee Program (AACP), Class 37/2563 Board Nomination & Compensation Program (BNCP), Class 10/2563 	-	-	2020-Present	Director 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
					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
Mrs. Wasara Cholithamarat Director and Member of Audit Committee September 13, 2016	57	<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 117/2009 Advanced Audit Committee Program (AACP), Class 25/2017 	-	-	2016 - Present	Independent Director/ Member of Audit Committee	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2020-Present	Independent Director/ Member of Audit Committee	Lease IT (Public) Company Limited	Finance
					2017 - Present	Accounting Director	Summit Group, Summit Auto body Industry Co.Ltd.	Auto Parts
					2015 -Present	Director	Supamitr Food Company Limited (2014)	Food and Service
					2015 -Present	Director	Supamitr Food Company Limited (2015)	Food and Service
					2015 -Present	Director	Supamitr Food Company Limited (2017)	Food and Service
					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	72	<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	56	<ul style="list-style-type: none"> Master of Business Administration in Management. Sasin Graduate Institute of Business Administration 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	Thanakom 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	Watanan Company Limited
					Present	Director	Satara Patana Company Limited
					Present	Director	Surudee Company Limited
Mr. Preedee Ngamsantikul Director (Authorized Director) June 7, 2019	46	<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	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

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. Phairoj Boonpun Director June 7, 2019	78	<ul style="list-style-type: none"> Bachelor of Accountancy, Ramkhamhaeng University Director Accreditation Program (DAP), Class 164/2019 	-	-	2019-Present	Director	QTC Energy (Public) Company Limited	Production and Distribution of Transformer
					2013-2019	Advisor	Mindmerge Consultant Company Limited	Audit, Internal Audit and Financial and Accounting Advisor
Dr. Apichart Sramoon Director July 30, 2020	52	<ul style="list-style-type: none"> Doctor of Engineering (D.Eng.), Civil Engineering and Energy, Nagaoka University of Technology (NUT), Japan Financial Statements for Directors Program, Class 19/2013 Director Accreditation Program (DAP), Class 169/2020 	12.46	-	2020-Present	Director	Director	Production and Distribution of Transformer
					2020-Present	Chief Executive Officer	Chief Executive Officer	Engineering consultant
					2019-Present	Chairman of Board	Chairman of Board	Architectural services
					2017-Present	Director	Director	Geotechnical Engineering and Financial Foundations
					2019-Present	Chairman of Board	Chairman of Board	Finance
					2019-Present	Director	Director	Energy
					2018-Present	Director	Director	Civil Engineering
					2017-Present	Director	Director	Real Estate
					Present	Director	Director	Engineering and Consultation
					Present	Director	Director	Hydroelectric dam in Laos
Mr. Pomthep Panyarachun Director April 23, 2021	50	<ul style="list-style-type: none"> Master of Business Administration (Finance and Investment), The George Washington University, USA Bachelor's Degree, Bachelor of Engineering (Electronic Engineering), King Mongkut's Institute of Technology Ladkrabang Director Accreditation Program (DAP) Class 18/2021 	-	-	2018-2019	Managing Director	Managing Director	Engineering consultant
					2016-2018	Vice President	Vice President	Engineering consultant
					2021-Present	Director	QTC Energy Public Company Limited	Production and Distribution of Transformer
					2020-Present	Management Committee member, Business Development Committee Member	Don Muang Tollway Public Co. Ltd	Operate and maintain concession highways
					2018-2020	Sub-committee on Consideration of Regulations on Issuance and Offering of Debt Securities, Derivatives and Structured Products	The Securities and Exchange Commission, Thailand	Corporate Governance
					2018-2018	Executive Director, Audit Committee and Chief Financial Officer	AQ Estate Public Company Limited	Develop real estate projects
					2009-2018	Assistant Managing Director	The Siam Commercial Bank Public Company Limited	Commercial bank

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	69	<ul style="list-style-type: none">Bachelor's Degree in Electrical Engineering, King Mongkut's Institute of Technology North BangkokDirector Certification Program (DCP) Class 117/2009Director Accreditation Program (DAP) Class 77/2009Financial Statements for Directors (FSD) Class 4/2009Role 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
					2020-Present	President Director	Thai Transformer Association	Power Plant
					2017-Present	Advisor of the Council of Engineers	Q Solar 1 Company Limited	
					2017-Present	Advisor to the Electrical Subcommittee Advisor	Council of Engineers	
					2017-Present		Engineering Institute of Thailand (EIT)	
					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
					2007-Present	Honorary Advisor	Thai Electrical & Mechanical Contractors Association	Electrical and contracting business
					1996-Present	Director	Jarin Apartment Limited Partnership	Apartment
					2021-Present	Director	QTC Marketing Company Limited	Dealer of Transformer
					2014 – 2018	Director	QTC Panco Company Limited	Production and Distribution of Transformer
					2008-2010	Chairman of Executive Committee	QTC Transformers Company Limited	Production and Distribution of Transformer
					2003-2008	Managing Director	QTC Transformers 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
Mr. Ruangchai Kritsnakriengkrai Director and Managing Director (Authorized Director) September 13, 2016	56	<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 	-	-	2016-Present	Managing Director/ Director	QTC Energy (Public) Company Limited	Production and Distribution of Transformer Energy
					2016-Present	Director	QTC Global Power Company Limited	Power Plant
					2017-Present	Director	Q Solar 1 Company Limited	Dealer of Transformer Energy
					2021-Present	Director	QTC Marketing Company Limited	Production of Transformer (Laos)
					2021-Present	Director	PPWE Company Limited	Production of Transformer
					2014-2019	Director	QTC Panco Company Limited (Subsidiary)	Production of Transformer
					2014-2015	International Sales Deputy	QTC Energy (Public) Company Limited	Production of Transformer
Miss Boonpa Ruddit Deputy Managing Director of General Management	61	<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 	-	-	2012-2014	Manager	QTC Energy (Public) Company Limited	Production and Export of high-voltage insulators
					2004-2012	Sales Manager	PPC Asian Insulators Company Limited	Production and Export of high-voltage insulators
					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
Mr. Kitti Achariyaboonyong Deputy Managing Director of Marketing	55	<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 	-	-	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	Welltech Group Company Limited	Distribution of Computer Devices and Cosmetics

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. Charoensak Sarawong Deputy Managing Director of Factory	50	<ul style="list-style-type: none"> Bachelor of Electrical Engineering, Faculty of Engineering, Mahanakorn University 	-	-	2017-Present 2010-2017 2003-2010	Deputy Managing Director of Factory Manager of Production Department Production Manager	QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited QTC Transformers Company Limited	Production and Distribution of Transformer Production and Distribution of Transformer Production of Transformer
Mr. Phot Wongkham Assistant to Managing Director of Transformer Business	37	<ul style="list-style-type: none"> Master of Business Administration in Management, Ramkhamhaeng University 	0.00029	Grandchild of Mr. Poonphiphat Tantanasin	2021-Present 2021-Present 2019-2020 2017-2018 2015-2016	Assistant to Managing Director of Transformer Business Director Manager of International Sales Department International Sales Manager Export Sales Executive	QTC Energy (Public) Company Limited QTC Marketing Company Limited QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited	Production and Distribution of Transformer Dealer of Transformer Production and Distribution of Transformer Production and Distribution of Transformer Production and Distribution of Transformer
Mr. Nipat Chingchamikom Assistant to Managing Director of Solar Business	39	<ul style="list-style-type: none"> Master of Marketing / Business Administration, Ramkhamhaeng University 	-	-	2021-Present 2013-2020 2008-2013	Assistant to Managing Director of Solar Business Manager of Special Project Sales and Customer Service Department Sales Supervisor	QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited	Production and Distribution of Transformer Production and Distribution of Transformer Production and Distribution of Transformer
Miss Sureeporn Mitthammana Assistant to Managing Director of Sustainability Development and General Management	51	<ul style="list-style-type: none"> Diploma in Computer, Eastern Technological College 	-	-	2021 - Present 2017 - 2020 1996 - 2017	Assistant to Managing Director of Sustainability Development and General Management Manager of Corporate Sustainability Development Department Corporate Social Responsibility Manager	QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited	Production and Distribution of Transformer Production and Distribution of Transformer Production and Distribution of Transformer
Miss Suanya Noochapun Manager of Government Sales Department	43	<ul style="list-style-type: none"> Master of Business Administration, Kasetsart University 	0.0016	-	2021-Present 2012-2020 2007-2012	Manager of Government Sales Department Manager of Domestic Sales Department Domestic Sales Manager	QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited	Production and Distribution of Transformer Production and Distribution of Transformer 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 Kobetch Chuphemporn Manager of Accounting and Finance Department	47	<ul style="list-style-type: none"> Master of Public Administration, National Institute of Development Administration 	-	-	2018-Present 2013 - 2018	Manager of Accounting and Finance Department Manager of Accounting and Finance Department	QTC Energy (Public) Company Limited Jagota Brothers Trading Company Limited	Production and Distribution of Transformer Trading
Mr.Chanchai Thanawan Manager of Production Department	47	<ul style="list-style-type: none"> Bachelor of Industrial Engineering, Faculty of Engineering, Kasem Bundit University 	-	-	2019-Present 2017-2018 2013-2016	Manager of Production Department Production Manager Head of Assembly Section	QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited Ekarat Engineering Public Company Limited	Production and Distribution of Transformer Production and Distribution of Transformer Transformer
Miss Pakanat Tungtrakul Company Secretary	41	<ul style="list-style-type: none"> Master of Business Administration in General Business Administration, Khon Kaen University Company Secretary Program (Class 24) 	0.00087	-	2021-Present 2011-Present 2011-2016	Company Secretary Senior Manager of Investor Relations and Corporate Communications Department Investor Relations and Corporate Communications	QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited QTC Energy (Public) Company Limited	Production and Distribution of Transformer Production and Distribution of Transformer 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 Tungtrakul 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 University
Training Courses	: <ul style="list-style-type: none"> • Company Secretary Program (CSP) Class 122/2021 • Board Reporting Program - BRP 38/2021 • 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	20
Mr. Krirkkrai	Jirapaet	*	X, //																		
Mr. Natthaphon	Lilawatthanun			///	I, ///	I, ///															
Dr. Kamol	Takabut						C														
Mrs. Wasara	Chotithamarat							//, AC													
Mr. Suroj	Lamsam								C, ///							/					
Mr. Preedee	Ngamsantikul									///	/	/	///								
Mr. Phairoj	Boonpan																				
Mr. Norachit	Sinhaseni														//, AC						
Dr. Apichart	Sramoon										/	/		C							
Mr. Pomthep	Panyarachun																/				
Mr. Poonphiphat	Tantanasin																	/	/	/	/
Mr. Ruangchai	Kritsnakriengkrai																	/	/	/	/

Remarks x = Chairman of the Board of Directors

// = Independent Director

** = Advisor

C = Chairman of the Board of Executive

/// = Executive Director

AC = Member of Audit Committee

//// = Managing Director

/ = Director

* = Chairman of Advisor

Related Company:

- Banpu Public Company Limited
- Triple I Logistics (Public) Company Limited
- Jobmyway Recruitment Company Limited
- NBS Research & Consulting Company Limited
- Excellent Business Management Company Limited
- Italian Thai Power Company Limited
- Lease IT (Public) Company Limited
- Loxley (Public) Company Limited
- CSE (Thailand) Company Limited
- iGL Synergy Company Limited
- Nam Theun 1 Power Company Limited
- DD 49 Company Limited
- TEAM Consulting Engineering and Management (Public) Company Limited
- Central Plaza Hotel (Public) Company Limited
- Kasikornbank Public Company Limited
- Don Muang Tollway Public Co. Ltd
- QTC Global Power Company Limited
- Q Solar 1 Company Limited
- QTC Marketing Company Limited
- PPWE Company Limited

3. Details of Internal Audit Supervisor and Compliance Supervisor of the Company

The Company appointed BKIA & IC Company Limited to be the internal auditor for the year 2021. Internal audit results were reported to the Audit Committee and further presented to the Board of Directors. Miss Boonnee Kusolsopit acts as the Internal Audit Supervisor. The brief profile is as follows:

Education

- 2001-2003 : Master's degree in MBA (Executive), Burapha University
- 1996-1997 : Graduated Diploma (Auditing), Chulalongkorn University
- 1993-1996 : Bachelor's degree in B.A. (Mass Communication), Ramkhamhaeng University
- 1991-1995 : Bachelor's degree in B.B.A. (Accounting), Rajamangala University of Technology Krungthep

- Work Experience** :
- 2004-present : BKIA & IC Company Limited
Position – Partner, Chief Audit Executive
 - 2003-present : K&A Audit Company Limited
Position – Auditor and Consultant
 - 2002 - 2004 : A Accounting & Tag Business Company Limited
Position – Auditor and Consultant
 - 1995 -2003 : AMC Company Limited
Position - Audit Supervisor

Professional License : Certified Public Accountant (CPA) No. 5623 3

Position in Juristic Person : Managing Director

Objectives of Internal Audit

1. To assess risks from conducting activities relating to domestic and international purchases, domestic and international sales, production and inventories control, receivables-payables recording, receipt of payment-payment, including recognition of the Company's revenues and costs whether there is a chance that an event or activity may occur and cause damages or deflect the Company from achieving the objectives or goals of each activity
2. To assess the Company's existing internal control system whether it is sufficient to prevent potential damages and to promote the Company to provide an effective internal control system at reasonable costs
3. To help operators of the Company to be able to perform their duties in accordance with their responsibilities more efficiently

Scope and Responsibilities of Internal Control Supervision

1. Activities supervising the audit include:
 - Supervision and monitoring of domestic and international procuring activities
 - Supervision and monitoring of production and inventory management activities
 - Supervision and monitoring of marketing, sales of products, and customer service activities
 - Supervision and monitoring of financial and accounting activities
 - Supervision and monitoring of human resource activities

2. Review of efficiency and effectiveness of the Company's operations in relation to:
 - Company's existing internal control system
 - Use of the Company's resources for the best benefits
 - Compliance with policies, rules and Articles of Association of the Company, including other relevant agencies
3. The scope of the internal audit operations does not include the development of accounting systems or the preparation of operating handbooks.

Internal Audit Supervision

BK will independently perform the internal audit supervision as follows:

1. Studying the nature of business to understand the background of the organization, organizational structure, regulations, directions, and policies of the organization, goals, and short-term and long-term action plans from related documents and information from the Management in order to plan the action plans
2. Studying the operating systems and internal control by means of interviews and inquiries and collecting information from documents or any forms of the Company
3. Evaluating the internal audit results and providing observations and suggestions
4. Attending meetings with the Board of Executive or concerned officers of the Company in order to discuss about the internal audit results and submitting the internal audit report to the Audit Committee of the Company

4. Operating Assets

Details of Operating Assets

As at December 31, 2021, the operating assets were as follows:

Type/Nature of Asset	Nature of Ownership	Obligations	Net Book Value as at December 31, 2020 (Million Baht)	Net Book Value as at December 31, 2021 (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	17.00	17
Land of Factory located at Bo Thong Sub-district, Kabinburi District, Prachinburi Province, with the total area of 213 Rai	Owned by Subsidiary	Free of Obligations	75	75
Land Improvement	Owned	Free of Obligations	2.52	3.07
Land Improvement	Owned by Subsidiary	Free of Obligations	10.46	9.87
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	71.47	73.18
Building located at No. 2/2, Soi Krungthep Kritha 8 (5), Krungthep Kritha Road, Huamark, Bangkok	Owner	Free of Obligations	50.59	46.15
Building located at No. 102, Moo. 5, Bo Thong Sub-district, Kabinburi District, Prachinburi Province	Owned by Subsidiary	Free of Obligations	6.56	5.77
Factory Machinery and Equipment	Owner	Free of Obligations	150.54	153.88
Factory Machinery and Equipment	Owned by Subsidiary	Free of Obligations	212.59	199.32
Office Supplies and Furniture	Owner	Free of Obligations	9.64	9.58
Vehicles	Owner	Free of Obligations	2.17 ¹	1.46
Building under Construction	Owner	Free of Obligations	2.55	0.28
Machinery and Equipment during Installation	Owner	Free of Obligations	8.14	8.10
Total			633.32	616.75

Remarks ¹ Type/Nature of Asset: Vehicles, In 2021, the Company complied with the Financial Reporting Standard No. 16, Re: "Lease Agreement" (IFRS 16), stipulating criteria for contract recognition. Vehicles worth 4.97 million Baht had obligations to guarantee the hire-purchase contracts with financial institutions.

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-

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 technology provider with world-class standard in power industry along with social and environmental responsibilities and good governance", 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 Directors shall appoint the Nomination Committee, consisting of at least 3 directors and executives. More than half of the total number of members shall be the independent director. In addition, the Chairman of the Nomination Committee shall be the independent director in order to be able to perform duties and express 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 tenure of the Nomination Committee is 3 years for each term. In the case that the position of the member of the Nomination 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 Nomination Committee members so that the number of members of the Nomination Committee will reach the quantity specified by the Board of Directors in this charter. The person appointed to be a member of the Nomination Committee shall retain his/her office only for the remaining term of office of the member of the Nomination Committee whom he/she replaces.
- 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) and the Company's annual report (Form 56-2)
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 report (Form 56-2) 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 6 meetings in 2021 with the essential substances and issues as follows:

1. The Audit Committee considered and reviewed the quarterly financial statement and the annual financial statement for the year 2021 together with the Management and auditors to ensure that the Company's financial reports were prepared correctly according to the generally accepted accounting standards and disclosed adequately, completely, and reliably in the Notes to Financial Statements. In addition, the Audit Committee also provided observations and acknowledged corrective approaches that are beneficial to the Company.
2. Considering the disclosure of related transactions and connected transactions of the Company and persons with potential conflicts of interest; The Audit Committee deems that the disclosure of related transactions and connected transactions of the Company was correct, complete, and sufficient and in accordance with business conditions and rules set by the Stock Exchange of Thailand.
3. Supervising and ensuring that the internal audits were carried out independently by employing BKIA & IC 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. Regarding the internal audit results for the year 2021, no significant indicators of corruption or defects of internal control were found.
4. 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. Considering, selecting, and appointing the auditors, and proposing the audit fees for the year 2022; A proposal was made to the Board of Directors to appoint Mr. Chayapol Suppasedtanon, Certified Public Accountant No. 3972 or Mrs. Gingkam Atsawarangsarit, 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. Rosaporn Decharkom, Certified Public Accountant No. 5659 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 1,600,000 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.

On behalf of the Audit Committee



(Mr. Natthaphon Lilawatthanun)
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 2 independent directors and 1 executive director. Mr. Norachit Sinhaseni, the independent director, is the Chairman of the Nomination Committee while Dr. Kamol Takabut, the independent director, and Mr. Poonphiphat Tantanasin, the executive director, have scopes of duties and responsibilities according to the Charter of the Nomination, Remuneration and Corporate Governance Committee Charter.

In 2021, 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. Considering and selecting persons to hold the position of director to replace those who resigned according to the good corporate governance principles and proposing the list to the Board of Directors for considering and appointing at the Shareholders' Meeting
3. Considering, reviewing, and updating Charter of the Board of Directors and Executive Committee
4. Considering, reviewing, and updating the good corporate governance policy
5. Considering, reviewing, and updating the Code of Conduct to be consistent with current situations
6. Considering and reviewing the sustainability development policy
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. Considering, selecting, and nominating a person to be a director from the list proposed by shareholders by taking into account the qualifications and diversity of knowledge, capabilities, experiences and gender, etc., before further presenting the list to the Board of Directors and shareholders; The minor shareholders are encouraged to propose agendas and nominate directors to hold the position of director to replace those retiring by rotation in advance from October 5 - December 3, 2021 via the Company's website. However, there were no shareholders nominating any persons to be appointed as the director.

On behalf of the Nomination, Remuneration, and Corporate Governance Committee



(Mr. Norachit Sinhaseni)

Chairman of the Nomination, Remuneration, and Corporate Governance Committee

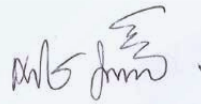
Report on Responsibilities for Financial Reports of the Board of Directors

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, 2021, 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, 2021.



(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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