



Gulf Energy Development Public Company Limited

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MESSAGE FROM THE CHAIRMAN

of life of the people in the society, we commit to refrain from investing in or participating in coal power projects, to increase the proportion of renewable energy under our energy portfolio and to expand the gas-fired power generation and infrastructure businesses to support urbanization to ensure that the Company will be able to grow sustainably and adapt to technology and business disruptions all the while conducting our businesses under good corporate governance.

Dear esteemed investors,

Over the past decade, global awareness of climate change has been the key driver in the gradual move towards decarbonization around the world. International efforts are being undertaken to reduce carbon emission as well as create low-carbon economies, including the transition of the energy landscape towards a more sustainable source of energy. Thailand has played a role in supporting such initiatives, which is apparent from the increase in the proportion of renewable energy and electricity imports, comprising mainly of clean energy, under the national Power Development Plan 2018 - 2037 (PDP2018) and the electrification of transport systems. Vietnam is also taking measures to reduce reliance on coal power, which was the primary source of fuel under the current energy and power development master plan, and to focus more on renewable energy under the new Power Development Master Plan 8 currently being drafted.

In order to remain at the forefront of the power industry while adapting to changing global trends, Gulf Energy Development Public Company Limited ("the Company") has expanded its portfolio in the past year to include infrastructure and utilities business in addition to the existing conventional power generation, renewable energy and gas businesses. In 2019, the Company submitted bidding documents for the development and operation of 5 infrastructure projects in Thailand, and in October 2019, the Company signed the Public Private Partnership contract with the public sector for the development of the Map Ta Phut Industrial Port Development Phase 3, being the first project under the Eastern Economic Corridor Infrastructure Development Program to achieve such progress. Apart from the successful venture into a new industry, the Company was also able to maintain good operating performance for the remaining businesses.

recording remarkable growth in revenues and profit from the successive commencement of commercial operation of power projects in Thailand and Vietnam, as well as from the expansion of industrial customer base in Thailand.

With an aspiration to elevate the quality of life of the people in the society, the Company has established long-term business strategies for sustainable business growth. We commit to refrain from investing in or participating in coal power projects and to increase the proportion of renewable energy under our energy portfolio to reduce greenhouse gas emissions, to expand the gas-fired power generation business and infrastructure business to support urbanization and secure the nation's power supply, and to invest in other related businesses to ensure that Gulf Energy Development Public Company Limited will always be able to grow sustainably and adapt to technology and business disruptions all the while conducting our businesses under good corporate governance.

On behalf of our Board of Directors, the management and the employees of Gulf Energy Development Public Company Limited, I would like to extend our sincere gratitude to you, our shareholders, for the confidence and trust that you have placed in GULF and to assure you that we will continue to conduct our business in a responsible manner and to grow sustainably for the utmost benefit of our shareholders.

> (Mr. Viset Choopiban) Chairman of the Board

Us anni



Message from the CEO

"Gulf is well aware of the crucial link between energy security and economic growth. We therefore continue to direct our efforts towards delivering affordable, reliable energy in the long term while contributing to impactful climate action. We believe it is our corporate social responsibility to help build a stronger, more sustainable society."

Dear valued shareholders,

The focus for Gulf Energy Development Public Company Limited in 2019 has been on building on our successes and branching out into new areas of business. We continue to seek opportunities domestically and overseas in order to create value for our shareholders while keeping the well-being of the Thai people in mind. Our successes overseas, which include bringing two new projects to commercial operation and beginning construction on two projects as well as planning for other projects, are important steps in helping us achieve our objective of becoming an internationally-recognized energy company. More importantly, the opportunity to interact closely with other countries, especially our neighbors, helps to demonstrate our sincere wish to contribute to regional development, thereby strengthening international relations and supporting the Thai economy indirectly through greater recognition for the country.

To this end, a major focus for us this year has been to increase our investment in infrastructure projects which will help support industrial expansion and economic growth in Thailand. The successful development of these projects will help increase the country's competitiveness by increasing access to greater market services through more efficient cross-country and transnational logistics channels. As we are well aware of the crucial link between energy security and economic growth, we continue to direct our efforts towards developing large-scale power projects which will deliver affordable, reliable energy in the long term.

At the same time, we remain highly concerned about environmental and social well-being. Recognizing the potential for Gulf to contribute to impactful climate action, we have made significant progress in adding renewables to our generation mix, in line with global trends towards decarbonization and the Company's strategy to increase investments in renewable energy projects. We have successfully begun commercial operation of some of our renewable energy projects and are actively pursuing a number of opportunities in the pipeline. We emphasize our commitment to sustainable power with our No Coal policy; Gulf will maintain our role as a leading provider of safe, clean and affordable energy.

In addition to supporting economic growth and environmental responsibility, Gulf also works hard to ensure that our business success translates into improved well-being for the local communities where we operate and for society in general. We believe it is the **corporate social responsibility** of a good company not just to take care of the needs of our shareholders, but to address the needs of all our stakeholders and engage with them to help build a stronger, more sustainable society. We are therefore involved in over 200 social and community development programs supporting education, sports, healthcare, and the improvement of local livelihoods.

One of our most important stakeholder groups is our own Gulf family. We have always made it a point to abide by the principles of **fairness and non-discrimination**, providing equal opportunities for our employees to develop their skills and demonstrate their capabilities. We invest in recruiting good quality personnel and training them not just to be good workers, but to be good people, because we see the current generation as the hope for the future. By fostering unity and a love of learning, rewarding hard work and strong ability, and encouraging courage and adaptability, Gulf aims to build a **top-quality workforce** that will serve as a model of responsible and sustainable business.

Certainly though, we would not have been able to achieve such successes without the support of the many parties involved. Thus, on behalf of the management and employees of Gulf, I would like to thank you, our shareholders, investors and all our stakeholders, for the confidence you have placed in our company. We are committed to delivering sustainable value creation for all our stakeholders and hope to maintain this success through many more years to come.

(Mr. Sarath Ratanavadi)

Sal Relen.

Chief Executive Officer



GENERAL INFORMATION

Company name : Gulf Energy Development Public Company Limited

Ticker symbol: GULF

Stock exchange: Stock Exchange of Thailand

Industry sector: Energy and Utilities

Company registration number: 0107560000231

Type of business: Holding company investing in a portfolio of electricity, steam and

chilled water generating projects and other businesses

Head office: 87 M. Thai Tower, All Seasons Place, 11th Floor, Wireless Road,

Lumpini Sub-District, Pathumwan District, Bangkok 10330

Telephone: 02-080-4499

Fax: 02-080-4455

Website: www.gulf.co.th

Registered capital: THB 10,666,500,000

Paid-up capital: THB 10,666,500,000, comprised of 2,133,300,000 ordinary shares

Par value: THB 5.0

Company Secretary: Telephone: 02-080-4070

Fax: 02-080-4455 Email: cs@gulf.co.th

Investor Relations: Telephone: 02-080-4488

Fax: 02-080-4455 Email: ir@gulf.co.th

Other References

1. Securities Registrar Thailand Securities Depository Co., Ltd.

Address: 93 The Stock Exchange of Thailand Building,

Ratchadaphisek Road, Dindaeng Sub-District,

Dindaeng District, Bangkok 10400

Telephone: 02-009-9999

Fax: 02-009-9991

Website: www.set.or.th/tsd

2. Auditor PricewaterhouseCoopers ABAS Ltd.

Auditor's name: Mr. Boonrueng Lerdwiseswit Certified Public Accountant (Thailand) No. 6552

Address: 179/74-80 15th Floor, Bangkok City Tower, South Sathorn Road, Tungmahamek Sub-District,

Sathorn District, Bangkok 10120

Telephone: 02-344-1000

Fax: 02-286-5050

Website: www.pwc.com

3. Debenture Registrar Bangkok Bank Public Company Limited

Address: 333 Silom Road, Silom Sub-District,

Bangrak District, Bangkok 10500

Telephone: 02-231-4333

Fax: 02-231-4890

Website: www.bangkokbank.com

4. Debentureholders'

Representative

Bangkok Bank Public Company Limited

Address: 333 Silom Road, Silom Sub-District,

Bangrak District, Bangkok 10500

Telephone: 02-231-4333

Fax: 02-231-4890

Website: www.bangkokbank.com

BACKGROUND AND

KEY MILESTONES

· GHC was established by Mr. Sarath Ratanavadi, as his wholly-owned company · GJP was established by J-Power, as its wholly-owned subsidiary 2008 · GJP was awarded 7 gas-fired SPPs and won • 2 gas-fired IPPs under GJP signed PPAs with EGAT the bid to develop 2 gas-fired IPPs 2009 • GHC acquired a 10.0% equity interest in GJP from • 7 gas-fired SPPs under GJP signed PPAs with EGAT 2010 • GHC was awarded 12 gas-fired SPPs • The Company was established by Mr. Sarath Ratanavadi, as his wholly-owned company • GHC transferred all of its stake in 12 gas-fired SPPs to the Company 2012 12 gas-fired SPPs under GHC signed PPAs with EGAT • GHC transferred 10.0% of its stake in GJP to the Company • IPD was established by the Company to participate in the IPP solicitation program in 2012 · Mitsui & Co. acquired a 49.0% equity interest in IPD • IPD was awarded 2 gas-fired IPPs, GSRC and GPD, which subsequently signed PPAs with EGAT • GMP was established by the Company, and the Company transferred all of its stake in the 12 gas-fired SPPs to GMP • Gulf Solar was established by the Company, which secured the rights to develop and operate 4 rooftop solar power projects

 $^{^{\}mbox{\tiny 1/}}\mbox{Gulf HK}$ currently holds 10.6% equity stake in SPCG (as of December 31, 2019)

^{2/}Hemaraj subsequently transferred all of its shares to WHAUP, its subsidiary

2014

- WHA Energy, a subsidiary of WHAUP, acquired a 25.0% equity interest in Gulf Solar
 - The Company established Gulf HK, which invested 9.1% in SPCG1
 - The Company established GCG, as its wholly-owned subsidiary

2015

- The Company established Gulf WHA MT
 - MIT-Power (wholly-owned by Mitsui & Co.) acquired a 30.0% equity interest in GMP
 - The Company divested Pomodoro Group Co., Ltd., a non-power related subsidiary
 - Gulf HK acquired 0.5% of EDL-Gen's issued and paid-up shares.

2016

- The Company was awarded the GCG biomass project
 - The Company acquired an additional equity interest in GJP, from 10.0% to 40.0%
 - The Company divested Gulf Sport, a non-power related subsidiary
 - Gulf WHA MT established WHA NGD2

2017

- Gulf WHA MT established WHA NGD4
- The Company transferred the 51.0% share capital of Gulf WHA MT to Hemarai2
- The Company registered its conversion to a public company limited
- 4 gas-fired SPPs under GMP commenced commercial operation
- The Company's shares were listed and began first trading on the Stock Exchange of Thailand on December 6, 2017

 The Company invested a 35.0% equity interest with WHAUP and MITG to jointly develop the natural gas distribution business to industrial users
 GCG signed the PPA with EGAT

- The Company acquired an additional equity interest in IPD from 51.0% to 70.0% while being entitled to receive 75.0% dividends
- The Company acquired a 49.0% equity interest in four solar and wind power projects in Vietnam
 - TTCIZ-01 and TTCIZ-02 signed the PPAs with EVN for 20 years
- The Company won the bid to develop a gas-fired power project in Oman, with a 45.0% equity interest in the project
 - 4 gas-fired SPPs and WHA NGD2 commenced commercial operation

 The Company acquired an additional equity interest in TTCIZ-01 and TTCIZ-02 from 49.0% to 90.0%

- The Company acquired an additional equity interest in Mekong project from 49.0% to 95.0%
- Mekong Wind project phase 1 signed the PPA with EVN
- The Company, Mitsui & Co. and TGES invested equally at 33.3% equity interest in BSE, to invest in the power distribution system and district cooling system for One Bangkok Project
- The Company invested a 70.0% equity interest with PTT Tank in Gulf MTP which entered into a PPP contract with IEAT for Map Ta Phut Industrial Port Development Phase 3 Project
- 4 gas-fired SPPs, WHA NGD4 project, TTCIZ-01 and TTCIZ-02 projects commenced commercial operation

2018

KEY EVENTS

IN 2019

January

- The GNLL2 power project, under the Company's subsidiary, GMP, commenced commercial operation.
- The Company offered unsecured and unsubordinated debentures valued THB 7,500 million to institutional investors and high net worth investors.
- The Company increased its indirect shareholding in the TTCIZ-02 solar power project in Vietnam from 49.0% to 90.0%.

April

- The TTCIZ-02 solar power plant project in Vietnam commenced commercial operation.
- The Company established BSE to invest in the power distribution system and district cooling system for One Bangkok Project.
- The Annual General Meeting of Shareholders 2019 approved the dividend payment for the operating results ended December 31, 2018 at THB 1.20 per share, totaling THB 2,560.0 million, or equivalent to 78.9% of the Company's net profit based on the separate financial statement.

June

- The NGD4 natural gas distribution project, under the Gulf WHA MT joint venture, commenced commercial operation.
- The Company increased its shareholding in wind and solar power projects in Vietnam (Mekong Project) from 49.0% to 95.0%.

March

- The GNPM power project, under the Company's subsidiary, GMP, commenced commercial operation.
- The TTCIZ-01 solar power plant project in Vietnam commenced commercial operation.

May

The GNRV1 power project, under the Company's subsidiary, GMP,
commenced commercial operation.

July

- The GNRV2 power project, under the Company's subsidiary, GMP, commenced commercial operation.
- The Company has entered into a Shareholders' Agreement in BSE with Mitsui & Co. and TGES in which the Company's shareholding in BSE was reduced from 100.0% to 33.3%.
- An offshore wind farm project phase 1 with installed power generation capacity of 30 megawatts under Mekong Project in Vietnam signed the PPA with EVN.

October

The Company and PTT Tank
 established a new subsidiary under
 the name of Gulf MTP to enter into
 a PPP contract with IEAT for Map
 Ta Phut Industrial Port Development
 Phase 3 Project.

November

- The Company has entered into a
 Cooperation Agreement with the Ninh
 Thuan Provincial People's Committee
 in Vietnam to jointly extend their
 cooperation to the exchange of studies
 and expertise as well as to accelerate
 the development of a gas-fired power
 project with installed power generation
 capacity of up to 6,000 megawatts
 along with an LNG terminal with
 capacity of up to 6 million tons per
 annum which will be located in Ninh
 Thuan province.
- GPD signed long-term financing agreements with an aggregate amount of THB 41,000 million to develop the IPP power project with an installed capacity of 2,650 megawatts.
- Mekong Wind Power entered into the Long Term Program Service Agreement and Engineering, Procurement and Construction Contract for the Mekong Wind Power Project.
- The Company increased its indirect shareholding in the TTCIZ-01 solar power project in Vietnam from 49.0% to 90.0%.

September

The consortium in which the Company and PTT Tank have shareholding of 70.0% and 30.0%, respectively, has been selected to develop the Map Ta Phut Industrial Port Development Phase
3 Project.

FINANCIAL

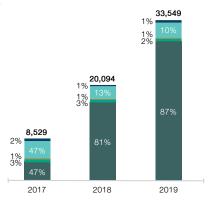
HIGHLIGHTS

	2017	2018	2019
Consolidated Statements of Comprehensive Income (THB mn)			
Total revenues	8,529	20,094	33,549
Total revenues from sales and management fee	4,350	17,181	30,040
Total cost of sales and management fee	(3,286)	(12,681)	(22,791)
Gain (loss) on exchange rate, net	995	135	1,003
Share of profit from an associate and joint ventures	3,982	2,615	3,205
Profit (loss) for the year	3,907	4,141	7,166
Profit (loss) attributable to owners of the parent	3,451	3,028	4,887
Core profit	1,559	2,826	3,509
Consolidated Statements of Financial Position (THB mn)			
Total assets	100,652	123,669	134,278
Total liabilities	61,304	78,880	85,238
Total equity	39,348	44,788	49,040
Total equity attributable to owners of the parent	34,565	36,537	38,427
Financial Ratios			
Book value per share (THB)	16.20	17.13	18.01
Basic earnings per share (THB)	3.18	1.42	2.29
Net profit margin* (%)	45.8%	20.6%	21.4%
Profit exclude gain (loss) on exchange rate to total revenues* (%)	34.1%	19.9%	18.4%
Return on equity (%)	18.1%	9.8%	15.3%
Return on assets (%)	4.9%	3.7%	5.6%
Debt to equity (times)	1.56	1.76	1.74
Interest-bearing debt to equity (times)	1.45	1.55	1.57
Net debt to equity (times)	1.04	1.34	1.44

^{*}Total revenues = revenues from sales and management fee + other income + interest income + dividend income + share of profit from an associate and joint ventures

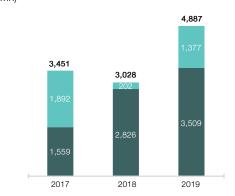
Total revenue breakdown

(THB mn)



- Revenue from electricity sales
- Revenue from steam sales
- Revenue from management fee
- Share of profit from an associate and joint ventures
- Other income including interest and dividend income

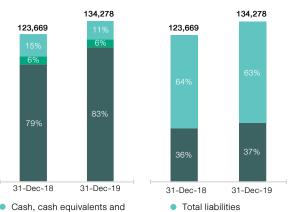
Core profit and net profit attributable to owners of the parent (THB mn)



Profit attributable to owners of the parent

- Gain (loss) on exchange rate attributable to owners of the parent
- Core profit

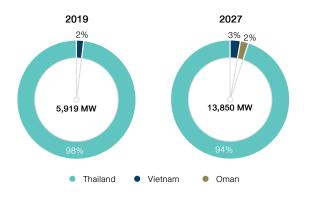
Assets Liabilities and Equity (THB mn) (THB mn) 134.278 134,278



Total equity

- Cash, cash equivalents and short-term investments
- Other current assets
- Non-current assets

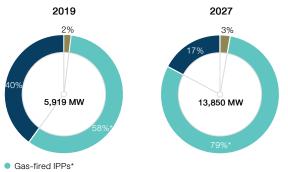
Installed Power Generation Capacity by Geography



Remarks:

- 1/ Data as of January 31, 2020
- $^{\mbox{\tiny 2/}}$ 2019: Projects that have commenced commercial operation only 2027: Including projects that are under development/construction, in which installed capacity may be subject to change as sappropriate

Installed Power Generation Capacity by Types of Energy Resources

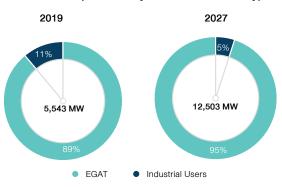


- Gas-fired SPPs
- Renewable

Remarks:

- * Including gas-fired power project in Oman
- ^{1/} Data as of January 31, 2020
- $^{\mbox{\tiny 2/}}$ 2019: Projects that have commenced commercial operation only 2027: Including projects that are under development/construction, in which installed capacity may be subject to change as appropriate

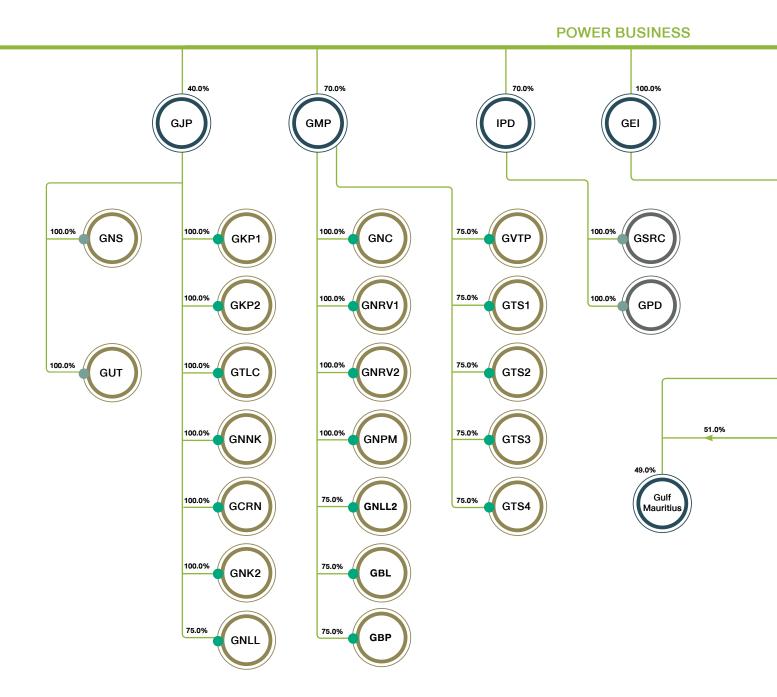
Contracted Power Generation Capacity by Customers (Power Projects in Thailand Only)



INVESTMENT

STRUCTURE

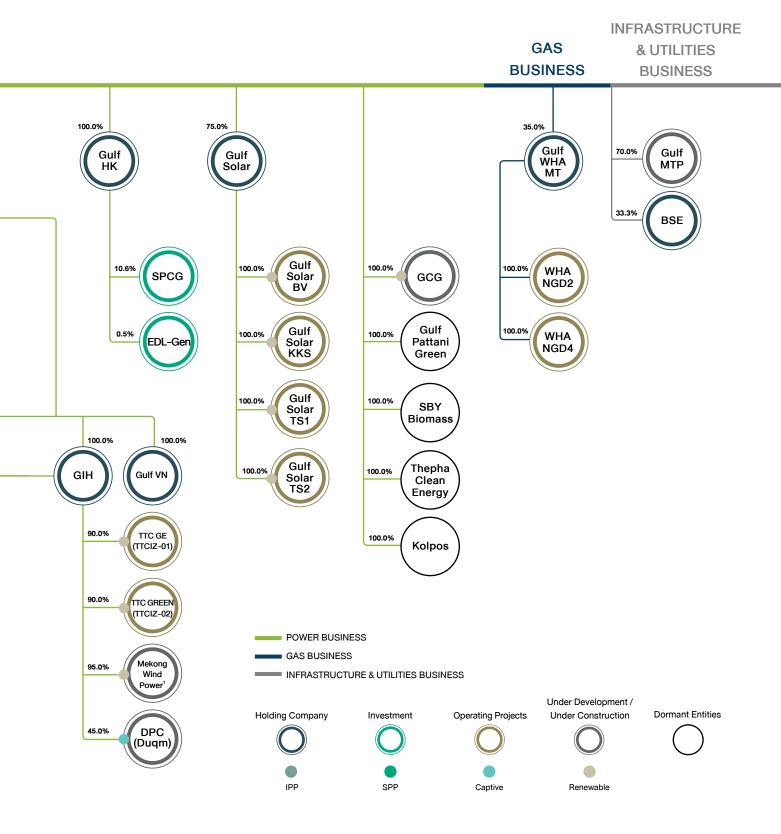




Data as of December 31, 2019

Remarks:

^{1/}Mekong Wind Power Joint Stock Company is the developer of Mekong Solar Farm and Mekong Wind Farm

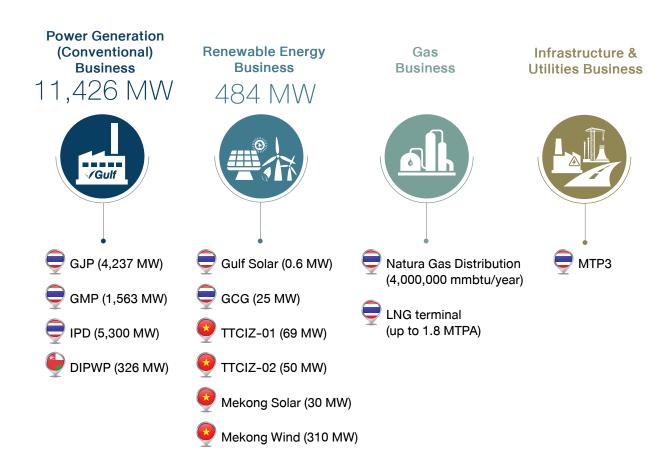


COMPANY'S

BUSINESS

The Company is a holding company with a portfolio of electricity, steam and chilled water generating projects and other related businesses, and is one of Thailand's largest private power producers. As of December 31, 2019, the total installed capacity of the Group's power projects – including those that have achieved commercial operation and those under development scheduled for completion by 2024 – is 11,910.4 megawatts, with an equity installed capacity of 6,905.8 megawatts. As of December 31, 2019, the Group's power projects which have achieved commercial operation have a total installed capacity of 5,919.4 megawatts, with an equity installed capacity of 2,701.1 megawatts.

The Company's business structure can be divided into 4 groups: the power generation business, the renewable energy business, gas business and infrastructure & utilities business.



1. Power Generation Business

1.1 Gas-fired power business in Thailand

The Group's gas-fired IPP power projects generate and sell electricity to EGAT under a 25-year PPA, while its gas-fired SPP power projects sell 70.0% - 80.0% of the electricity they generate to EGAT under a 25-year PPA which begins when the project achieves commercial operation. Electricity sold to EGAT is distributed through EGAT's country-wide transmission network from where it is then sold to PEA and MEA who then distribute it to consumers across the country. In addition, the gas-fired power projects also sell electricity, steam and chilled water to industrial users under PPAs with certain groups of industrial users.

The Company develops and operates its gas-fired power projects through subsidiaries and an associate which can be classified into three groups as follows:

1.1.1 GJP

GJP is an associated company in which JPHT (a company under J-Power Group) and the Company holds 60.0% and 40.0% equity interest, respectively. GJP operates 9 power projects which include two gas-fired IPPs located in Saraburi and Ayutthaya provinces, and 7 gas-fired SPPs located in Saraburi, Ayutthaya, Chachoengsao, Rayong and Pathumthani provinces. The projects have a total installed power generation capacity of 4,236.6 megawatts, with an equity installed capacity of 1,682.3 megawatts. All power projects under GJP achieved commercial operation between 2013 and 2015.

1.1.2 GMP

GMP is a subsidiary in which MIT-Power (a company under Mitsui Group) and the Company holds 30.0% and 70.0% equity interest, respectively. GMP operates 12 gas-fired SPPs located in Rayong, Prachinburi, Ayutthaya, Saraburi and Nakorn Ratchasima provinces, with a total installed power generation capacity of 1,563.4 megawatts of which equity installed capacity is 911.4 megawatts. All power projects under GMP achieved commercial operation between 2017 and 2019.

1.1.3 IPD

IPD is a subsidiary in which MIT-Power and the Company holds 30.0% and 70.0% equity interest, respectively, and the Company receives 75.0% of the total dividend payment which IPD pays out each time. IPD is the developer and operator of two gas-fired IPPs, namely, GSRC power project located in Chonburi province and GPD power project located in Rayong province, which have a total installed power generation capacity of 5,300.0 megawatts, of which equity installed capacity is 3,710.0 megawatts. At present, both power projects have been granted all required permits and the Company expects the projects to begin commercial operation between 2021 and 2024. As of December 31, 2019, GSRC power project's construction progress was at 52.2%, while GPD has already signed a long-term financing agreement with a group of onshore and offshore financial institutions and is expected to commence construction within the 3rd quarter of 2020.

Moreover, in January 2020, the Company has invested in 2 gas-fired IPPs as follows:

1.1.4 Hin Kong Power Project

HKH is a joint venture in which RATCH and the Company holds 51.0% and 49.0% equity interest, respectively. HKH is a holding company of HKP, to develop and operate a gas-fired IPP, namely, Hin Kong Power Project located in Ratchaburi province, with contracted power generation capacity of 1,400 megawatts under PPA with EGAT. At present, the project is in the process of preparing the Environmental Impact Assessment and is expected to commence commercial operation between 2024 and 2025.

1.1.5 Burapa Power Project

BPH is a joint venture in which NPS and the Company holds 65.0% and 35.0% equity interest, respectively. BPH is a holding company of BPG, to develop and operate a gas-fired IPP, namely, Burapa Power Project located in Chachoengsao province, with contracted power generation capacity of 540 megawatts under PPA with EGAT. At present, the project is in the process of preparing the Environmental Impact Assessment and is expected to commence commercial operation in 2027.

1.2 Gas-fired power business overseas

The Company indirectly holds 45.0% of shares in DPC through the subsidiary, GIH, to operate a gas-fired captive power project, namely the DIPWP power project located in the Duqm Special Economic Zone (Duqm SEZ) in Oman. The project has a total installed power generation capacity of 326.0 megawatts and a total installed desalinated water generation capacity of 1,667.0 cubic meters, of which equity installed capacity is 146.7 megawatts and 750.2 cubic meters, respectively.

The DIPWP power project generates and sells electricity and desalinated water to the Duqm Refinery and Petrochemical Industrial Company L.L.C. - a large-scale refinery with a crude oil production capacity of approximately 230,000 barrels per day - under a 25-year Power and Water Purchase Agreement (PWPA) with the option to extend the contract for an additional five years. As of December 31, 2019, DIPWP project's construction progress was at 51.4%, and the Company expects the project to achieve commercial operation between 2021 and 2022.

2. Renewable Energy Business

2.1 Renewable energy business in Thailand

The Company develops and operates two forms of renewable energy projects in Thailand: rooftop solar power and biomass power projects.

2.1.1 Gulf Solar power projects

The Company holds a 75.0% equity interest in the subsidiary, Gulf Solar, to operate 4 rooftop solar VSPP projects located in Chonburi and Rayong provinces. The projects have a total installed capacity of 0.6 megawatts and began commercial operation between 2014 and 2015.

2.1.2 GCG power project

The Company wholly owns the subsidiary, GCG, which operates a biomass SPP located in Songkhla province with a total installed capacity of 25.0 megawatts. The power project will receive an additional adder of THB 1.3 per kilowatt-hour for seven years as part of a special program for projects located in the four districts of Songkhla province. As of December 31, 2019, construction progress was at 95.1% and the Company expects the project to begin commercial operation in March 2020.

2.2 Renewable energy business overseas

The Company develops and operates renewable energy power plants in Vietnam. The projects, which have a total installed power generation capacity of 458.8 megawatts, can be divided into two categories: Solar Farm and Offshore Wind Farm.

2.2.1 Solar power projects

The Company indirectly holds 90.0% of shares in TTC GE and TTC GREEN through the subsidiary, GIH, to operate 2 solar farms in Vietnam, namely, TTCIZ-01 and TTCIZ-02, both of which are located in Tay Ninh province, Vietnam, with a total installed power generation capacity of 118.8 megawatts. The projects sell electricity to EVN under a 20-year PPA which begins when the project achieves commercial operation, and all projects have achieved commercial operation in 2019.

Moreover, the Company indirectly holds 95.0% of shares in Mekong through the subsidiary, GIH, to operate a solar power plant, namely, Mekong solar farm project located in Ben Tre province, Vietnam, with a total installed power generation capacity of up to 30.0 megawatts. As of December 31, 2019, Mekong solar farm project is awaiting approval from relevant agencies, and project development will be considered based on the appropriate feed-in tariff (FiT) rates, which will be announced by relevant government agencies.

2.2.2 Wind power project

The Company indirectly holds 95.0% of shares in Mekong through the subsidiary, GIH, to develop and operate a wind power project, Mekong Wind Farm, located in Ben Tre province with a total installed power generation capacity of up to 310.0 megawatts. The project is divided into several phases, and phase 1 with installed power generation capacity of 30.0 megawatts will sell electricity to EVN under a 20-year PPA, which begins when the project achieves commercial operation. In November 2019, the Company signed the EPC contract and the project is expected to commence commercial operation in December 2020, while the other phases are expected to gradually commence commercial operation in 2021.

3. Gas Business

3.1 Gas distribution business

The Company holds a 35.0% equity interest in the joint venture, Gulf WHA MT, which operate two gas distribution projects serving industrial users in industrial estates, namely, WHA NGD2 and WHA NGD4, distributing natural gas to industrial users in the WHA Eastern Seaboard 2 and WHA Eastern Seaboard 4 industrial estates, respectively. At present, both projects have been granted all required permits, with WHA NGD2 commencing commercial operation in 2018 and WHA NGD4 achieving commercial operation in 2019.

3.2 Liquefied natural gas terminal business

Gulf MTP is a subsidiary in which the Company holds 70.0% equity interest to develop and operate the MTP3 project, and received the right to design, construct and operate the port and LNG terminal located in the Map Ta Phut Industrial Estate, Rayong province. The aforementioned business is related to MTP3 project, and the LNG terminal of the MTP3 project can facilitate shipment of LNG volume of up to 10.8 million tons per annum (for LNG terminal phase 1 and its extension at a later stage). The Company expects the project to begin commercial operation in 2025. Details of the MTP3 project is disclosed under Section 4.1 "Map Ta Phut Industrial Port Development Phase 3 Project (Phase 1)".

4. Infrastructure & Utilities business

4.1 Map Ta Phut Industrial Port Development Phase 3 Project (Phase 1)

In 2019, the Company has invested in the Infrastructure & Utilities business. The Company and PTT Tank established Gulf MTP with 70.0% and 30.0% equity interest, respectively, to develop and operate Map Ta Phut Industrial Port Development Phase 3 Project (Phase 1) (MTP3 project) located in the Map Ta Phut Industrial Estate, Rayong province. Gulf MTP has entered into a Public Private Partnership (PPP) contract with IEAT with contract terms of 30 years, and the project is comprised of 1) design and construction of the infrastructure, including dredging and land reclamation of approximately 1,000 rai, in which the Company expects the phase to be completed within 2023, and 2) the right to construct the port and LNG terminal on approximately 200 rai of the reclaimed land as mentioned in Section 3.2 "Liquefied natural gas terminal business".

Furthermore, the Company also entered into 3 other Public Private Partnerships (PPP) related to the country's infrastructures as follows:

4.2 Laem Chabang Port Development Phase 3 (Terminal F)

The Company, PTT Tank and CHEC, together under the name of GPC Consortium, participated in the bidding of PAT's Laem Chabang Port Development Phase 3 project (Terminal F). The private sector will be responsible for the design, construction, and operation and maintenance (O&M) services for F1 and F2 container berths to accommodate container throughput and implement automation technology for the operation of the project, under a 35-year PPP contract with PAT. GPC Consortium has already passed the general qualifications, technical and investment plan proposal, and the proposed compensation benefits are currently under consideration for negotiation in the next stage.

4.3 Intercity Motorway Bang Pa-In - Nakhon Ratchasima (M6) Project

The Company, BTS, STEC and RATCH, together under the name of BGSR Consortium, participated in the bidding of Intercity Motorway Bang Pa-In - Nakhon Ratchasima (M6) Project with a distance of 196 kilometers. The private sector will be responsible for the design and construction of system works and provide operation and maintenance (O&M) services for both the civil works invested by the government and the infrastructure invested by the private sector, under a 30-year PPP contract with the Department of Highways. The BGSR Consortium has been selected to develop the project and is currently negotiating the terms of the PPP Contract, which is expected to be signed within April 2020.

4.4 Intercity Motorway Bang Yai - Kanchanaburi (M81) Project

The Company, BTS, STEC and RATCH, together under the name of BGSR Consortium, participated in the bidding of Intercity Motorway Bang Yai - Kanchanaburi (M81) Project with a distance of 96 kilometers. The private sector will be responsible for the design and construction of system works and provide operation and maintenance (O&M) services for both the civil works invested by the government and the infrastructure invested by the private sector, under a 30-year PPP contract with Department of Highways. The BGSR Consortium has been selected to develop the project and is currently negotiating the terms of the PPP Contract, which is expected to be signed within April 2020.

Moreover, in January 2020, the Company has invested in a project related to Utilities business as follows:

4.5 Power Distribution System and District Cooling System Project)

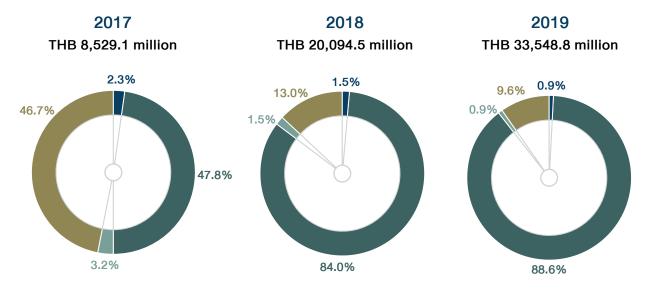
BSE is a joint venture in which the Company, Mitsui, and TGES each hold 33.3% equity interest equally, established as a holding company investing in the power distribution system and district cooling system for One Bangkok Project, with details as follows:

- BSP, in which BSE holds 40.0% equity interest, will operate the power distribution system with installed capacity of approximately 240 megawatts for One Bangkok Project under the Utility Development Agreements with One Bangkok Project for 30 years.
- BSD, in which BSE holds 49.0% equity interest, will operate the District Cooling System with installed capacity of approximately 36,000 refrigeration tons for One Bangkok Project under the Utility Development Agreements with One Bangkok Project for 30 years.

One Bangkok Project is a mixed used estate located on Wireless - Rama IV - Sathorn Intersection, with total area of 104 rais. The project has started construction since June 2019 and is expected to commence operation in 2023.

Revenue Structure

In 2019, the majority of the Group's revenue was derived from the gas-fired power business in Thailand, in particular revenue from the sale of electricity and steam from the subsidiary GMP and share of profit from the associate GJP.



- Revenue from electricity and steam sales
- Revenue from management fee
- Share of profit from an associate and joint ventures
- Other income

The table below shows information about the Group's power projects in Thailand and overseas categorized by the projects' operational status as projects in operation, projects under construction/preparing for construction, and projects under development under various groups, namely GMP, IPD, GCG, Gulf Solar and GJP for power projects in Thailand, and GIH Group for power projects overseas, namely Vietnam and Oman (as of December 31, 2019).

Project Name	Category	Location	Type of Power Project ⁽¹⁾	Installed Power/ Steam/Chilled Water Generation Capacity ⁽²⁾	Equity Participation ⁽³⁾	Equity Installed Power/Steam/ Chilled Water Generation Capacity ⁽²⁾	Contracted Power/Steam/ Chilled Water Generation Capacity (4)(5)	Commercial Operation Dates/ Scheduled Commercial Operation Dates
POWER PROJE	CTS IN THA	AILAND						
GMP Group : In	operation							
GVTP	SPP	Rayong	Gas-fired (CG)	EE: 137.0 MW ST: 20.0 TPH	52.49%	EE: 71.9 MW ST: 10.5 TPH	PPA: 90.0 MW ESA: 50.9 MW SSA: 7.0 TPH	May 16, 2017
GTS1	SPP	Rayong	Gas-fired (CG)	EE: 134.0 MW ST: 30.0 TPH	52.49%	EE: 70.3 MW ST: 15.7 TPH	PPA: 90.0 MW ESA: 41.0 MW SSA: 42.0 TPH	July 8, 2017
GTS2	SPP	Rayong	Gas-fired (CG)	EE: 134.0 MW ST: 30.0 TPH	52.49%	EE: 70.3 MW ST: 15.7 TPH	PPA: 90.0 MW ESA: 44.7 MW SSA: 36.0 TPH	September 1, 2017
GTS3	SPP	Rayong	Gas-fired (CG)	EE: 129.9 MW ST: 25.0 TPH	52.49%	EE: 68.2 MW ST: 13.1 TPH	PPA: 90.0 MW ESA: 41.1 MW SSA: 25.0 TPH	November 1, 2017

Project Name	Category	Location	Type of Power Project ⁽¹⁾	Installed Power/ Steam/Chilled Water Generation Capacity ⁽²⁾	Equity Participation ⁽³⁾	Equity Installed Power/Steam/ Chilled Water Generation Capacity ⁽²⁾	Contracted Power/Steam/ Chilled Water Generation Capacity (4)(5)	Commercial Operation Dates/ Scheduled Commercial Operation Dates
POWER PROJE			1 10,000	Cupacity	Tartiorpation	Cupuony	Cupucity	Operation Bates
GMP Group : In								
GTS4	SPP	Rayong	Gas-fired (CG)	EE: 129.9 MW	52.49%	EE: 68.2 MW	PPA: 90.0 MW ESA: 35.3 MW	January 1, 2018
				ST: 25.0 TPH		ST: 13.1 TPH	SSA: 25.0 TPH	
GNC	SPP	Prachinburi	Gas-fired (CG)	EE: 126.5 MW	70.0%	EE: 88.5 MW	PPA: 90.0 MW ESA: 17.7 MW	March 1, 2018
				ST: 20.0 TPH		ST: 14.0 TPH	SSA: 22.0 TPH	
GBL	SPP	Ayutthaya	Gas-fired (CG)	EE: 126.8 MW	52.50%	EE: 66.6 MW	PPA: 90.0 MW ESA: 32.3 MW	September 1, 2018
				ST: 10.0 TPH		ST: 5.3 TPH	SSA: 8.0 TPH	
GBP	SPP	Ayutthaya	Gas-fired (CG)	EE: 126.8 MW	52.50%	EE: 66.6 MW	PPA: 90.0 MW ESA: 34.0 MW	November 1, 2018
				ST: 10.0 TPH		ST: 5.3 TPH	SSA: 2.5 TPH	
GNLL2	SPP	Rayong	Gas-fired (CG)	EE: 126.9 MW	52.49%	EE: 66.6 MW	PPA: 90.0 MW ESA: 31.0 MW	January 1, 2019
0.15.4				ST: 10.0 TPH		ST: 5.2 TPH		
GNPM	SPP	Saraburi	Gas-fired (CG)	EE: 135.2 MW	70.00%	EE: 94.7 MW	PPA: 90.0 MW ESA: 37.7 MW	March 1, 2019
01/51//				ST: 25.0 TPH		ST: 17.5 TPH	SSA: 37.0 TPH	
GNRV1	SPP	Nakorn Ratchasima	Gas-fired (CG)	EE: 128.2 MW	70.00%	EE: 89.8 MW	PPA: 90.0 MW ESA: 32.8 MW	May 1, 2019
ONID) (O	ODD	NI-L	0 6	ST: 10.0 TPH	70.000/	ST: 7.0 TPH	SSA: 2.0 TPH	habitat 0040
GNRV2	SPP	Nakorn Ratchasima	Gas-fired (CG)	EE: 128.2 MW ST: 10.0 TPH	70.00%	EE: 89.8 MW ST: 7.0 TPH	PPA: 90.0 MW ESA: 21.8 MW	July 1, 2019
Subtotal GMP G	iroup			EE: 1,563.4 MW		EE: 911.4 MW	PPA: 1,080.0 MW ESA: 420.2 MW	
				ST: 225.0 TPH		ST: 129.5 TPH	SSA: 206.5 TPH	
Preparing for / u	ınder cons	struction						
GSRC	IPP	Chonburi	Gas-fired (CCGT)	EE: 2,650.0 MW	70.00%	EE: 1,855.0 MW	PPA: 2,500.0 MW	Units 1 and 2: Expected 2021
								Units 3 and 4: Expected 2022
GPD	IPP	Rayong	Gas-fired (CCGT)	EE: 2,650.0 MW	70.00%	EE: 1,855.0 MW	PPA: 2,500.0 MW	Units 1 and 2: Expected 2023
								Units 3 and 4: Expected 2024
Subtotal IPD Gr				EE: 5,300.0 MW		EE: 3,710.0 MW	PPA: 5,000.0 MW	
Gulf Solar DV(6)	•		0-1	EE. 0.40 MM	74.000/	EE. 0.40 * ***	DDA 0.40 M	huma 00 0011
Gulf Solar BV ⁽⁶⁾	VSPP	Chonburi	Solar	EE: 0.13 MW	74.99%	EE: 0.10 MW	PPA: 0.13 MW (132.8 kW)	June 23, 2014
Gulf Solar ISS	VSPP	Rayong	Solar	EE: 0.13 MW	74.99%	EE: 0.09 MW	PPA: 0.13 MW (127.4 kW)	August 27, 2014
Gulf Solar KKS	VSPP	Chonburi	Solar	EE: 0.25 MW	74.99%	EE: 0.19 MW	PPA: 0.25 MW (249.6 kW)	December 26, 2014
Gulf Solar TS2 ⁽⁶⁾	VSPP	Rayong	Solar	EE: 0.09 MW	74.99%	EE: 0.07 MW	PPA: 0.10 MW (95.6 kW)	January 8, 2015
Subtotal Gulf So	nai			EE: 0.60 MW		EE: 0.45 MW	PPA: 0.60 MW	

Project Name	Category	y Location	Type of Power Project ⁽¹⁾	Installed Power/ Steam/Chilled Water Generation Capacity ⁽²⁾	Equity Participation ⁽³⁾	Equity Installed Power/Steam/ Chilled Water Generation Capacity ⁽²⁾	Contracted Power/Steam/ Chilled Water Generation Capacity (4)(5)	Commercial Operation Dates/ Scheduled Commercial Operation Dates
POWER PROJE		·	•		•		. ,	•
GCG : Under co								
GCG	SPP	Songkhla	Biomass	EE: 25.0 MW	100.00%	EE: 25.0 MW	PPA: 20.6 MW	March 2020
Subtotal GCG				EE: 25.0 MW		EE: 25.0 MW	PPA: 20.6 MW	
GJP Group (ass	ociate) : I	n operation						
GNS	IPP	Saraburi	Gas-fired (CCGT)	EE: 1,653.2 MW	40.00%	EE: 661.3 MW	PPA: 1,600.0 MW	<u>Unit 1:</u> June 1, 2014 <u>Unit 2:</u> December 1, 2014
GUT	IPP	Ayutthaya	Gas-fired (CCGT)	EE: 1,752.4 MW	40.00%	EE: 701.0 MW	PPA: 1,600.0 MW	<u>Unit 1:</u> June 1, 2015 <u>Unit 2:</u> December 1, 2015
GKP1	SPP	Saraburi	Gas-fired (CCGT)	EE: 114.0 MW	40.00%	EE: 45.6 MW	PPA: 90.0 MW ESA: 25.7 MW	January 5, 2013
				ST: 22.0 TPH		ST: 8.8 TPH	SSA: 18.0 TPH	
GKP2	SPP	Saraburi	Gas-fired (CG)	EE: 114.0 MW	40.00%	EE: 45.6 MW	PPA: 90.0 MW ESA: 25.1 MW	February 1, 2013
				ST: 22.0 TPH		ST: 8.8 TPH	SSA: 24.5 TPH	
GTLC	SPP	Saraburi	Gas-fired (CG)	EE: 114.0 MW	40.00%	EE: 45.6 MW	PPA: 90.0 MW ESA: 30.2 MW	March 1, 2013
				ST: 15.0 TPH		ST: 6.0 TPH	SSA: 15.0 TPH	
GNNK	SPP	Chachoengsao	Gas-fired (CG)	EE: 114.0 MW	40.00%	EE: 45.6 MW	PPA: 90.0 MW ESA: 29.4 MW	April 1, 2013
ON!!!!	000		0 " 1	CW: 3,200.0 RT	00.000/	· · · · · · · · · · · · · · · · · · ·	CWSA: 1,525.0 R	
GNLL	SPP	Rayong	Gas-fired (CG)	EE: 123.0 MW	30.00%	EE: 36.9 MW	PPA: 90.0 MW ESA: 29.1 MW	May 1, 2013
				ST: 8.0 TPH CW: 4,600.0 RT		ST: 2.4 TPH	SSA: 3.0 TPH CWSA: 3,200.0 R ⁻	r
GCRN	SPP	Pathumthani	Gas-fired (CG)	EE: 119.0 MW	40.00%	EE: 47.6 MW	PPA: 90.0 MW ESA: 27.9 MW	July 1, 2013
				ST: 15.0 TPH		ST: 6.0 TPH	SSA: 10.0 TPH	
GNK2	SPP	Saraburi	Gas-fired (CG)	EE: 133.0 MW	40.00%	EE: 53.2 MW	PPA: 90.0 MW ESA: 44.5 MW	October 1, 2013
				ST: 10.0 TPH		ST: 4.0 TPH	SSA: 6.9 TPH	
Subtotal GJP Group				EE: 4,236.6 MW		EE: 1,682.3 MW	PPA: 3,830.0 MW ESA: 211.9 MW	
				ST: 92.0 TPH		ST: 36.0 TPH	SSA: 77.4 TPH	
				CW: 7,800.0 RT		CW: 2,659.8 RT	CWSA: 4,725.0 RT	
Power Projects	Overseas	5						
GIH Group : In operation								
TTCIZ-01	_	Vietnam	Solar	EE: 68.8 MW	90.00% ⁽⁷⁾	EE: 61.9 MW	PPA: 48.0 MW	March 6, 2019
TTCIZ-02	-	Vietnam	Solar	EE: 50.0 MW	90.00%	EE: 45.0 MW	PPA: 40.8 MW	April 19, 2019
Preparing for /	under cor	struction						
Mekong Wind Farm (Phase 1)	-	Vietnam	Wind	EE: 30.0 MW	95.00% ⁽⁹⁾	EE: 28.5 MW		December 2020
Duqm Independent Power & Water Project (DIPWP)	-	Oman	Gas-fired (Captive)	EE: 326.0 MW WT: 1,667.0 m ³ /hı	45.00%	EE: 146.7 MW WT: 750.2 m ³ /hr	PWPA: 208.0 MW/ 1,250.0 m ³ /hr	2021 - 2022

Project Name	Category	Location	Type of Power Project ⁽¹⁾	Installed Power/ Steam/Chilled Water Generation Capacity ⁽²⁾	Equity Participation ⁽³⁾	Equity Installed Power/Steam/ Chilled Water Generation Capacity ⁽²⁾	Contracted Power/Steam/ Chilled Water Generation Capacity (4)(5)	Commercial Operation Dates/ Scheduled Commercial Operation Dates
Power Projects	Overseas							
GIH Group:								
Under develop	ment							
Mekong Wind Farm ⁽¹⁰⁾	-	Vietnam	Wind	EE: 280.0 MW	95.00% ⁽⁹⁾	EE: 266.0 MW		2021
Mekong Solar Farm ⁽¹¹⁾	-	Vietnam	Solar	EE: 30.0 MW	95.00%	EE: 28.5 MW		
Subtotal GIH G	roup			EE: 784.8 MW		EE: 576.6 MW	PPA/PWPA:	
						_	296.8 MW/	
				WT: 1,667.0 m ³ /h	r	WT: 750.2 m ³ /hr	1,250 m ³ /hr	
Total power pro	jects in ope	eration		EE: 5,919.4 MW		EE: 2,701.1 MW	PPA: 4,999.4 MW ESA: 632.1 MW	
				ST: 317.0 TPH		ST: 165.5 TPH	SSA: 283.9 TPH	
				CW: 7,800.0 RT		CW: 2,659.8 RT	CWSA: 4,725.0 RT	
Total power pro	jects prepa	ring for / und	er	EE: 5,681.0 MW		EE: 3,910.2 MW	PPA/PWPA: 5,228.6 MW/	
				WT: 1,667 m ³ /hr		WT: 750.2 m ³ /hr	1,250.0 m ³ /hr	
Total power pro	jects under	developmen	t	EE: 310.0 MW		EE: 294.5 MW		
Total				EE: 11,910.4 MW		EE: 6,905.8 MW	PPA/PWPA:	
				WT:1,667.0 m ^{3/} hr		WT: 750.2 m ³ /hr	10,228.0 MW/ 1,250 m ³ /hr ESA: 632.1 MW	
				ST: 317.0 TPH		ST: 165.5 TPH	SSA: 283.9 TPH	
				CW: 7,800.0 RT		CW: 2,659.8 RT	CWSA: 4,725.0 RT	

Remarks

- (1) CCGT refers to combined-cycle gas turbine system, CG refers to cogeneration system and Captive refers to power generation system that is sold directly to clients.
- EE refers to power generation capacity in megawatts (MW) or kilowatts (kW); ST refers to steam generation capacity in tons per hour (TPH); CW refers to chilled water generation capacity in refrigeration tons (RT); and WT refers to desalinated water generation capacity in cubic meter per hour (m3/hr). The installed capacities of each power project preparing for or under construction or under development are expected numbers. When any of these power projects becomes operational, the actual installed capacity may differ slightly from the expected numbers.
- ⁽³⁾ Equity participation refers to the effective equity stake directly or indirectly held by the Company.
- (4) PPA refers to the contracted power generation capacity under PPAs between the power projects and EGAT or PEA or EVN; ESA refers to the contracted power generation capacity under ESAs between the power projects and industrial users; SSA refers to the contracted steam generation capacity under SSAs between the power projects and industrial users; CWSA refers to the contracted chilled water generation capacity under CWSAs between the power projects and industrial users; and PWPA refers to the contracted power and water generation capacity under PWPAs between the power projects Duqm Refinery and Petrochemical Industries Company L.L.C.
- (5) The contracted capacities of electricity, steam and chilled water are presented as of December 31, 2019, which represent the capacities under the agreements into which the Group's power projects had entered with EGAT, PEA and industrial users in each case for the time period indicated (as the case may be).
- (6) Each of Gulf Solar BV and Gulf Solar TS2 owns two power projects and has entered into two PPAs. The selected data is presented on a consolidated basis.
- (7) GIH increased its investment in TTC GE, the operator of TTCIZ-01 solar power project in Vietnam, from 49.0% to 90.0% in November 2019.
- (8) GIH increased its investment in TTC GREEN, the operator of TTCIZ-02 solar power project in Vietnam, from 49.0% to 90.0% in January 2019.
- (9) GIH increased its investment in Mekong Wind Power Joint Stock Company, the operator of Mekong Wind Farm and Mekong Solar Farm, from 49.0% to 95.0% in June 2019.
- (10) Mekong Wind Farm, located in Binh Dai district, Ben Tre province, Vietnam, is under development with total installed capacity of up to 310.0 megawatts, divided into several phases. Phase 1, with installed capacity of 30.0 megawatts, is under construction and is expected to commercial operation in December 2020. The other phases are expected to gradually commence commercial operation in 2021.
- (11) Mekong Solar Farm, located in Binh Dai district, Ben Tre province, Vietnam, is awaiting approval from relevant agencies, and project development will be considered based on the appropriate feed-in tariff (FiT) rates, which will be announced by relevant government agencies.

Business Strategies

The Company has an aspiration to elevate the quality of life of the people in the society, with the business that creates sustainable benefits to the community. In order to achieve such goals, the Company has developed a number of business strategies as follows:

- 1. Increase the investment proportion in renewable energy by investing in renewable energy projects and acquiring shares in companies which operate renewable energy businesses. This is a part of the strategy to respond to the climate change, and in preparation to join the low carbon society and reduce greenhouse gas emissions. The Company also has a policy to not support coal power and to refrain from investing in coal power projects.
- 2. Expand the gas-fired power projects and related infrastructure businesses both in Thailand and overseas to ensure power system security and to accommodate the continuous growth in electricity demand in Thailand, as well as support the industrial and economic growth at the national and regional levels.
- 3. Invest in other related businesses to ensure that no matter how the future develops, Gulf will always be able to timely adjust its business structure to the changing world.

All of these strategies are based on good corporate governance principles and utilization of modern, state-of-the-art technologies to ensure that the projects will be developed within the set timeframe and budget and every project is operating with high efficiency without neglecting the responsibilities towards the society and environment.



Industry Overview - Thailand

Demand

Electricity demand in Thailand is expected to grow in tandem with economic growth, based on the database from Energy Policy and Planning Office ("EPPO"), Ministry of Energy. In the last two decades, electricity demand has grown at a CAGR of 3.9%, from 100,091 gigawatt-hours in 2002 to 192,956 gigawatt-hours in 2019. Estimates published in the Thailand Power Development Plan 2018 – 2037 ("PDP2018") indicate that electricity consumption in Thailand will grow in the next five years (2020 – 2024) at a CAGR of 3.6%, from 219,946 gigawatt-hours in 2020 to 253,039 gigawatt-hours in 2024. In addition, long-term electricity consumption is expected to grow at a CAGR of 3.1% from 2020 to 367,458 gigawatt-hours in 2037.

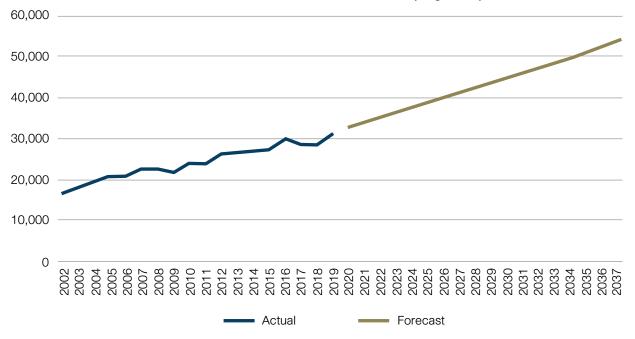
Total Electricity Consumption in Thailand, 2002-2037F (Gigawatt-hours)

Note: Forecasted data are estimates from PDP2018

Sources: EPPO and PDP2018

In 2002 - 2019, peak power demand increased at a CAGR of 3.7%, from 16,681 megawatts in 2002 to 30,853 megawatts in 2019. Estimates in PDP2018 indicate that peak power demand is forecasted to grow at a CAGR of 3.0%, from 32,732 megawatts in 2020 to 53,997 megawatts in 2037. Generally, peak power demand increases with the rising temperatures in April or May due to the hot weather, drought and increased air conditioner use among consumers. Typically, increased peak power demand occurred after the Songkran festival where higher consumption of electricity is experienced in the industrial, services and household sectors.

Peak Power Demand in Thailand, 2002-2037F (Megawatts)



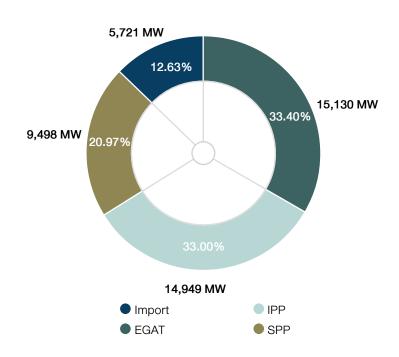
Note: Forecasted data are estimates from PDP2018

Sources: EPPO and PDP2018

Supply

According to EPPO Energy Statistics, in December 2019, total contracted power generation capacity in Thailand was 45,297 megawatts, of which 15,130 megawatts or 33.4% of total power generation capacity was generated by EGAT and 14,948 megawatts or 33.0% and 9,498 megawatts or 21.0% was generated by IPPs and SPPs, respectively. In addition, Thailand also imported 5,721 megawatts or 12.6% of its total contracted power generation capacity from Lao PDR and Malaysia.

Total Contracted Power Generation Capacity in Thailand by Types of Power Operators as of December 2019



Note: The information above includes contracted power generation capacity on EGAT's transmission system and direct supply to the industrial sector but excludes VSPPs.

Source: Energy statistics, EPPO

Contracted power generation capacity in Thailand between 2002 and 2019 was dominated by EGAT and IPPs. EGAT accounted for the largest share of capacity at 61.0%, or 15,000 megawatts, in 2002 and 33.4%, or 15,130 megawatts, in 2019 at a CAGR of 0.05%. IPPs accounted for the second largest share of contracted capacity at 29.0%, or 7,071 megawatts, in 2002 and 33.0%, or 14,949 megawatts, in 2019 at a CAGR of 4.5%. Contracted power generation capacity of SPPs and imported sources increased between 2002 and 2019, with contracted power generation capacity of SPPs growing at a CAGR of 10.4% from 1,768 megawatts in 2002 to 9,498 megawatts in 2019. The growth of SPPs is mainly supported by the PDP that promotes SPPs to ensure power system reliability in Thailand. During the same period, contracted power generation capacity from imported sources (Lao PDR and Malaysia) grew at a CAGR of 13.8% from 640 megawatts in 2002 to 5,721 megawatts in 2019.

From 2020, Thailand will see increased contracted power generation capacity from new power plants including 3 power projects belonging to the Group with a total contracted power generation capacity of 5,020.6 megawatts, with details as set out below (data as of December 2019):

SCOD	Project Name	Company's Equity Ownership	Location	Category	Source of Fuel	Contracted Power Generation Capacity (Megawatts)
2020	GCG	100.0%	Songkhla	SPP	Biomass	20.6
2021	GSRC (unit 1&2)	70.0%	Chonburi	IPP	Natural gas	1,250.0
2022	GSRC (unit 3&4)	70.0%	Chonburi	IPP	Natural gas	1,250.0
2023	GPD (unit 1&2)	70.0%	Rayong	IPP	Natural gas	1,250.0
2024	GPD (unit 3&4)	70.0%	Rayong	IPP	Natural gas	1,250.0

Industry Overview - Overseas

The Company has made investments in Thailand as well as overseas based on the vision to be a trusted company with a goal to expand the business of gas-fired power projects, renewable energy or other types of energy, and energy-related businesses. The Group currently invests in power projects overseas, comprised of the gas-fired power project in Oman and renewable energy projects in Vietnam. The Company is also conducting project feasibility studies in the Asia Pacific region, especially in neighboring countries such as Lao PDR, Myanmar and Cambodia. The market conditions and competitive landscape of each country is set out as follows:

Oman

Continued growth in Oman's economy and industry have led to a rapid increase in electricity demand from both household and industrial sectors. Oman's electricity sector is divided into three segments, namely 2) Main Interconnected System (MIS), 2) Rural System of the Rural Areas Electricity Company (RAEC) and 3) Dhofar Power System (DPS). Based on the Oman Power and Water Procurement's 7-year Statement (2019 – 2025), Oman currently has maximum power generation capacity of 11,307 megawatts while the electricity demand in the MIS (where Muscat, Oman's capital city, is located) and Dhofar are expected to grow at 5.0% per annum. Peak power demand in 2019 was approximately 6,410 megawatts and this is expected to rise to 8.600 megawatts by 2025, equivalent to a CAGR of 6.0%, resulting in insufficient power generation capacity in RAEC to serve the demand in the area. As such, the Government of Oman has plans to connect the MIS to RAEC in order to improve the efficiency in electricity transmission to meet the electricity demands in all areas. Currently, the source of fuel for electricity generation primarily comes from fuel and natural gas; however, the government has issued a policy to increase the use of renewable energy such as solar power and wind power to generate electricity in order to reduce the amount of natural gas usage in the country.

Vietnam

Vietnam's economy has been expanding from higher population and industrial growth rates, with average GDP growth rate of 6.6% per annum. In this regard, the economic development and population increase has led to increasingly higher electricity demand. As such, the government has issued a policy to increase the country's electricity generation capability as well as support domestic industrial development and growth. Based on The Revised National Power Development Master Plan from 2011 - 2020 period with the visions extended to 2030 (The Revised PDP VII), the Vietnam Government has plans to increase the power generation capacity to support the population growth and economic development. It is anticipated that total power generation capacity will reach 60,000 megawatts in 2020 and increase to 97,500 megawatts in 2025, and reach 129,000 megawatts by 2030, which is equivalent to a CAGR of 7.2%. In addition, the government has a policy to develop renewable energy power plants such as solar power, wind power and hydroelectricity, and power generation capacity from renewable energy is expected to account for 38.0% of the total power generation capacity, or equivalent to 49,000 megawatts by 2030. In 2019, approximately 4,500 megawatts were sold to the grid by solar power plants.

Lao PDR

According to The World Bank's database, Lao PDR had GDP growth of 6.5% from the previous year, with electricity exports and tourism as important factors in driving the country's economy. In this regard, the Laos government is expediting the development and construction of various power plant projects, such as hydroelectric dams and thermal power plants to align with the Battery of ASEAN policy, which is the country's main policy. It is expected that Lao PDR will have power generation capacity of over 10,000 megawatts within 2020 from the total power generation capacity target of approximately 28,000 megawatts within 2040.

Myanmar

According to The World Bank's database, Myanmar had GDP growth of 6.2% from the previous year. Myanmar currently has total power generation capacity of 5,642 megawatts and it is in the process of constructing gas-fired power plants, hydroelectric dams and solar power plants, in which total power generation capacity of Myanmar is expected to increase to 6,142 megawatts within 2020, and increase to approximately 11,478 megawatts and 20,489 megawatts in 2025 and 2030, respectively. Nonetheless, the amount of electricity produced is still insufficient to serve the electricity demands within the country, which is expected to grow at 17.0% per annum. Furthermore, as most of the population is still not connected to the national electricity grid, the Myanmar government drew up a policy to develop the grid system to ensure that the entire population will be connected to the grid by 2030, as well as jointly invested in the construction of power plants with the private sector from other countries to increase the power generating capacity to serve domestic electricity demands. Moreover, the Myanmar government has received support from international organizations such as the Asian Development Bank in drafting the power development plans and other related regulations.

Cambodia

According to The World Bank's database, Cambodia had GDP growth of 7.0% from the previous year. It is projected that Cambodia's peak power demand will reach approximately 1,680 megawatts in 2020, an increase of 310 megawatts from the peak power demand in 2018, and peak power demand is projected to reach 2,670 megawatts and 3,980 megawatts in 2025 and 2030, respectively. It is also projected that Cambodia will be able to undertake approximately 1,278 megawatts of own power production in 2020, equivalent to 76.0% of total domestic electricity demand. As such, electricity has to be imported from Vietnam, Thailand and Lao PDR, respectively. Presently, the Cambodia government has proceeded to connect the population to the national electricity grid and are accelerating the construction of power plants in order to increase the power generation capacity to serve the electricity demands of the household and industrial sectors. Furthermore, policies to support renewable energy have been put in place, and construction of renewable energy power plants have commenced in several provinces across the country such as the solar power plants in Kampong Chhnang and Pursat provinces, Stung Num hydropower dam and biomass power plants.

MANAGEMENT DISCUSSION

AND ANALYSIS

Significant Accounting Policies

During the past year, the Company has adopted the Thai Financial Reporting Standard No. 15 (TFRS15) "Revenue from contracts with customers", effective for the period beginning on or after January 1, 2019. Under TFRS15, Availability Payments in relation to availabilities of the power plants, as agreed with EGAT and in accordance with the terms of the Power Purchase Agreements, are recognized over time as services rendered. If the payments exceed the services rendered, a contract liability is recognized. On the other hand, if the payments are less than the services rendered, a contract asset is recognized.

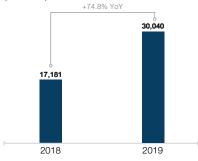
Moreover, during 2018, the Company acquired ordinary shares in TTCIZ-01, TTCIZ-02 and Mekong Wind in the proportion of 49.0% for all 3 projects, classified as investments in joint ventures. The Company determined the fair value of previously held equity interests of net identifiable assets acquired of TTCIZ-01, TTCIZ-02 and Mekong Wind prior to the date of business combinations achieved in stage, including goodwill and purchase price allocation of TTCIZ-01, TTCIZ-02 and Mekong Wind, during 2019.

Subsequently, during 2019, the Company acquired 41.0% additional stake in both TTCIZ-01 and TTCIZ-02, resulting in an increase in its shareholdings in TTICZ-01 and TTCIZ-02 to 90.0%. The Company also acquired 46.0% additional stake in Mekong Wind, resulting in an increase in its shareholding in Mekong Wind to 95.0%. As such, the Company's management considered that such additional shareholding portion resulted in control over TTCIZ-01, TTCIZ-02 and Mekong Wind and reclassified investments in these entities from investments in joint ventures to investments in subsidiaries. The additional investments were considered to be business combinations achieved in stage in accordance with Thai Financial Reporting Standard No. 3 "Business Combination". This accounting standard required the management to measure the fair value of previously held equity interest prior to the date of obtaining control and recognize any gains or losses arising from fair value measurement in statement of comprehensive incomes and determined fair value of net identifiable assets acquired.

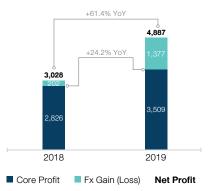
Summary of the performance for 2019 compared to 2018

Key financial information	2018	2019	Change
	THB million	THB million	%YoY
Revenue from sales and management fee	17,181.1	30,039.7	74.8%
Share of profit from an associate and joint ventures	2,615.5	3,205.4	22.6%
Profit attributable to owners of the parent	3,028.1	4,886.6	61.4%
Less: gain (loss) on exchange rate attributable to owners of the parent	201.7	1,377.2	582.9%
Profit attributable to owners of the parent before gain (loss) on			
exchange rate (Core profit)	2,826.5	3,509.4	24.2%
Share of profit (loss) from an associate - GJP exclude gain (loss) on exchange rate	2,508.9	2,356.6	-6.1%
Basic earnings per share (THB)	1.42	2.29	61.3%

Revenue from sales and management fee (THB mn)



Core Profit/ Profit attributable to owners of the parent (THB mn)



Revenue from sales and management fee increased 74.8% YoY from THB 17,181 million to THB 30,040 million from the revenue recognition of 12SPPs under GMP group and 2 Solar Power Projects in Vietnam, compared to 8 SPPs in 2018.

Core profit increased 24.2% YoY from THB 2,826 million to THB 3,509 million from:

- Profit recognition from 12SPPs under GMP group and TTCIZ-01 and TTCIZ-02 Solar Power Projects which have commenced commercial operation in entirety in 2019.
- Electricity sold to EGAT and industrial users by the 12SPPs in this year were significantly higher than the previous year, both from the existing customer base and new customers of the 4 SPPs which commenced commercial operation during the year.
- Increase in profit from GMP group in 2019 was able to offset the decrease
 in profit from GJP group, from the lower availability payment rate (APR)
 according to the PPA of 2 IPPs, namely GNS and GUT, and from the major
 overhaul for 6 power projects of the 7 SPPs during the second half of 2019,
 as well as offset the loss from other projects under development.

Net profit increased by 61.4% YoY from THB 3,028 million to THB 4,887 million due to the recognition of unrealized gain on exchange rate which increased from the appreciation of the Thai Baht by 2.2835 THB/USD compared to the previous year. The recording of such profit is an accounting transaction which has no impact on the cash flow and performance of the Group at all

Analysis of the Group's Results of Operations for the Year Ended December 31, 2019

Revenue structure

Revenue structure	2018	2019	Change
	THB million	THB million	%YoY
Revenue from sales	16,881.1	29,721.1	76.1%
Revenue from electricity sold to EGAT and PEA	12,684.6	22,578.1	78.0%
Revenue from electricity sold to EVN	-	210.1	n.a.
Revenue from electricity sold to industrial users	3,661.2	6,291.3	71.8%
Revenue from steam sold to industrial users	535.4	641.6	19.8%
Revenue from management fee	300.0	318.6	6.2%
Share of profit from an associate and JVs	2,615.5	3,205.4	22.6%
Dividend income	107.2	100.5	-6.3%
Interest income	181.2	188.9	4.2%
Other income	9.4	14.3	51.3%
Total revenues	20,094.5	33,548.8	67.0%

Revenue from sales

Revenue from sales in 2019 increased 76.1% YoY from the revenue recognition of the entire 12 SPPs under GMP group, after the 9th - 12th power plants with a total installed power generation capacity of 518.6 megawatts gradually commenced commercial operations between January - July 2019, compared to 8 SPPs in operation in 2018. As a result, the Company was able to expand the industrial customer base as well as increase the volume of electricity and steam sold.

In addition to Thailand's power plants, the Company also recorded revenue from solar power plants TTCIZ-01 (installed power generation capacity of 68.8 megawatts) and TTCIZ-02 (installed power generation capacity of 50.0 megawatts) in Vietnam, which had commenced commercial operation in March and April 2019, respectively. Revenue from TTCIZ-01 project has been consolidated to the Company's consolidated financial statements from November 2019 onwards, after the Company increased its shareholding in the project from 49.0% to 90.0%.

Volume of electricity and steam sold by SPPs under GMP

Volume of electricity and steam sold	2018	2019	Change
			% YoY
Power projects under GMP			
Volume of electricity sold to EGAT (gigawatt-hour)	4,088.8	7,073.1	73.0%
Volume of electricity sold to industrial users (gigawatt-hour)	1,152.4	1,944.9	68.8%
Volume of steam sold (thousand tons)	563,096	728,975	29.5%

Volume of electricity sold by solar power projects TTCIZ-01 and TTCIZ-02 in Vietnam

Volume of electricity sold (megawatt-hour)	2018	2019	Change
			% YoY
TTCIZ-01	-	87,842.0	n.a.
TTCIZ-02	-	54,880.0	n.a.

Revenue from management fee

In 2019, the Company recorded revenue from management fee, which is revenue received from the provision of management services by the Company to its associate GJP and to SPPs under GEC Group, in the amount of THB 318.6 million, an increase of 6.2% YoY.

Dividend income

Dividend income in 2019 was THB 100.5 million, from dividend paid by SPCG and EDL Gen, a slight decrease compared to THB 107.2 million in the previous year.

Cost and expense structure

Cost of sales structure	2018	2019	Change
	THB million	THB million	% YoY
Cost of sales	(12,515.8)	(22,631.1)	80.8%
Fuel cost	(10,303.1)	(18,543.7)	80.0%
Operations and maintenance cost	(232.8)	(711.4)	205.5%
Depreciation	(1,374.2)	(2,401.1)	74.7%
Other costs	(605.6)	(974.9)	61.0%
Cost of service	(165.0)	(160.0)	-3.0%
Total cost of sales and service	(12,680.8)	(22,791.1)	79.7%
Selling and administrative expenses	(1,489.6)	(1,713.1)	15.0%
Total operating costs and administrative expenses	(14,170.3)	(24,504.2)	72.9%

Cost of sales

Cost of sales in 2019 was THB 22,631.1 million, an increase of 80.8% YoY from the realization of cost of sales from 4 additional SPPs under GMP group which commenced commercial operation in 2019. However, average price of natural gas increased slightly from 258.0 THB/mmbtu in 2018 to 272.9 THB/mmbtu in 2019.

Operations and maintenance costs in 2019 stood at THB 711.4 million, an increase of 205.5% YoY, in line with the increase in the number of power projects under GMP group. Moreover, in Q4'18, there was an adjustment of maintenance costs under the Long-Term Service Agreement (LTSA) for the power projects under GMP group, resulting in a reversal of the long-term maintenance cost overbooked in the past in 2018.

Cost of service

Cost of service is a cost incurred from the Company providing management services to its associate GJP and to SPPs under GEC Group. In 2019, cost of service was THB 160.0 million, a decrease of THB 5 million or 3.0% YoY, due to the Company's ability to allocate personnel providing management services to GJP more efficiently, resulting in the aforementioned lower cost.

Administrative expenses

In 2019, administrative expenses were THB 1,713.1 million, an increase of 15.0% YoY primarily from the increase in provision for employee benefits in accordance with the Labour Protection Act (No. 7), B.E. 2562 which stipulates that employees who are terminated by the Company and have served for a continuous period of 20 years or more shall be paid a compensation in the amount not less than the last rate of wages for 400 days (from 300 days), which became effective on May 5, 2019. Moreover, the Company saw increases in expenses to support CSR activities and advertising and public relations activities.

Finance costs

Finance costs	2018	2019	Change
	THB million	THB million	% YoY
Interest expense	(1,710.2)	(2,663.2)	55.7%
Guarantee fee	(103.3)	(38.9)	-62.4%
Commitment fee	(54.9)	(94.5)	72.2%
Others	(69.9)	(99.2)	41.8%
Total finance costs	(1,938.3)	(2,895.7)	49.4%

Finance costs in 2019 were THB 2,895.7 million, an increase of 49.4% YoY mainly attributable to an increase in interest expense from the issuances and offerings of debentures on January 25, 2019, the recognition of interest expenses after commencing commercial operation of additional SPPs under GMP group from 8 SPPs in 2018 to 12 SPPs in 2019, and increase in GSRC's commitment fee for the financial facilities to invest in the project's construction.

Net profit and net profit before gain on exchange rate (Core profit)

Profit for the period	2018	2019	Change
	THB million	THB million	% YoY
Gross profit	4,500.4	7,248.6	61.1%
Gross profit from sales	4,365.3	7,090.0	62.4%
Gross profit from services	135.0	158.6	17.4%
Profit for the period	4,141.2	7,166.1	73.0%
Profit attributable to owners of the parent	3,028.1	4,886.6	61.4%
Less: gain (loss) on exchange rate attributable to owners of the parent	201.7	1,377.2	582.9%
Profit attributable to owners of the parent before gain on exchange rate (Core profit)	2,826.5	3,509.4	24.2%
Gross profit margin (Sales)	25.9%	23.9%	-2.0%
Gross profit margin (Services)	45.0%	49.8%	4.8%

Gross profit

Gross profit in 2019 was THB 7,248.6 million, an increase of THB 2,748.3 million or 61.1% YoY. The increase was caused primarily by an increase in gross profit from the electricity and steam sales business whereby there was 4 additional projects under GMP which commenced commercial operation compared to 2018. Nonetheless, gross profit margin from sales marginally softened from 25.9% to 23.9%, affected by the rise in natural gas price from 258.0 THB/mmbtu in 2018 to 272.9 THB/mmbtu while Ft rates only increased slightly by 0.43 THB/kWh. Also, there was a higher maintenance cost from the larger number of power plants in operation.

Gross profit from services increased by THB 23.6 million or 17.4% YoY from the increase in revenue from management fee, and the Company was able to manage cost of services more efficiently, despite the provision for employee benefits in Q2'19 as mentioned in the cost section. As a result, gross profit margin from services improved from 45.0% in 2018 to 49.8% in 2019.

Profit attributable to owners of the parent and Core Profit

Core profit increased 24.2% YoY from THB 2,826.5 million in 2018 to THB 3,509.4 million in 2019 from:

- 1) Profit from GMP group which increased 75.8% YoY from the operation of 12 SPPs under GMP group, compared to 8 SPPs in 2018. The 12 SPPs on average recorded a superior performance from the higher electricity sold to industrial users, from both existing customer base and new customers, despite the higher natural gas cost from 258.0 THB/mmbtu in 2018 to 272.9 THB/mmbtu in 2019 while Ft rate only adjusted slightly upward by THB 0.43 from (0.1590) THB/kWh in 2018 to (0.1160) THB/kWh in 2019.
- Realized profit from 2 Solar Power Projects in Vietnam in 2019, while both projects were still under construction in the previous year.
- 3) Share of profit from GJP group which decreased by 6.1% YoY.

In summary, the significant profit increment from GMP group in 2019 was able to offset the softened profit from GJP group as well as the loss from expenses recorded of other projects under development such as GSRC or GCG in entirety.

Share of profit from an associate and joint ventures

Share of profit from an associate and joint ventures	2018	2019	Change
	THB million	THB million	%YoY
Share of profit from the associate GJP	2,629.1	3,196.8	21.6%
Share of profit from the joint venture Gulf WHA MT	(1.0)	(6.4)	-523.4%
Share of profit from the joint venture BSE	-	(1.1)	n.a.
Share of profit from the joint venture for projects in Vietnam	2.0	33.9	1627.0%
Share of profit from the joint venture for a project in Oman	(14.6)	(17.7)	-21.7%
Total share of profit from an associate and joint ventures	2,615.5	3,205.5	22.6%
Less: gain on exchange rate from share of profit from the associate GJP	120.1	840.3	599.5%
Share of profit from an associate and joint ventures before			
gain on exchange rate	2,508.9	2,356.6	-6.1%

The Group recorded a share of profit from an associate and joint ventures in 2019 of THB 3,205.5 million, an increase of 22.6% YoY. The majority of the share of profit was from the contribution from GJP, of which, before effects from exchange rate, the Group's share of profit in 2019 was THB 2,356.6 million, a decrease of 6.1% YoY.

The softened share of profit from the associate GJP before effects from exchange rate was a result of the major overhaul of the 6 power projects under 7SPPs, namely GKP1, GKP2, GTLC, GNNK, GNLL and GNK2 during the second half of 2019, resulting in the lower electricity sales to EGAT from the SPPs when compared to 2018. Moreover, availability payment rate of the 2IPPs declined from 2018 according to the PPA, although the 2 IPPs were able to sell 91.5% more electricity to EGAT and recorded a better heat rate from the previous year.

The volume of electricity sold to industrial users by the SPPs increased by 2.6% YoY from the increase in electricity demand from customers. Nonetheless, the volume of steam and chilled water sold to industrial users decreased by 3.1% YoY and 7.6% YoY from the major overhaul of the power projects as mentioned previously.

The following table shows volume of electricity, steam and chilled water sold by power projects under GJP

Volume of electricity, steam and chilled water sold	2018	2019	Change
			% YoY
IPPs			
Volume of electricity sold (gigawatt-hour)	5,332.2	10,213.5	91.5%
7 SPPs			
Volume of electricity sold to EGAT (gigawatt-hour)	4,464.4	4,245.3	-4.9%
Volume of electricity sold to industrial users (gigawatt-hour)	1,124.9	1,154.4	2.6%
Volume of steam sold (thousand tons)	268,802.6	260,344.0	-3.1%
Volume of chilled water (million refrigeration tons)	29.0	26.8	-7.6%

Gain from exchange rate

Gain (loss) on exchange rate primarily results from loans for the power projects under the GMP and IPD group that were denominated in a foreign currency (USD), in which the Group is required to record unrealized gain (loss) on exchange rate incurred from translating long-term debts denominated in USD to Thai Baht using the exchange rate at the end of the accounting period. In cases where the Thai Baht appreciates against USD, the Group will record a gain on exchange rate, as the Group's amount of outstanding debts converted to Thai Baht is lower. The reverse will occur if the Thai Baht depreciates against USD. However, since the long-term debts have not reached the due dates yet, such gain (loss) on exchange rate is only recognized as unrealized gain (loss).

The exchange rates at the end of 2018 and 2019 were equal to 32.6148 and 30.3313 THB/USD, respectively (the Thai Baht in 2019 appreciated compared to 2018). As a result, the Group recognized a gain on exchange rate in 2019 of THB 1,377.2 million, an increase of 582.9% YoY from the gain on exchange rate of THB 201.7 million in 2018.

Nonetheless, in this report, the Group separates effects from unrealized exchange rate of the associate (GJP) in 2019 of THB 840.3 million and the Company's subsidiaries (mainly GMP) of THB 536.9 million, resulting in a total unrealized gain (loss) from exchange rate attributable to the owners of the parent of THB 1,377.2 million. This will explain the Group's performance accurately and appropriately. Details of which are set forth as follows:

Gain (loss) on exchange rate	2018	2019	Change
	THB million	THB million	% YoY
Gain (loss) on exchange rate	134.8	1,003.5	644.6%
Less: Gain (loss) on exchange rate attributable to non-controlling interests	(53.2)	(466.6)	776.8%
Gain (loss) on exchange rate attributable to the owners of the parent	81.5	536.9	558.4%
Add: Gain (loss) on exchange rate attributable to share of profit from an associate	120.1	840.3	599.5%
Total gain (loss) from exchange rate attributable to owners of the parent	201.7	1,377.2	582.9%

Analysis of the Group's Financial Position as of December 31, 2019

The following table shows the Group's financial position in respect to the consolidated financial statements

Financial position	As of December 31, 2018	As of December 31, 2019	Change
	THB million	THB million	%
Cash, cash equivalents and short-term investment	18,793.5	14,810.1	-21.2%
Trade accounts receivable	3,512.1	5,199.0	48.0%
Investments in an associate and joint ventures	21,658.9	21,247.2	-1.9%
Advance payments for land and power plant construction	5,417.5	3,069.9	-43.3%
Property, plant and equipment, net	67,664.2	80,960.7	19.7%
Other assets	6,622.4	8,990.6	35.8%
Total assets	123,668.7	134,277.5	8.6%
Accounts payable for power plant construction	5,504.0	2,772.6	-49.6%
Trade accounts payable	1,177.6	1,689.1	43.4%
Interest-bearing debts due in 1 year	9,649.2	3,214.1	-66.7%
Interest-bearing debts due over 1 year	59,882.5	73,946.6	23.5%
Other liabilities	2,667.0	3,615.2	35.6%
Total liabilities	78,880.4	85,237.6	8.1%
Issued and paid-up capital	10,666.5	10,666.5	0.0%
Share premium	20,889.3	20,889.3	0.0%
Unappropriated retained earnings	3,923.9	6,084.3	55.1%
Other equity	1,057.2	787.0	-25.6%
Total equity attributable to owners	36,536.9	38,427.1	5.2%
Non-controlling interests	8,251.3	10,612.8	28.6%
Total equity	44,788.2	49,039.9	9.5%
Debt to equity	1.76	1.74	-1.24%

Total assets

Total assets as of December 31, 2019 was THB 134,277.5 million, an increase of THB 10,608.9 million or 8.6% from December 31, 2018. The increase was attributable to the following factors:

- 1) Significant increase in assets include:
 - An increase in property, plant and equipment, net of 19.7% or THB 13,296.5 million, from the increase in value of 12SPPs power plants under GMP group and solar power plants TTCIZ-01 and TTCIZ-02 in Vietnam, as well as the power plant construction work of gas-fired IPPs GSRC and GCG.
 - An increase in trade accounts receivable of 48.0% or THB 1,687.0 million primarily from the SPPs under GMP group in which 4 power projects began commercial operation in 2019.

- 2) Significant decrease in assets include:
 - A decrease in cash and cash equivalents and deposits at financial institutions used as collateral of 21.2% or THB 3,983.4 million from the dividends paid and loans to related companies for the investments in Vietnam and Oman projects.
 - A decrease in advance payments for land and power plant construction of 43.3% or THB 2,347.6 million from the payment of construction costs per milestone for GSRC.

Total liabilities

Total liabilities as of December 31, 2019 was THB 85,237.6 million, an increase of THB 6,357.2 million or 8.1% from December 31, 2018. The increase was attributable to the following factors:

- 1) Significant increase in liabilities include:
 - An increase in long-term loans from financial institutions of THB 6,570.2 million primarily from the drawdowns
 for the construction of GSRC power project under IPD group, and the consolidation of TTCIZ-01 solar power
 plant's loan, after the Company increased its shareholding in the project from 49.0% to 90.0%.
 - Increase in debentures of THB 1,502.6 million from the issuances of new debentures of THB 7,493.9 million which offset with the repayments of existing debentures of THB 5,991.4 million (net of transaction fees).
 - Increase in trade accounts payable of THB 511.5 million from SPPs under GMP group in which 4 additional power projects commenced commercial operation compared to 2018.
- 2) Significant decrease in liabilities include:
 - Accounts payable for power plant construction decreased by THB 2,731.5 million from the payment of construction costs per milestone for GSRC during the period.

Total equity

Total equity as of December 31, 2019 was THB 49,039.9 million, an increase of THB 4,251.7 million or 9.5% from December 31, 2018 due to two main factors:

- An increase in non-controlling interests of THB 2,361.5 million was from the increase in paid-up capital of Mitsui group, WHA group and HITEC group as well as the increase in non-controlling interests of TTC Group from the additional investment in TTCIZ-01, TTCIZ-02 and Mekong Project, and the increase in net profit from operations during the period.
- Total equity attributable to owners of the parent increased by THB 1,890.2 million as the Group recorded an increase in net profit for the period of THB 4,886.6 million, offset with dividend payment of THB 2,559.9 million.

Capital structure

As of December 31, 2019, the Group had a debt to equity ratio of 1.74 times, a slight decrease from 1.76 times as of December 31, 2018 primarily as the Company had increased liabilities from the loan drawdowns for construction of GSRC and the issuances of debentures in Q1'19. Nonetheless, the Company also recognized profits from 12 SPPs under GMP group which gradually commenced commercial operation, resulting in a lower debt-to-equity ratio compared to the end of the previous year. Furthermore, most of the Company's liabilities have terms of over 15 years, which reflects the Company's strong financial position and ability to take out more loans to support future growth opportunities for the Company.

CAPITAL

STRUCTURE

Ordinary Shares

As of December 31, 2019, the Company has issued 2,133,300,000 ordinary shares at the par value of THB 5.0 per share.

The ten largest shareholders whose names appear in the shareholders' registration as of December 31, 2019 are as follows:

	Shareholders	Number of Shares	Shareholding (%)
1.	Group of Mr. Sarath Ratanavadi	1,556,303,100	73.0
	- Mr. Sarath Ratanavadi	755,999,994	35.4
	- Mrs. Nalinee Ratanavadi¹	4,100,000	0.2
	- Gulf Holdings (Thailand) Company Limited ²	100,000,002	4.7
	- Gulf Capital Holdings Limited³	476,000,002	22.3
	- Gulf Investment and Trading Pte. Ltd. ⁴	220,203,102	10.3
2.	Thai NVDR Company Limited	76,103,370	3.6
3.	Asian Development Bank	64,000,000	3.0
4.	Sino-Thai Engineering & Construction Public Company Limited	40,000,000	1.9
5.	Bangkok Bank Public Company Limited	28,734,900	1.3
6.	South East Asia UK (Type C) Nominees Limited	26,094,348	1.2
7.	Rojana Industrial Park Public Company Limited	19,400,000	0.9
8.	State Street Europe Limited	11,397,005	0.5
9.	Mr. Narat Jiwalai	10,650,100	0.5
10.	SCB Dividend Stock 70/30 Long Term Equity Fund	7,426,700	0.3
	Total	1,840,109,523	86.3

Remarks:

Minor Shareholders:

Shareholding percentage of minor shareholders (Free Float) is 26.7% (as of December 31, 2019)

The Company's major shareholders who is a connected person of the Company who participates in management of the Company's operation:

Mr. Sarath Ratanavadi, holding 755,999,994 shares or equivalent to 35.4% (as of December 31, 2019)

Shareholders Agreements that significantly impact the Company or other shareholders:

The Company does not have any shareholder agreements with the major shareholders of the Company, which could have an impact on the operation of the Company or on other shareholders

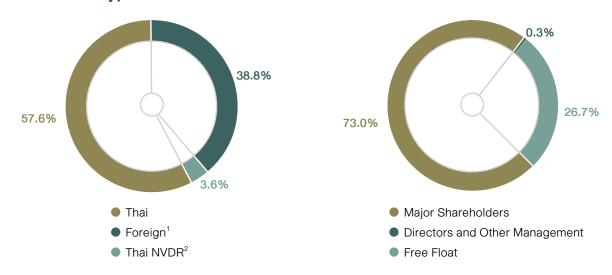
^{1/} Mrs. Nalinee Ratanavadi is the spouse of Mr. Sarath Ratanavadi

 $^{^{^{2\}prime}}\text{A}$ company limited registered under the laws of Thailand wholly owned by Mr. Sarath Ratanavadi

 $^{^{^{3\}prime}}$ A company limited registered under the laws of Hong Kong of which Mr. Sarath Ratanavadi is beneficiary

^{4/} A company limited registered under the laws of Singapore of which Mr. Sarath Ratanavadi is beneficiary

Shareholder Types



Remarks:

Debentures

As of December 31, 2019, the Company has 4 series of outstanding debentures in the aggregate amount of THB 7,500 million. The details of which are as follows:

No.	Type of Debenture	Issue Date	Maturity Date	Issue Amount (THB million) ¹	Coupon Rate (%)	Issue Rating / Outlook by TRIS
1/2019 Tranche 1	Name-Registered Unsubordinated and Unsecured Debentures with a Debentureholders' Representative	January 25, 2019	January 25, 2022	2,000	2.73	A-/Stable
1/2019 Tranche 2	Name-Registered Unsubordinated and Unsecured Debentures with a Debentureholders' Representative	January 25, 2019	January 25, 2024	2,500	3.28	A-/Stable
1/2019 Tranche 3	Name-Registered Unsubordinated and Unsecured Debentures with a Debentureholders' Representative	January 25, 2019	January 25, 2026	2,000	3.61	A-/Stable
1/2019 Tranche 4	Name-Registered Unsubordinated and Unsecured Debentures with a Debentureholders' Representative	January 25, 2019	January 25, 2029	1,000	3.85	A-/Stable

Remarks:

 $^{^{\}rm 1/}$ The Company has a foreign ownership limit of 49%

^{2/} Thai NVDR Company Limited is a company that issues non-voting depository receipts (NVDRs) to both Thai and foreign investors. NVDR shareholders are entitled to the same economic benefits as those who invest in a company's stock; however, NVDR shareholders do not have voting rights at shareholders' meetings

^{1/} The total amount of outstanding debentures issued by the Company shown in the table above is the offering amount of such debentures, which is different from the amo1unt set out in the Company's financial statements due to amortization



Dividend Policy of the Company

The Company has a policy to pay dividend to the shareholders at no less than 30.00% of the Company's separate net profit, after deducting tax, legal reserve and other obligations under financing agreements. However, the Company's dividend payment may be adjusted depending on the Company's performance, cash flow, investment requirements, conditions and restrictions under relevant financing agreements and other relevant considerations in the future. In the case where it is resolved by the Company's Board of Directors to pay annual dividend, the Company's Board of Directors must propose such resolution to the Company's meeting of the shareholders for approval, unless it is an interim dividend payment which the Company's Board of Directors has the authority to authorize dividend payment to the shareholders and will report such payment in the subsequent Shareholders' Meeting.

The Company is a holding company whose income is earned from holding shares in other companies and which does not conduct any significant income-earning business of its own, with its major assets being investments in subsidiaries and associates. Therefore, the Company's ability to pay dividend mainly depends on the performance of, and payment of dividends by, the Company's subsidiaries and associates.

Dividend Policy of the Company's Subsidiaries

The dividend policy of the Company's subsidiaries is set in accordance with the consideration of the subsidiaries' Board of Directors, subject to the approval of each company's shareholder in the meeting of shareholders each year, provided that the dividend must be paid from its net profit, after deducting tax, legal reserve and other obligations under financing agreements. The amount of dividend payment of each of the Company's subsidiaries depends on its performance, cash flows, investment requirements, conditions and restrictions under relevant financing agreements and any other considerations. The Board of Directors of each subsidiary may also by resolution has authority to authorize dividend payment to its shareholders and such interim dividend payment must be reported to the shareholders of the subsidiary in the subsequent shareholders' meeting.

Dividend payment from the annual operating results can be summarized as follows:

Dividend payment for the annual operating results	Total dividend payment (THB million)	Dividend payment rate (THB/share)	Dividend payout ratio on net profit according to the separate financial statements of the Company (%)	Dividend payment date
2017	853.3	0.40	49.3	14 May 2018
2018	2,560.0	1.20	78.9	21 May 2019
2019	2,773.3	1.30*	89.5	28 April 2020

Remark:

^{*} The Company's Board of Directors' Meeting No. 2/2019 dated February 21, 2020 resolved to propose to the Annual General Meeting of Shareholders for the Year 2020 to be held on April 8, 2020 that the dividend payment for the Company's performance ended as of December 31, 2019 be made at the rate of THB 1.30 per share, which amounts to THB 2,773.3 million in total.

BOARD OF **DIRECTORS**

Data as of February 21, 2020



Mr. Viset Choopiban Independent Director and Chairman of the Board



Mr. Kasem Snidvongs
Independent Director and
Chairman of the Audit Committee



Mr. Sommai Phasee Independent Director, Member of the Audit Committee and Chairman of the Sustainability and Risk Management Committee



Dr. Raweporn KuhirunIndependent Director and
Member of the Audit Committee



Mr. Vinit Tangnoi Independent Director and Member of the Audit Committee



Mr. Santi Boonprakub Independent Director and Member of the Sustainability and Risk Management Committee



Mr. Sarath Ratanavadi Director and Chief Executive Officer



Mrs. Porntipa Chinvetkitvanit
Director, Member of the
Sustainability and Risk Management
Committee, President and
Deputy Chief Executive Officer



Mr. Boonchai ThiratiDirector and
Executive Director



Ms. Yupapin Wangviwat
Director, Member of the
Sustainability and Risk Management
Committee, Executive Director and
Chief Financial Officer



Mrs. Chotikul Sookpiromkasem Director

MANAGEMENT

TEAM



Mr. Sarath RatanavadiDirector and
Chief Executive Officer



Mrs. Porntipa Chinvetkitvanit
Director, Member of the
Sustainability and Risk Management
Committee, President and
Deputy Chief Executive Officer



Mr. Boonchai ThiratiDirector and
Executive Director



Ms. Yupapin Wangviwat Director, Member of the Sustainability and Risk Management Committee, Executive Director and Chief Financial Officer



Mr. Ratthaphol Cheunsomchit
Deputy Chief Executive Officer and
Member of the Sustainability and
Risk Management Committee



Mr. Ravi KurmarohitaChief Business Development Officer



Mr. Worapong Vivatanavanich Chief Operating Officer



Mr. Tanon TantisunthornChief Corporate Affairs Officer



Ms. Bung-on Suttipattanakit Chief Planning Officer



Mr. Smith Banomyong Chief International Business Officer



Mr. Olarn Srivalattha Senior Vice President -Accounting

BOARD OF DIRECTORS AND

MANAGEMENT PROFILES

Mr. Viset Choopiban
Independent Director and Chairman of the Board
Age: 74 years



Date of Appointment

May 25, 2017

Education/Training

- Honorary Doctor of Engineering, Chulalongkorn University
- Master of Engineering (Electrical Engineering),
 Chulalongkorn University
- Bachelor of Engineering (Electrical Engineering),
 Chulalongkorn University
- The Joint State Private Sector Course, Class 8, Thailand National Defence College

Director Training

- Director Accreditation Program (DAP), Class 130/2016,
 Thai Institute of Directors
- Role of the Chairman Program (RCP), Class 3/2001,
 Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2011 - 2017	Independent Director and Chairman of
	the Board, Gulf Energy
	Development Company Limited
2014 - 2017	Director, CUEL Company Limited
2005 - 2006	Minister, Ministry of Energy
2001 - 2003	President, PTT Public Company Limited
2000 - 2001	Chairman of the Board of Directors,
	PTT Exploration and Production Public
	Company Limited
1999 - 2001	Governor, Petroleum Authority of Thailand

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

2008 - Present Independent Director, Member of the
Audit Committee and Member of the
Nomination and Remuneration Committee,
RCL Public Company Limited

• Non-listed Companies

2000 - Present Director, Petroleum Institute of Thailand
 2015 - Present Director, TIPS Company Limited
 2009 - Present Chairman of the Board of Directors,
 Gulf JP Company Limited

Shareholding in the Company

(as of December 30, 2019): Personal : 0.007%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management



Mr. Kasem Snidvongs

Independent Director and Chairman of the Audit Committee

Age: 81 years

Date of Appointment

May 25, 2017

Education/Training

- Master of Development Economics, Williams College, Massachusetts, USA
- Bachelor of Science (Physics and Mathematics) (Honors),
 Sir John Cass College, London University, United Kingdom
- The National Defence, Class 21, Thailand National Defence College

Director Training

- Director Accreditation Program (DAP), Class 33/2005,
 Thai Institute of Directors
- Finance for Non-Finance Directors (FND), Class 15/2005, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2011 - 2017	Independent Director and Chairman of
	the Audit Committee, Gulf Energy Development
	Company Limited
2006 - 2008	Minister, Ministry of Natural Resources and
	Environment
2002 - 2006	Director and Chairman of the Audit Committee,
	Gulf Electric Public Company Limited
1996 - 2000	Senator
1992 - 1998	Permanent Secretary, Ministry of Science and
	Technology

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

- None -

• Non-listed Companies

Foundation

Present Chairman of the Board,

Sem Pringpuangkaew Foundation

Present Director, Environment Law Center

Thailand Foundation

Present Chairman, Population and Community

Development Association

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.006% Spouse: 0.001% Minor child: -None-

Relationship among Family with Other Directors and Management



Mr. Sommai Phasee

Independent Director, Member of the Audit Committee and Chairman of the Sustainability and Risk Management Committee

Age: 75 years

Date of Appointment

September 14, 2017

Education/Training

- Master of Economics (Planning and Development),
 Vanderbilt University, USA
- Master of Economics, Thammasat University
- Bachelor of Economics (Honors), Thammasat University
- Civil Service Executive Development Program (Program I),
 Class 11, Civil Executive College, Civil Service Training
 Institute, Office of the Civil Service Commission
- The National Defence, Class 37, Thailand National Defence College

Director Training

- Director Certification Program (DCP), Class 268/2018,
 Thai Institute of Directors
- Director Accreditation Program (DAP), Class 59/2006, Thai Institute of Directors
- Role of the Chairman Program (RCP), Class 9/2003,
 Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

Chairman of the Board of Directors and Independent Director, Nok Airlines Public Company Limited
Chairman of the Board of Directors, Crown Property Bureau
Chairman of the Board of Directors, Bank for Agriculture and Agricultural Co-operatives
Deputy Chairman of the Anti-Money Laundering Board, Anti-Money Laundering Office
Minister, Ministry of Finance
Director, Gulf Energy Development Company Limited
Deputy Minister, Ministry of Finance
Chairman of the Board of Directors,
Gulf Electric Public Company Limited
Deputy Permanent Secretary, Ministry of Finance

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

• Non-listed Companies

	•
2019 - Present	Director, Precious Metal Refining
	Company Limited
2018 - Present	Chairman of the Board of Directors,
	Rachakarn Asset Management
	Company Limited
2017 - Present	Director, Aroonsom Company Limited
2016 - Present	Director, Sai Nam Yen Company Limited
2016 - Present	Director, Andaman Beach Suites
	Company Limited
2016 - Present	Director, Aroonsom Company Limited Director, Sai Nam Yen Company Limited Director, Andaman Beach Suites

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.005%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management



Dr. Raweporn Kuhirun

Independent Director and Member of the Audit Committee Age: 76 years

Date of Appointment

May 25, 2017

Education/Training

- Doctor of Public Administration, Eastern Asia University
- Master of Business Administration (Accounting), Central Michigan University, USA
- Bachelor of Accountancy (Accounting), Chulalongkorn University
- Bachelor of Laws, Ramkhamheang University
- The National Defence, Class 38, Thailand National Defence College
- Civil Service Executive Development Program (Program II), Civil Executive College, Civil Service Training Institute, Office of the Civil Service Commission
- Civil Service Executive Development Program (Program I), Class 12, Civil Executive College, Civil Service Training Institute, Office of the Civil Service Commission
- Program for Senior Executive on Justice Administration, Class 14, National Justice Academy, Office of the Judiciary
- Top Executive Program in Commerce and Trade (TEPCoT), Class 4, Commerce Academy
- Capital Market Leadership Program, Class 7, Capital Market Academy
- The International Auditor's Fellowship Program, Government Accountability Office (U.S. GAO), USA
- Audit of Computer System, Kingston Polytechnic, United Kingdom
- Internal Audit and Computer Audit, National Audit Office (NAO), United Kingdom
- Procurement Audit, Board of Audit and Inspection, Republic of Korea

Director Training

- Board Matters and Trends (BMT), Class 6/2018, Thai Institute of Directors
- Director Accreditation Program (DAP), Class 94/2012, Thai Institute of Directors
- Director Certification Program (DCP), Class 155/2012, Thai Institute of Directors
- Audit Committee Program (ACP), Class 38/2012, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2007 - 2019	Committee on Overseeing the NBTC's
	Operation, Office of the National Broadcasting
	and Telecommunications Commission (NBTC)
2016 - 2017	Independent Director and Member of the
	Audit Committee, Gulf Energy Development
	Company Limited
2011 - 2014	Independent Director and Member of the
	Audit Committee, PTT Global Chemical Public
	Company Limited
2011 - 2013	Honorary Member of Special Investigation
	Commission, Department of Special
	Investigation
2008 - 2015	Advisor to the Audit Committee, Thai Airways
	International Public Company Limited
2000 - 2006	Member of the State Audit Commission,
	Office of the Auditor General of Thailand

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

Non-listed Companies

2019 - Present	Advisor, Office of the National
	Broadcasting and Telecommunications
	Commission (NBTC)
2019 - Present	Chairman of the Sub-Committee on
	Finance, Accounting and Inventories,
	Office of the National Broadcasting
	and Telecommunications Commission
	(NBTC)
2011 - Present	Advisory Member of the University
	Council, Srinakharinwirot University

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.005%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management



Mr. Vinit Tangnoi Independent Director and Member of the Audit Committee Age: 69 years

Date of Appointment

May 25, 2017

Education/Training

- Master of Science (Industrial Engineering),
 The University of Texas at Arlington, USA
- Bachelor of Engineering (Mechanical Engineering),
 Kasetsart University
- Senior Executive Development Program-1, GE Co., Ltd., USA
- Advanced Management Program, Harvard Business School, USA
- Senior Executive Program (SEP), Class 16, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Capital Market Leadership Program, Class 8,
 Capital Market Academy
- Army War College Regular Program,
 Royal Thai Army War College

Director Training

- Role of the Compensation Committee (RCC),
 Class 2/2007, Thai Institute of Directors
- Director Certification Program (DCP), Class 67/2005,
 Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2014 - 2017	Independent Director and Member of the
	Audit Committee, Gulf Energy Development
	Company Limited
2009 - 2011	Chairman of the Board of Directors,
	Gulf Electric Public Company Limited
2008 - 2011	Director and President, Electricity Generating
	Public Company Limited
2008 - 2011	Director, BLCP Power Company Limited
2006 - 2008	Director, Ratchaburi Electricity Generating
	Holding Public Company Limited
2005 - 2008	Deputy Governor, Electricity Generating
	Authority of Thailand

Other Directorship Positions/Other Positions at Present

- Other Listed Companies
 - -None-
- Non-listed Companies
 - -None-

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.005%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management



Mr. Santi Boonprakub

Independent Director and Member of the Sustainability and Risk Management Committee Age: 67 years

Date of Appointment

May 25, 2017

Education/Training

- Master of Public and Private Management Program,
 National Institute of Development Administration
- Bachelor of Science (Statistics), Ramkhamhaeng University
- Corporate Governance for Directors and Senior
 Executives of State Enterprises and Public Organizations
 (PDI), Class 12, King Prajadhipok's Institute
- Senior Executive Development (Program II), Class 3,
 Civil Executive College, Civil Service Training Institute,
 Office of the Civil Service Commission
- Civil Service Executive Development Program: Visionary and Moral Leadership (Program I), Class 59,
 Civil Executive College, Civil Service Training Institute,
 Office of the Civil Service Commission
- Management of Public Economics for Executives,
 Class 3, King Prajadhipok's Institute
- Economics for Natural Resource Management, Oregon State University, USA

Director Training

- Director Certification Program (DCP), Class 268/2018, Thai Institute of Directors
- Director Accreditation Program (DAP), Class 131/2016,
 Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2017 - 2020	Member of the Audit and Evaluation
	Sub-Committee, Agricultural Research
	Development Agency
2017 - 2019	Advisory Member, Biodiversity-Based
	Economy Development Office
	(Public Organizations)
2015 - 2017	Independent Director, Gulf Energy
	Development Company Limited
2011 - 2013	Secretary General, Office of Natural Resources
	and Environmental Policy and Planning
2010 - 2011	Inspector General, Ministry of Natural
	Resources and Environment
2009 - 2010	Deputy Secretary General,
	Office of Natural Resources and Environmental
	Policy and Planning
2009	Deputy Director General, Department of Mineral
	Resources

Other Directorship Positions/Other Positions at Present

Other Listed Companies

-None-

• Non-listed Companies

2019 - Present	Member of the National Committee on
	Climate Change Policy
2019 - Present	Member of the National Land Policy
	Committee

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.005%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management



Mr. Sarath Ratanavadi

Director and Chief Executive Officer
Age: 54 years

Date of Appointment

May 25, 2017

Education/Training

- Master of Science (Engineering Management),
 University of Southern California, USA
- Bachelor of Engineering (Civil Engineering), Chulalongkorn University
- The Program of Senior Executives on Justice Administration, Class 23, Judicial Training Institute
- Executive Development Training Program, Royal Thai Police
- Executive Management with Business Development and Investment, Class 1, Institute of Business and Industrial Development
- Rule of Law for Democracy, Class 6, College of the Constitutional Court
- The Executive Program in Energy Literacy for a Sustainable Future, Class 1, Thailand Energy Academy
- Administrative Justice for Executives Program, Class 1, the Administrative Justice Institute, the Office of the Administrative Courts
- Capital Market Leadership Program, Class 7, Capital Market Academy

Director Training

• Director Accreditation Program (DAP), Class 138/2017, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

-	
2018 - 2020	Director, Gulf Energy International Company Limited
2008 - 2020	Director, Gulf JP Company Limited
2011 - 2017	Director and Chief Executive Officer, Gulf
	Energy Development Company Limited
2008 - 2017	President, Gulf JP Company Limited
2008 - 2017	Board Vice Chairman, NIST International
	School Foundation
2011 - 2016	Representative of Licensee, NIST International
	School
2008 - 2016	Executive Board Chairman, NIST International
	School

Working Experience (during the recent 5 years) and/or Important Positions

Director and President, Gulf Electric Public
Company Limited
Chairman of the Board of Directors, Gulf Energy
Company Limited
Chairman of the Board of Directors, Gulf IPP
Company Limited
Chairman of the Board of Directors,
Samutprakarn Cogeneration Company Limited
Chairman of the Board of Directors,
Nong Khae Cogeneration Company Limited
Chairman of the Board of Directors,
Gulf Yala Green Company Limited
Chairman of the Board of Directors,
Gulf Cogeneration Company Limited
Chairman of the Board of Directors,
Gulf Power Generation Company Limited

Other Directorship Positions/Other Positions at Present

Other Listed Companies

-None-

Non-listed Companies

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SA
)
;

Shareholding in the Company

(as of December 30, 2019): Personal: 35.438% Spouse: 0.192% Minor Child: - None-

Juristic Entities Holding More Than 30% of Shares: 37.323%

Relationship among Family with Other Directors and Management

Brother-in-law of Mr. Tanon Tantisunthorn, Chief Corporate Affairs Officer

Mrs. Porntipa Chinvetkitvanit

Director, Member of the Sustainability and Risk Management Committee, President and Deputy Chief Executive Officer

Age: 57 years



Date of Appointment

May 25, 2017

Education/Training

- Master of Engineering (Industrial Engineering), Asian Institute of Technology
- Bachelor of Engineering (Mechanical Engineering),
 Khon Kaen University
- Rule of Law for Democracy, Class 7, College of the Constitutional Court
- Administrative Justice for Executives Program, Class 4, the Administrative Justice Institute, the Office of the Administrative Courts
- The Executive Program in Energy Literacy for a Sustainable Future, Class 3, Thailand Energy Academy
- Capital Market Leadership Program, Class 20, Capital Market Academy
- The National Defence, Class 58, Thailand National Defence College

Director Training

• Director Certificate Program (DCP), Class 159/2012, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2018 - 2020	Director, Gulf Energy Mauritius Company Limited
2018 - 2020	Director, Gulf Energy International Company Limited
2017 - 2020	Director, Kolpos Pte. Ltd.
2014 - 2020	Director, Gulf Chana Green Company Limited
2014 - 2020	Director, SBY Biomass Company Limited
2014 - 2020	Director, Thepa Clean Energy Company Limited
2014 - 2020	Director, Gulf Pattani Green Company Limited
2014 - 2020	Director, Gulf SRC Company Limited
2014 - 2020	Director, Gulf PD Company Limited
2014 - 2020	Director, Gulf International Investment
	(Hong Kong) Limited
2014 - 2020	Director, Gulf International Holding Pte. Ltd.
2012 - 2020	Director, Independent Power Development
	Company Limited
2011 - 2017	Director and President, Gulf Energy
	Development Company Limited
1994 - 2016	Senior Executive Vice President,
	Gulf Electric Public Company Limited

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

• Non-listed Companies

	- Francisco
2019 - Present	Director, Gulf Energy (Vietnam) Limited
	Liability Company
2017 - Present	President, Gulf JP Company Limited
2017 - Present	Director, WHA Eastern Seaboard NGD4
	Company Limited

Other Directorship Positions/Other Positions at Present

2016 - Present Director, WHA Eastern Seaboard NGD2

2010 1103011	Director, With Editori Ocaboard NGDZ
	Company Limited
2016 - Present	Director and President, Gulf Electric
	Public Company Limited
2015 - Present	Director, Gulf WHA MT Natural Gas
	Distribution Company Limited
2014 - Present	Director, Gulf Solar BV Company Limited
2014 - Present	Director, Gulf Solar TS1 Company Limited
2014 - Present	Director, Gulf Solar TS2 Company Limited
2014 - Present	Director, Gulf Solar KKS Company Limited
2013 - Present	Director, Gulf MP Company Limited
2013 - Present	Director, Gulf Solar Company Limited
2012 - Present	Director, Gulf VTP Company Limited
2012 - Present	Director, Gulf TS1 Company Limited
2012 - Present	Director, Gulf TS2 Company Limited
2012 - Present	Director, Gulf TS3 Company Limited
2012 - Present	Director, Gulf TS4 Company Limited
2012 - Present	
	Director, Gulf NC Company Limited
2012 - Present	Director, Gulf BL Company Limited
2012 - Present	Director, Gulf BP Company Limited
2012 - Present	Director, Gulf NLL2 Company Limited
2012 - Present	Director, Gulf NPM Company Limited
2012 - Present	Director, Gulf NRV1 Company Limited
2012 - Present	Director, Gulf NRV2 Company Limited
2011 - Present	Director, Gulf JP Company Limited
2009 - Present	Director, Gulf JP NNK Company Limited
2009 - Present	Director, Gulf JP NLL Company Limited
2009 - Present	Director, Gulf JP CRN Company Limited
2009 - Present	Director, Gulf JP NS Company Limited
2009 - Present	Director, Gulf JP UT Company Limited
2008 - Present	Director, Gulf JP KP1 Company Limited
2008 - Present	Director, Gulf JP KP2 Company Limited
2008 - Present	Director, Gulf JP TLC Company Limited
2008 - Present	Director, Gulf JP NK2 Company Limited
2004 - Present	Director, Gulf IPP Company Limited
2004 - Present	Director, Gulf Energy Company Limited
2003 - Present	Director, Gulf Yala Green Company Limited
2002 - Present	Director, Samutprakarn Cogeneration
	Company Limited
2002 - Present	Director, Nong Khae Cogeneration
_55	Company Limited
2000 - Present	Director, Gulf Cogeneration Company
2000 1100011	Limited
2000 - Present	Director, Gulf Power Generation Company
2000 1 100011l	Limited
	LITTILEU

Shareholding in the Company

(as of December 30, 2019): Personal: 0.018%

Spouse or minor children: -None-

Relationship among Family with Other Directors and Management

-None-





Date of Appointment

May 25, 2017

Education/Training

- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University
- Business Administration for Executive Program, National Petrochemical Public Company Limited
- Politics and Governance in Democratic Systems for Executives Program, Class 10, King Prajadhipok's Institute
- Management of Public Economics for Executives, Class 6, King Prajadhipok's Institute
- Administrative Justice for Executives Program, Class 2, the Administrative Justice Institute, the Office of the Administrative Courts
- The Executive Program in Energy Literacy for a Sustainable Future, Class 2, Thailand Energy Academy
- Executive Management with Business Development and Investment, Class 2, Institute of Business and Industrial Development

Director Training

• Director Accreditation Program (DAP), Class 128/2016, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

and/or Important Positions		
2017 - 2020	Director, Kolpos Pte. Ltd.	
2017 - 2020	Director, WHA Eastern Seaboard NGD4	
	Company Limited	
2016 - 2020	Director, WHA Eastern Seaboard NGD2	
	Company Limited	
2016 - 2020	Director, Gulf International Investment	
0015 0000	(Hong Kong) Limited	
2015 - 2020	Director, Gulf WHA MT Natural Gas	
	Distribution Company Limited	
2015 - 2020	Director, Gulf MP Company Limited	
2015 - 2020	Director, Gulf JP NNK Company Limited	
2015 - 2020	Director, Gulf JP NLL Company Limited	
2015 - 2020	Director, Gulf JP CRN Company Limited	
2015 - 2020	Director, Gulf JP KP1 Company Limited	
2015 - 2020	Director, Gulf JP KP2 Company Limited	
2015 - 2020	Director, Gulf JP TLC Company Limited	
2015 - 2020	Director, Gulf JP NK2 Company Limited	
2015 - 2020	Director, Gulf Energy Company Limited	
2015 - 2020	Director, Gulf IPP Company Limited	
2015 - 2020	Director, Gulf Cogeneration Company Limited	
2015 - 2020	Director, Gulf Power Generation Company Limited	
2015 - 2020	Director, Gulf Yala Green Company Limited	
2015 - 2020	Director, Nong Khae Cogeneration Company	
	Limited	
2015 - 2020	Director, Samutprakarn Cogeneration	
	Company Limited	

Working Experience (during the recent 5 years) and/or Important Positions

2014 - 2020	Director, Gulf VTP Company Limited
2014 - 2020	Director, Gulf TS1 Company Limited
2014 - 2020	Director, Gulf TS2 Company Limited
2014 - 2020	Director, Gulf TS3 Company Limited
2014 - 2020	Director, Gulf TS4 Company Limited
2014 - 2020	Director, Gulf NC Company Limited
2014 - 2020	Director, Gulf BL Company Limited
2014 - 2020	Director, Gulf BP Company Limited
2014 - 2020	Director, Gulf NLL2 Company Limited
2014 - 2020	Director, Gulf NPM Company Limited
2014 - 2020	Director, Gulf NRV1 Company Limited
2014 - 2020	Director, Gulf NRV2 Company Limited
2014 - 2020	Director, Gulf JP NS Company Limited
2014 - 2020	Director, Gulf JP UT Company Limited
2014 - 2020	Director, Gulf PD Company Limited
2014 - 2020	Director, Gulf SRC Company Limited
2012 - 2020	Director, Independent Power Development
	Company Limited
2017 - 2019	Senior Executive Vice President and Chief
	Operating Officer, Gulf Energy Development
	Public Company Limited
2014 - 2017	Director and Senior Executive Vice President,
	Gulf Energy Development Company Limited
1996 - 2008	Senior Executive Vice President,
	Gulf Electric Public Company Limited

Other Directorship Positions/Other Positions at Present

Other Listed Companies

-None-

• Non-listed Companies

2020 - Present	Director, TTC Energy Development
	Investment Joint Stock Company
2020 - Present	Director, TTC Green Energy Investment
	Joint Stock Company
2019 - Present	Director, Gulf Energy (Vietnam) Limited
	Liability Company
2019 - Present	Director, Mekong Wind Power Joint
	Stock Company
2008 - Present	Senior Executive Vice President,
	Gulf JP Company Limited

Shareholding in the Company

(as of December 30, 2019): Personal: 0.017% Spouse or minor child: -None-

Relationship among Family with Other Directors and Management

-None-



Director, Member of the Sustainability and Risk Management Committee,
Executive Director and Chief Financial Officer
Age: 50 years



Date of Appointment

24 October 2018

Education/Training

- Master of Business Administration, University of Florida, USA
- Bachelor of Business Administration (Banking and Finance), Chulalongkorn University
- Digital Transformation for CEO, Class 1, Nation Multimedia Group Public Company Limited
- Capital Market Leadership Program, Class 16, Capital Market Academy
- ABC Course, Class 5, Academy of Business Creativity, Sripatum University
- Executive Management with Business Development and Investment, Class 4, Institute of Business and Industrial Development

Director Training

 Director Certification Program (DCP), Class 164/2012, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2019 - 2020	Director, Bangkok Smart Energy Company Limited
2017 - 2020	Director, Gulf WHA MT Natural Gas Distribution Company Limited
2017 - 2020	Director, WHA Eastern Seaboard NGD2 Company Limited
2017 - 2020	Director, WHA Eastern Seaboard NGD4 Company Limited
2015 - 2020	Director, Gulf Cogeneration Company Limited
2015 - 2020	Director, Samutprakarn Cogeneration Company Limited
2015 - 2020	Director, Nong Khae Cogeneration Company Limited
2015 - 2020	Director, Gulf Yala Green Company Limited
2015 - 2020	Director, Gulf Power Generation Company Limited
2015 - 2020	Director, Gulf IPP Company Limited
2015 - 2020	Director, Gulf Energy Company Limited
2017 - 2019	Senior Executive Vice President and Chief Corporate Officer, Gulf Energy Development Public Company Limited
2014 - 2017	Senior Executive Vice President and Chief Financial Officer, Gulf Energy Development Company Limited

Other Directorship Positions / Other Positions at Present

Other Listed Companies

-None-

Non-listed Companies

2020 - Present Director, Gulf JP Company Limited 2020 - Present Director, Gulf SRC Company Limited

Other Directorship Positions/Other Positions at Present

2020 - Present Director, Gulf PD Company Limited

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2020 - Present	Director, Gulf Energy Mauritius Company Limited
2019 -Present	Director, Independent Power
	Development Company Limited
2019 - Present	Director, Rachakarn Asset Management
	Company Limited
2018 - Present	Director, Gulf Energy International
	Company Limited
2015 - Present	Director, Gulf JP KP1 Company Limited
2015 - Present	Director, Gulf JP KP2 Company Limited
2015 - Present	Director, Gulf JP TLC Company Limited
2015 - Present	Director, Gulf JP NNK Company Limited
2015 - Present	Director, Gulf JP NLL Company Limited
2015 - Present	Director, Gulf JP CRN Company Limited
2015 - Present	Director, Gulf JP NK2 Company Limited
2014 - Present	Director, Gulf International Investment
	(Hong Kong) Limited
2014 - Present	Director, Gulf International Holding Pte. Ltd.
2014 - Present	Director, Gulf Solar BV Company Limited
2014 - Present	Director, Gulf Solar TS1 Company Limited
2014 - Present	Director, Gulf Solar TS2 Company Limited
2014 - Present	Director, Gulf Solar KKS Company Limited
2013 - Present	Director, Gulf MP Company Limited
2013 - Present	Director, Gulf Solar Company Limited
2013 - Present	Director, Gulf JP NS Company Limited
2013 - Present	Director, Gulf JP UT Company Limited
2012 - Present	Director, Gulf VTP Company Limited
2012 - Present	Director, Gulf TS1 Company Limited
2012 - Present	Director, Gulf TS2 Company Limited
2012 - Present	Director, Gulf TS3 Company Limited
2012 - Present	Director, Gulf TS4 Company Limited
2012 - Present	Director, Gulf NC Company Limited
2012 - Present	Director, Gulf BL Company Limited
2012 - Present	Director, Gulf BP Company Limited
2012 - Present	Director, Gulf NLL2 Company Limited
2012 - Present	Director, Gulf NPM Company Limited
2012 - Present	Director, Gulf NRV1 Company Limited
2012 - Present	Director, Gulf NRV2 Company Limited
2011 - Present	Director, Kolpos Pte. Ltd.
2008 - Present	Senior Executive Vice President,

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.025%

1997 - Present

Spouse or minor child: - None-

Relationship among Family with Other Directors and Management

Gulf JP Company Limited

Company Limited

Chief Financial Officer, Gulf Electric Public

-None-





Date of Appointment

April 24, 2019

Education/Training

• Bachelor of Accountancy (Accounting), Thammasat University

Director Training

• Director Accreditation Program (DAP), Class 128/2016, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2017 - 2018	Director, Gulf Energy Development Public	
	Company Limited	
2002 - 2018	Director, Pomodoro Five Company Limited	
2015 - 2017	Director, Gulf Energy Development	
	Company Limited	
2003 - 2017	Director and Vice President - Finance and	
	Accounting, Pomodoro Group Company	
	Limited	

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

• Non-listed Companies

2018 - Present	Director, Rachakarn Asset Management
	Company Limited
2017 - Present	Director, Gulf Investment and Trading
	Pte. Ltd.
2016 - Present	Director, Gulf Holdings (Thailand)
	Company Limited
2012 - Present	Director, Land and Property Development
	Company Limited
2009 - Present	Director, B Property Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.005% Spouse: 0.009% Minor child: -None-

Relationship among Family with Other Directors and Management



Deputy Chief Executive Officer and Member of the Sustainability and Risk Management Committee Age: 49 years



Date of Appointment

February 15, 2019

Education/Training

- Master of Business Administration (Finance),
 The George Washington University, USA
- Bachelor of Engineering (Electrical Engineering),
 King Mongkut's Institute of Technology Ladkrabang
- The Executive Program in Energy Literacy for a Sustainable Future, Class 4, Thailand Energy Academy

Director Training

Director Certification Program (DCP), Class 168/2013,
 Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

and/or important r ositions		
2018 - 2020	Director, Gulf Energy International Company Limited	
2014 - 2020	Director, Gulf Chana Green Company Limited	
2014 - 2020	Director, SBY Biomass Company Limited	
2014 - 2020	Director, Thepha Clean Energy Company Limited	
2014 - 2020	Director, Gulf Pattani Green Company Limited	
2014 - 2020	Director, Gulf Solar BV Company Limited	
2014 - 2020	Director, Gulf Solar TS1 Company Limited	
2014 - 2020	Director, Gulf Solar TS2 Company Limited	
2014 - 2020	Director, Gulf Solar KKS Company Limited	
2013 - 2020	Director, Gulf MP Company Limited	
2013 - 2020	Director, Gulf Solar Company Limited	
2018 - 2019	Director, Mekong Wind Power Joint Stock	
	Company	
2018 - 2019	Director, TTC Energy Development Investment	
	Joint Stock Company	
2018 - 2019	Director, TTC Green Energy Investment Joint	
	Stock Company	
2017 - 2019	Senior Executive Vice President and Chief	
	Development Officer, Gulf Energy Development	
	Public Company Limited	
2015 - 2017	Director, SPCG Public Company Limited	
2014 - 2017	Senior Executive Vice President, Gulf Energy	

Development Company Limited

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

• Non-listed Companies

2019 - Present	Director, Gulf MTP LNG Terminal Company
	Limited
2018 - Present	Director, Gulf Energy Mauritius Company
	Limited
2014 - Present	Director, Gulf International Investment
	(Hong Kong) Limited
2014 - Present	Director, Gulf International Holding Pte. Ltd.
2011 - Present	Director, Kolpos Pte. Ltd.
2008 - Present	Senior Executive Vice President,
	Gulf JP Company Limited
2007 - Present	Director, Pal Associate Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.033%

Spouse and minor child: -None-

Relationship among Family with Other Directors and Management



Age: 55 years



Date of Appointment

February 15, 2019

Education/Training

- Master of Accountancy, Chulalongkorn University
- Bachelor of Accountancy, Chiang Mai University
- Certified Investment and Securities Analyst (CISA No. 0027), the Securities Analysts Association
- The Executive Program in Energy Literacy for a Sustainable Future, Class 14, Thailand Energy Academy
- Senior Executive Program (SEP), Class 26, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Public-Private Partnerships for Executive Program, Class 1, Institute of Research and Development for Public Enterprises
- CFO Focus on Financial Reporting (CFO 0023), Federation of Accounting Professions and the Securities and Exchange Commission, Thailand

Director Training

• Director Certification Program (DCP), Class 255/2018, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2019 - 2020	Director, TTC Green Energy Investment Joint Stock Company
2019 - 2020	Director, TTC Energy Development Investment Joint Stock Company
2019 - 2020	Director, Mekong Wind Power Joint Stock Company
2018 - 2020	Director, Independent Power Development Company Limited
2018 - 2019	Senior Executive Vice President, Gulf Energy Development Public Company Limited
2017 - 2018	Senior Executive Vice President and Chief Financial Officer, Gulf Energy Development Public Company Limited

2016 - 2017 Executive Vice President - Accounting

2010 - 2016 Senior Vice President - Investment Banking,

Company Limited

and Finance, Gulf Energy Development

Bangkok Bank Public Company Limited

Other Directorship Positions/Other Positions at Present

Other Listed Companies

-None-

• Non-listed Companies

Director, Gulf International Investment
(Hong Kong) Limited
Director, Kolpos Pte. Ltd.
Director, Gulf International Holding
Pte. Ltd.
Director, Gulf MTP LNG Terminal
Company Limited
Director, WHA Eastern Seaboard NGD4
Company Limited
Director, WHA Eastern Seaboard NGD2
Company Limited
Director, Gulf WHA MT Natural Gas
Distribution Company Limited
Director, Gulf Energy (Vietnam) Limited
Liability Company
Director, Gulf Energy Mauritius
Company Limited
Director, Gulf Energy International
Company Limited
Director, Blue One Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.014%

Spouse or minor child: - None-

Relationship among Family with Other Directors and Management



Mr. Smith Banomyong

Chief International Business Officer Age: 47 years

Date of Appointment

January 28, 2020

Education/Training

- Master of Science (Economics), The London School of Economics and Political Science (LSE), United Kingdom
- Bachelor of Arts (Economics), Reed College, USA
- Bachelor of Engineering (Industrial Engineering), Chulalongkorn University

Director Training

- Director Accreditation Program (DAP), Class 76/2008,
 Thai Institute of Directors
- Corporate Governance for Capital Market Intermediaries (CGI), Class 0/2014, Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2018 - 2020	Chief Financial Officer, Gulf Energy
	Development Public Company Limited
2018 - 2020	Senior Executive Vice President - Finance,
	Gulf JP Company Limited
2014 - 2018	Chief Executive Officer, SCB Asset
	Management Company Limited
2011 - 2014	First Executive Vice President,
	Head of Wealth Division, The Siam
	Commercial Bank Public Company Limited
2010 - 2011	Executive Vice President, Head of Corporate
	Strategy, The Siam Commercial Bank Public
	Company Limited
2008 - 2010	Director, Head of Asia Local Credit Trading,
	Citigroup Global Markets Asia Limited,
	Hong Kong
2006 - 2008	Director, Local Credit Trading, Citibank N.A.,
	Bangkok Thailand

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

• Non-listed Companies

2020 - Present	Director, Gulf International Investment
	(Hong Kong) Limited
2020 - Present	Director, Kolpos Pte. Ltd.
2020 - Present	Director, Gulf International Holding Pte. Ltd.
2018 - Present	Director, Gulf Energy Mauritius Company
	Limited
2018 - Present	Director, Smith Technology Company
	Limited
2017 - Present	Director, Sirasan Place Company Limited
2015 - Present	Director, Sirasan Property Company
	Limited
2009 - Present	Director, SCS Property Management
	Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.005%

Spouse or minor child: - None-

Relationship among Family with Other Directors and Management

Mr. Worapong Vivatanavanich

Chief Operating Officer Age: 48 years



Date of Appointment

February 15, 2019

Education/Training

- Master of Economics, The University of Texas at Arlington, USA
- Master of Business Administration (Finance), The University of Texas at Arlington, USA
- Bachelor of Business Administration, Texas A&M University - Commerce, USA
- Bachelor of Engineering (Electrical Engineering), King Mongkut's Institute of Technology Ladkrabang
- Certified Investment and Securities Analyst, the Securities Analysts Association

Director Training

- None -

Working Experience (during the recent 5 years) and/or Important Positions

2018 - 2020	Director, TTC Energy Development Investment Joint Stock Company
2018 - 2020	Director, TTC Green Energy Investment Joint
	Stock Company
2018 - 2019	Acting Chief Operating Officer and Executive
	Vice President - Project Development, Gulf
	Energy Development Public Company Limited
2009-2019	Executive Vice President - Operations,
	Gulf JP Company Limited
2013 - 2018	Executive Vice President - Project
	Development Group, Gulf Energy Development
	Company Limited

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

-None-

Non-listed Companies

Non-listed Companies			
2020 - Present	Director, Hinkong Power Holding Company		
	Limited		
2020 - Present	Director, Burapa Power Holding Company		
	Limited		
2020 - Present	Director, Burapa Power Generation		
	Company Limited		
2020 - Present	Director, Gulf Chana Green Company		
	Limited		
2020 - Present	Director, SBY Biomass Company Limited		

Other Directorship Positions/Other Positions at Present

2020 - Present	Director, Thepha Clean Energy
	Company Limited
2020 - Present	Director, Gulf Pattani Green Company Limited
2020 - Present	Director, Gulf NPM Company Limited
2020 - Present	Director, Gulf NRV1 Company Limited
2020 - Present	Director, Gulf NRV2 Company Limited
2020 - Present	Director, Gulf NC Company Limited
2020 - Present	Director, Gulf MP Company Limited
2020 - Present	Director, Gulf SRC Company Limited
2020 - Present	Director, Gulf PD Company Limited
2019 - Present	Senior Executive Vice President -
	Operations and Chief Operating Officer,
	Gulf JP Company Limited
2019 - Present	Director, Gulf MTP LNG Terminal
	Company Limited
2019 - Present	Director, Bangkok Smart Energy Company
	Limited
2019 - Present	Director, Gulf VTP Company Limited
2019 - Present	Director, Gulf TS1 Company Limited
2019 - Present	Director, Gulf TS2 Company Limited
2019 - Present	Director, Gulf TS3 Company Limited
2019 - Present	Director, Gulf TS4 Company Limited
2019 - Present	Director, Gulf NLL2 Company Limited
2019 - Present	Director, Gulf BL Company Limited
2019 - Present	Director, Gulf BP Company Limited
2019 - Present	Director, Gulf Solar Company Limited
2019 - Present	Director, Gulf Solar BV Company Limited
2019 - Present	Director, Gulf Solar TS1 Company Limited
2019 - Present	Director, Gulf Solar TS2 Company Limited
2019 - Present	Director, Gulf Solar KKS Company Limited
2018 - Present	Director, Mekong Wind Power Joint Stock
	Company
2018 - Present	Director, Independent Power Development
	Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: -None-

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management

- None -



Mr. Ravi Kurmarohita Chief Business Development Officer

Age: 50 years

Date of Appointment

February 15, 2019

Education/Training

- Master of Science (Structural Steel Design), Imperial College London, United Kingdom
- Bachelor of Engineering (Civil Engineering), Imperial College London, United Kingdom
- The Executive Program in Energy Literacy for a Sustainable Future, Class 6, Thailand Energy Academy
- Executive Management with Business Development and Investment, Class 3, Institute of Business and Industrial Development

Director Training

- None -

Working Experience (during the recent 5 years) and/or Important Positions

2015 - 2020	Director, Gulf MP Company Limited
2014 - 2020	Director, Gulf Solar Company Limited
2014 - 2020	Director, Gulf Solar BV Company Limited
2014 - 2020	Director, Gulf Solar TS1 Company Limited
2014 - 2020	Director, Gulf Solar TS2 Company Limited
2014 - 2020	Director, Gulf Solar KKS Company Limited
2014 - 2020	Director, Gulf Pattani Green Company Limited
2014 - 2020	Director, Gulf Chana Green Company Limited
2014 - 2020	Director, SBY Biomass Company Limited
2014 - 2020	Director, Thepha Clean Energy Company Limited
2014 - 2020	Director, Gulf International Holding Pte. Ltd.

Working Experience (during the recent 5 years) and/or Important Positions

2018 - 2019	Executive Vice President - International Business Development, Gulf Energy Development Public Company Limited
2008 - 2019	Executive Vice President - Business
	Development, Gulf JP Company Limited
2017 - 2018	Head of Investor Relations, Gulf Energy
	Development Public Company Limited
2017 - 2017	Director, WHA Eastern Seaboard NGD4
	Company Limited
2016 - 2017	Director, WHA Eastern Seaboard NGD2
	Company Limited
2015 - 2017	Director, Gulf WHA MT Natural Gas
	Distribution Company Limited
2015 - 2017	Executive Vice President - Business
	Development, Gulf Energy Development
	Company Limited

Other Directorship Positions/Other Positions at Present

Other Listed Companies

-None-

Non-listed Companies

2019 - Present	Senior Executive Vice President -	
	Business Development and Chief	
	Business Development Officer,	
	Gulf JP Company Limited	
2001 - Present	Director, Sunset Park Company Limited	

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.006%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management

- None -

Mr. Tanon Tantisunthorn

Chief Corporate Affairs Officer Age: 47 years



Date of Appointment

February 15, 2019

Education/Training

- Master of Science (Management), New York University, USA
- Master of Business Administration (Finance), American University, USA
- Bachelor of Engineering (Environmental Engineering),
 Chulalongkorn University
- Politics and Governance in Democratic Systems for Executives Program, Class 7, King Prajadhipok's Institute
- Administrative Justice for Executives Program, Class 3, the Administrative Justice Institute, the Office of the Administrative Courts
- Capital Market Leadership Program, Class 21, Capital Market Academy

Director Training

Director Certification Program (DCP), Class 57/2005,
 Thai Institute of Directors

Working Experience (during the recent 5 years) and/or Important Positions

2014 - 2020	Director, Gulf Solar Company Limited
2014 - 2020	Director, Gulf Solar BV Company Limited
2014 - 2020	Director, Gulf Solar KKS Company Limited
2014 - 2020	Director, Gulf Solar TS1 Company Limited
2014 - 2020	Director, Gulf Solar TS2 Company Limited
2014 - 2020	Director, Gulf International Holding Pte. Ltd
2017 - 2019	Executive Vice President - Corporate Affairs
	Group, Gulf Energy Development Public
	Company Limited
2008 - 2019	Executive Vice President - Corporate Affairs,
	Gulf JP Company Limited
2016 - 2017	Executive Vice President - Office of Chief
	Executive Officer, Gulf Energy Development
	Company Limited
2014 - 2016	First Senior Vice President - Asset
	Management and First Senior Vice President
	- Office of Chief Executive Officer,
	Gulf Energy Development Company Limited

Other Directorship Positions/Other Positions at Present

• Other Listed Companies

2003 - Present Director, Lanna Resources Public Company Limited

Non-listed Companies

2019 - Present Senior Executive Vice President -

Corporate Affairs, Gulf JP Company

Limited

2010 - Present Director, Sarin Property Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.080%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management

Brother-in-law of Mr. Sarath Ratanavadi, Director and Chief Executive Officer



Mr. Olarn Srivalattha

Senior Vice President - Accounting
Age: 39 years

Date of Appointment

January 1, 2020

Education/Training

• Bachelor of Accountancy (Accounting), Thammasat University

Director Training

- None -

Working Experience (during the recent 5 years) and/or Important Positions

2018 - 2019	Vice President - Accounting, Gulf Energy	
	Development Public Company Limited	
2018 - 2019	Vice President - Accounting	
	Gulf JP Company Limited	
2014 - 2017	Assistant Vice President - Accounting,	
	Gulf Energy Development Company Limited	
2014 - 2017	Assistant Vice President - Accounting,	
	Gulf JP Company Limited	

Other Directorship Positions/Other Positions at Present

- Other Listed Companies
 - None -
- Non-listed Companies

 2015 - Present Director, Nabsib Company Limited
 2020 - Present Senior Vice President - Accounting, Gulf JP Company Limited

Shareholding in the Company

(as of December 30, 2019):

Personal: 0.000%

Spouse or minor child: -None-

Relationship among Family with Other Directors and Management

- None -

Report of Changes in Securities Holdings of Directors and Executives

Gulf Energy Development Public Company Limited

as of December 31, 2019

		Number of Ordinary Shares		3
Director	Position	December 31, 2018	December 31, 2019	increases/ (decreases)
Mr. Viset Choopiban Spouse and Minor Child	Chairman of the Board/Independent Director	150,000 -	150,000 -	-
Mr. Kasem Snidvongs Spouse and Minor Child	Chairman of Audit Committee/Independent Director	150,000 700	125,000 25,700	(25,000) 25,000
Mr. Sommai Phasee Spouse and Minor Child	Member of the Audit Committee/Independent Director	100,000	100,000	-
Dr. Raweporn Kuhirun Spouse and Minor Child	Member of the Audit Committee/Independent Director	100,000	104,000	4,000
Mr. Vinit Tangnoi Spouse and Minor Child	Member of the Audit Committee/Independent Director	100,000	100,000	-
Mr. Santi Boonprakub Spouse and Minor Child	Independent Director	100,000	100,000	-
Mr. Sarath Ratanavadi Spouse and Minor Child Juristic persons which holding more than 30%	Director/Chief Executive Officer	755,999,994 3,900,000 794,003,106	755,999,994 4,100,000 796,203,106	200,000 2,200,000
Mrs. Porntipa Chinvetkitvanit Spouse and Minor Child	Director/President/Deputy Chief Executive Officer	385,900 -	385,900 -	-
Mr. Boonchai Thirati Spouse and Minor Child	Director / Executive Director	353,500 -	353,500 -	-
Ms. Yupapin Wangviwat	Director/Executive Director/Chief Financial Officer	541,400	541,400	_
Mrs. Chotikul Sookpiromkasem* Spouse and Minor Child	Director	n/a n/a	100,000 190,000	

Remark: * Mrs. Chotikul Sookpiromkasem was appointed as a Company Director on April 24, 2019

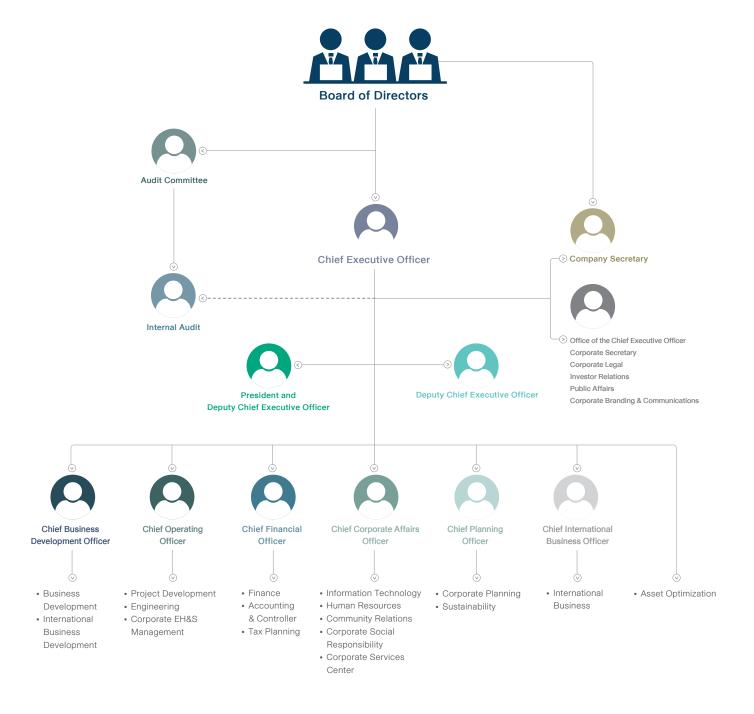
	Position	Number of Or	Number of Ordinary Shares		
Director		December 31, 2018	December 31, 2019	decreases (decreases)	
Mr. Ratthaphol Cheunsomchit Spouse and Minor Child	Deputy Chief Executive Officer	700,000	700,000	- -	
Ms. Bung-on Suttipattanakit	Chief Planning Officer	291,400	291,400	-	
Mr. Smith Banomyong Spouse and Minor Child	Chief International Business Officer	100,000	100,000	-	
Mr. Worapong Vivatanavanich*	Chief Operating Officer	n/a	-		
Mr. Ravi Kurmarohita* Spouse and Minor Child	Chief Business Development Officer	n/a n/a	121,700		
Mr. Tanon Tantisunthorn* Spouse and Minor Child	Chief Corporate Affairs Officer	n/a n/a	1,708,900 -		

Remark: * Mr. Worapong Vivatanavanich, Mr. Ravi Kurmarohita and Mr. Tanon Tantisunthorn were appointed as the Company's Executives on February 15, 2019

MANAGEMENT

STRUCTURE

As of January 28, 2020, the Company's management structure consists of the Board of Directors, the Audit Committee and the executives. The details of which are as follows:



1. Board of Directors and Sub-Committees

1.1 Board of Directors

As of December 31, 2019, the Board of Directors of the Company comprises of 11 directors as follows:

Director	Position
Mr. Viset Choopiban	Independent Director / Chairman of the Board of Directors
2. Mr. Kasem Snidvongs	Independent Director / Chairman of the Audit Committee
3. Mr. Sommai Phasee ⁽¹⁾	Independent Director / Audit Committee Member
4. Dr. Raweporn Kuhirun ⁽¹⁾	Independent Director / Audit Committee Member
5. Mr. Vinit Tangnoi	Independent Director / Audit Committee Member
6. Mr. Santi Boonprakub	Independent Director
7. Mr. Sarath Ratanavadi	Director
8. Mrs. Porntipa Chinvetkitvanit ⁽²⁾	Director
9. Mr. Boonchai Thirati ⁽²⁾	Director
10. Ms. Yupapin Wangviwat ⁽²⁾	Director
11. Mrs. Chotikul Sookpiromkasem ⁽³⁾	Director
(1)	

Note: (1) The director who has requisite knowledge and experience to review the reliability of the financial statements of the Company.

Members of the Board of Directors

As of December 31, 2019, the Company's Board of Directors comprises of 11 sophisticated individuals who possess various qualifications, including skills, experience and specialized expertise, which are beneficial to the Company's operation. The Board of Directors of the Company is formed of nine non-executive directors and two executive directors.

The Company has six Independent Directors, namely Mr. Viset Choopiban, Mr. Kasem Snidvongs, Mr. Sommai Phasee, Dr. Raweporn Kuhirun, Mr. Vinit Tangnoi and Mr. Santi Boonprakub, in the Board of Directors amounting to more than half of the total number of directors in the Company. All of the Independent Directors have all qualifications as required by the Company's rule on qualifications of Independent Director in accordance with the requirements of the Capital Market Supervisory Board.

Authorized Directors

Authorized directors of the Company are Mr. Sarath Ratanavadi or Mrs. Porntipa Chinvetkitvanit or Mr. Boonchai Thirati or Ms. Yupapin Wangviwat or Mrs. Chotikul Sookpiromkasem, any two directors of these five directors sign together with the Company's seal affixed.

The director and/or executive holds office as director and/or executive of Gulf Electric Public Company Limited ("GEC") and/or subsidiaries of GEC which operate the business having the same nature as the business of the Company, and some of which may be considered as operating the business deemed to be in competition with the business of the Company. Nonetheless, the Audit Committee Meeting No. 5/2017 dated August 11, 2017 and the Board of Directors' Meeting No. 6/2017 dated August 11, 2017 had acknowledged the details related to such holding of directorships of such person and had resolved to require that he/she shall perform duties in accordance with the laws, the objectives and the Articles of Association with integrity and accountability as required by the relevant laws as well as his/her duty in compliance with the policy on conflict of interest of group companies. However, in case that, in the future, there is any conflict of interest under the Management Services Agreement between GEC and GJP, the Company will inform GEC and will discuss with GEC's shareholders on appropriate approach to manage such conflict of interest.

⁽⁹⁾ Mrs. Chotikul Sookpiromkasem was appointed as director by the Annual General Meeting of Shareholders for the Year 2019 dated April 24, 2019.

1.2 Audit Committee

As of December 31, 2019, the Audit Committee of the Company comprises of 4 members as follows:

Director	Position
1. Mr. Kasem Snidvongs	Chairman of the Audit Committee
2. Mr. Sommai Phasee (1)	Audit Committee Member
3. Dr. Raweporn Kuhirun ⁽¹⁾	Audit Committee Member
4. Mr. Vinit Tangnoi	Audit Committee Member

Note: (1) The director who has requisite knowledge and experience to review the reliability of the financial statements of the Company.

The Audit Committee appointed Ms. Chotiros Likitcharoenpanich, Senior Vice President - Internal Audit, as the secretary of the Audit Committee.

Board of Directors' Meetings and Audit Committee Meetings

The Company determined to hold the Board of Directors' Meeting on a monthly basis, the schedules of which are arranged in advance every year and submitted to each director within January of every year so that all the directors can arrange their schedule for the meetings.

In 2019, the Company held 14 Board of Directors' Meetings and 6 Audit Committee Meetings. Each director had attended the Board of Directors' Meetings and the Audit Committee Meetings not less than 75% of the total meetings and the percentage of Board of Directors' meetings with all directors present is 91.30% as per details below:

Divostor	Position	Number of Attendance / Total Mee (During January 1, - December 31,			
Director	Position	Board of Directors	Audit Committee	AGM	
1. Mr. Viset Choopiban	Independent Director / Chairman of the Board of Directors	14/14	-	1/1	
2. Mr. Kasem Snidvongs	Independent Director / Chairman of the Audit Committee	13/14	6/6	1/1	
3. Mr. Sommai Phasee	Independent Director / Audit Committee Member	14/14	6/6	1/1	
4. Dr. Raweporn Kuhirun	Independent Director / Audit Committee Member	14/14	6/6	1/1	
5. Mr. Vinit Tangnoi	Independent Director / Audit Committee Member	12/14	5/6	1/1	
6. Mr. Santi Boonprakub	Independent Director	14/14	-	1/1	
7. Mr. Sarath Ratanavadi	Director	11/14	-	1/1	
8. Mrs. Porntipa Chinvetkitvanit	Independent Director / Audit Committee Member	14/14	-	1/1	
9. Mr. Boonchai Thirati	Independent Director / Audit Committee Member	11/14	-	1/1	
10. Ms. Yupapin Wangviwat	Independent Director	11/14	-	1/1	
11. Mrs. Chotikul Sookpiromkasem	Director	9/10	-	-	

Note:

⁽¹⁾ Directors no. 2, 5, 7, 9, 10 and 11 were absent from the meeting(s) due to prior scheduled commitment.

Directors no. 3 and 4 are the directors who have requisite knowledge and experience to review the reliability of the financial statements of the Company.

⁽³⁾ Director no. 11 was appointed as the director by the Annual General Meeting of Shareholders for the Year 2019 dated April 24, 2019.

⁽⁴⁾ AGM means the Annual General Meeting of Shareholders for the Year 2019 dated April 24, 2019

2. Executives

As of January 28, 2020, the executives of the Company are as follows:

Executive	Position
1. Mr. Sarath Ratanavadi	Chief Executive Officer
2. Mrs. Porntipa Chinvetkitvanit	President and Deputy Chief Executive Officer
3. Mr. Ratthaphol Cheunsomchi	t Deputy Chief Executive Officer
4. Ms. Yupapin Wangviwat	Chief Financial Officer
5. Ms. Bung-on Suttipattanakit	Chief Planning Officer
6. Mr. Ravi Kurmarohita	Chief Business Development Officer
7. Mr. Smith Banomyong	Chief International Business Officer
8. Mr. Worapong Vivatanavanic	n Chief Operating Officer
9. Mr. Tanon Tantisunthorn	Chief Corporate Affairs Officer
10. Mr. Olarn Srivalattha	Senior Vice President - Accounting

3. Company Secretary

Ms. Chattawan Jaijakul was appointed by the resolution of the Board of Directors as the Company Secretary whose duties and responsibilities are to prepare and keep documents of the Company as required under the applicable laws; to keep reports on the interests reported by the directors and executives; to provide advices in relation to rules and regulations that the Board of Directors and the executives should be aware of; to prepare and organize orientation to the newly appointed director; to monitor and coordinate in order for the Company to comply with the laws, the Company's Articles of Association and rules, and the resolutions of the Board of Directors and shareholders' meetings, including the Corporate Governance Policy and Code of Conduct; and to perform other acts as prescribed by the Securities and Exchange Act and the Capital Market Supervisory Board.

4. Remuneration of the Directors and the Executives

4.1 Remuneration of the Directors

The Company has policies to pay remuneration to its directors at appropriate rates in accordance with their duties, responsibilities and results of operation of the Company. Such rates are considered based on those of the companies in the same industry, size of business, revenue level, value of securities according to market value during the same period. For the performance bonus, it will be based on results of the Company's operation in each year and will be allocated to each director in accordance with the service period of each director.

(1) Monetary Remuneration

The Company's Annual General Meeting of Shareholders for the Year 2019 dated April 24, 2019 resolved to approve the fixing of remuneration of the directors and the Audit Committee members for the year 2019 in form of monthly salary without meeting allowance and the performance bonus for the year 2018 as follows:

Composition of Remuneration	Chairman	Director
Composition of Remuneration	Gilaiiiilaii	Director
A. Monthly Remuneration		
Board of Directors (Baht/Month)	100,000	65,000
Audit Committee (Baht/Month)	30,000	20,000
B. Performance Bonus for the year 2018 (Baht/year)	1,500,000	1,200,000
C. Other Benefits	- No	one -

Remark * The Company pays remuneration only to non-executive directors.

The following table sets forth monetary remuneration of the directors and the audit committee members for the fiscal year ended December 31, 2019.

	Monthly Remuneration from January 1 - December 31, 2019						
Director	Monthly Remu	ineration (Baht)	Danus				
Bilector	Director	Audit Committee Member	Bonus (Baht/Year)	Total			
1. Mr. Viset Choopiban	1,200,000	-	1,500,000	2,700,000			
2. Mr. Kasem Snidvongs	780,000	360,000	1,200,000	2,340,000			
3. Mr. Sommai Phasee	780,000	240,000	1,200,000	2,220,000			
4. Dr. Raweporn Kuhirun	780,000	240,000	1,200,000	2,220,000			
5. Mr. Vinit Tangnoi	780,000	240,000	1,200,000	2,220,000			
6. Mr. Santi Boonprakub	780,000	-	1,200,000	1,980,000			
7. Mr. Sarath Ratanavadi	-	-	-	-			
8. Mrs. Porntipa Chinvetkitvanit	-	-	-	-			
9. Mr. Boonchai Thirati	-	-	-	-			
10. Ms. Yupapin Wangviwat	-	-	-	-			
11. Mrs. Chotikul Sookpiromkasem	-	-	-	-			

(2) Other Benefits

- None -

4.2 Remuneration of the Executives

The Company has a policy in determining the remuneration of the executives by regularly benchmarking with leading companies in the same industry to ensure the competitive remuneration with other companies. Remuneration will also be based on results of the Company's operation in each year to encourage work performance.

(1) Monetary Remuneration

As of December 31, 2019, the Company paid remuneration to its executives, exclusive of finance and accounting manager, in the form of monthly salary, annual bonus and provident fund in total of approximately Baht 139.1 million.

(2) Other Remuneration

The Company provides health insurance, life insurance, accident insurance, annual medical check-up and financial aids in accordance with the Company's policy.

5. Subsidiaries Engaging in Core Business

As of December 31, 2019, directors and executives of subsidiaries that engage in core business appointed by the Company are as follows:

Director / Executive Company	Abbreviation of the Company	Mr. Sarath Ratanavadi	Mrs. Porntipa Chinvetkitvanit	Mr. Boonchai Thirati	Ms. Yupapin Wangviwat	Mr. Ratthaphol Cheunsomchit	Ms. Bung-on Suttipattanakit	Mr. Ravi Kurmarohita	Mr. Worapong Vivatanavanich	Mr. Jirapat Archalaka	Ms. Theerathiphisa Tawichpasoot	Mr. Tanon Tantisunthorn	Mr. Prasert Thirati	Mr. Tawan Nuannak	Mr. Nguyen Van Hong
Independent Power Development Group			1					1							
Independent Power Development Company Limited ⁽¹⁾	IPD		0	/	/		/		/						
Gulf SRC Company Limited (2)	GSRC		0	/											
Gulf PD Company Limited (2)	GPD		0	/											
Gulf MP Group															
Gulf MP Company Limited (1)	GMP		/	/	/	/		/							
Gulf VTP Company Limited	GVTP		0,Δ	/,//	/, //	//			/, //	/	/				
Gulf TS1 Company Limited	GTS1		0,Δ	/,//	/, //	//			/, //	/	/				
Gulf TS2 Company Limited	GTS2		0,Δ	/,//	/, //	//			/, //	/	/				
Gulf TS3 Company Limited	GTS3		0,Δ	/,//	/, //	//			/, //	/	/				
Gulf TS4 Company Limited	GTS4		0,∆	/,//	/, //	//			/, //	/	/				
Gulf NLL2 Company Limited	GNLL2		Ο,Δ	/,//	/, //	//			/, //	/	/				
Gulf NC Company Limited	GNC		0,Δ	/,//	/, //	//			//						
Gulf NPM Company Limited	GNPM		Ο,Δ	/,//	/, //	//			//						
Gulf NRV1 Company Limited	GNRV1		0,Δ	/,//	/, //	//			//						
Gulf NRV2 Company Limited	GNRV2		0,Δ	/,//	/, //	//			//						
Gulf BL Company Limited	GBL		0,Δ	/,//	/, //	//			/, //	/	/				
Gulf BP Company Limited	GBP		Ο,Δ	/,//	/, //	//			/, //	/	/				
Gulf Solar Group															
Gulf Solar Company Limited (1)	Gulf Solar		0		/	/		/	/			/			
Gulf Solar BV Company Limited	Gulf Solar BV		Ο,Δ	//	/, //	/, //		/	/, //			/			
Gulf Solar KKS Company Limited	Gulf Solar KKS		0,Δ	//	/, //	/, //		/	/, //			/			
Gulf Solar TS1 Company Limited	Gulf Solar TS1		Ο,Δ	//	/, //	/, //		/	/, //			/			
Gulf Solar TS2 Company Limited	Gulf Solar TS2		0,Δ	//	/, //	/, //		/	/, //			/			
Other Subsidiaries															
Gulf Chana Green Company Limited ⁽²⁾	GCG		0			/		/							
Gulf Energy International Company Limited ⁽¹⁾	GEI	0	/		/	/	/								
Gulf International Holding Pte. Ltd. ⁽¹⁾	GIH		/		/	/		/				/			
TTC Green Energy Investment Joint Stock Company	TTC GE						/		/				/,//	//	//
TTC Energy Development Investment Joint Stock Company	TTC GREEN						/		/				/, //	//	//
Mekong Wind Power Joint Stock Company ⁽²⁾	Mekong Wind Power			/			/		/ ecuti				/		

Note Symbol \bigcirc = Chairman / = Director \triangle = Managing Director // = Executive

⁽¹⁾ A holding company that holds shares in other companies and does not operate its own power plant thus there is no organizational structure.

⁽²⁾ A company that is under construction/ preparation for construction hence there is no organizational structure.

6. Employees of the Company and Subsidiaries Engaging in Core Business

6.1 Number of Employees

As of December 31, 2019, total number of employees of the Company and subsidiaries engaging in core business were 832 employees, of which employees of subsidiaries were included in Asset Management Department. The details of employees are as follows:

Department	Number of Employees for the Period Ended December 31, 2018	Number of Employees for the Period Ended December 31, 2019
Management and secretary	39	43
Business Development & Project Development	68	81
Finance and Accounting	69	75
Asset Management	429	494
Human Resources	19	20
Information Technology	17	17
Corporate Legal	9	12
Corporate Affairs	87	90
Total	737	832

6.2 Remuneration of Employees

The Company has a policy in determining the remuneration of the employees that remuneration shall be commensurate with their responsibilities, capabilities, performance and fairness. The Company regularly reviews that the employee remuneration structure to be in consistent with the economy and business competition and benchmarks the Company against other leading companies in the same industry in order to ensure competitive remuneration. The Company also have a composition of remuneration which is in conformity with the short-term and long-term operating results of the Company and is attractive enough to retain the employees with the Company. Remuneration from short-term operating results is a bonus which correlates with the Company's operating results and each employee's individual performance. Remuneration from long-term operating results is a provident fund which acts as a financial security to employees.

Regarding remuneration from short-term operating results, the Company, together with employees, will set clear work goals. The Key Performance Indicators (KPIs) are taken into consideration in granting annual special remuneration (bonus), comprising of appraisal results from Corporate KPIs, which covers the revenue and profit of the Company and subsidiaries each year, Core Competency and Functional Competency. The Company has publicized information regarding the appraisal manual and approval process of the performance appraisal and knowledge about welfare and various benefits for all employees to be informed of their rights via email and the Company's Intranet system.

For the period ended December 31, 2019, the Company and subsidiaries, which engage in core business, paid remuneration to employees (exclusive of executives) totalling approximately Baht 1,087.2 million in the form of monthly salary, annual bonus and other remuneration, i.e. overtime, shift allowance, risk allowance, on call allowance, provident fund and other fixed incomes.

In addition, the Company provides other benefits such as health insurance and medical care for employees, spouses and children, life insurance, accident insurance, disability insurance, annual medical check-up, dental care, influenza vaccination, loans and financial aids in accordance with the Company's policy. The Company constantly review and improve the various welfare to suit the circumstances and well-being of employees.

6.3 Employee Development Policy

The Company places high importance on developing the directors, executives and employees and to that end, has set out guidelines based on the Good Corporate Governance Standards for Listed Companies which can be summarized as follows:

(a) Development Guidelines for Directors

- (1) The Company will arrange for directors to attend professional development training programs to develop, support and promote the work of the Board of Directors.
- (2) The Company will disclose informational regarding the participation in training and development programs of directors over the past year.
- (3) The Company encourages all directors to attend training programs and broaden their knowledge on a regular basis in terms of performance of their duties as directors for the purposes of enabling them to make a successful adaptation to potential changes in the business.
- (4) The Company encourages all directors to broaden their knowledge in terms of operation of the Company as directors for the purposes of enhancing their efficiency in discharging duties as directors.
- (5) The Company will provide an orientation course for a new director and provide documents which aim for assisting the director in discharging his/her duties as well as an induction into the Company's businesses.

In 2019, the Company's directors who have attended training programs are as follows:

Director	Position	Training
Mr. Sarath Ratanavadi	Director and Chief Executive Officer	 The Program of Senior Executives on Justice Administration, Class 23, Judicial Training Institute Executive Development Training Program, the Royal Thai Police
Mrs. Porntipa Chinvetkitvanit	Director, Deputy Chief Executive Officer and President	Rule of Law for Democracy, Class 7, College of the Constitutional Court
Ms. Yupapin Wangviwat	Director, Executive Director and Chief Financial Officer	Digital Transformation for CEO, Class 1, Nation Multimedia Group Public Company Limited

(b) Development Guidelines for Executives

- (1) The Company has set out the Managerial Competency as a basis for developing the Company's executives with an aim to equip them with skills, knowledge and capabilities to deliver successful work.
- (2) The Company will provide training programs and other development courses as deemed appropriate and in line with competency of executives.
- (3) The Company will provide an orientation course for new executives to enable them to successfully adapt to new roles, responsibilities and expectations of the new position.
- (4) The Company will encourage the executives in sharing work experiences among executives and employees to create an environment of learning and development within the organization.

(c) Development Guidelines for Employees

- (1) The Company has set out the Functional Competency as a basis for developing the Company's employees in each relevant department with an aim to equip them with skills, knowledge and capabilities to deliver successful work, for instance, professional presentation course and improving Microsoft Excel skills.
- (2) The Company will provide development courses for managers as deemed appropriate and in line with Managerial Competency indicator, for instance, leadership building program, guide on how to be a good coach and personnel management for managers.

- (3) The Company will provide an orientation course for new employees to enable them to realize the visions, values, Code of Conduct, policies and directions which the Company's businesses will take.
- (4) The Company requires every employee to prepare an annual Individual Development Plan (IDP) and has established a process for consistent tracking of the employee's development according to each IDP.

Besides providing development courses on the functional skills, the Company realized the importance of conducting business under the Principles of the Corporate Governance and with transparency and fairness. In 2019, the Company therefore held an in-house seminar for the executives and employees pertaining to the corruption situation in Thailand and the role of private sector in fighting against corruption, relevant rules and regulations, case studies and Code of Conduct under the topic of "Private Sector Collective Action Coalition against Corruption (CAC)" by having a guest speaker from the Collective Action Coalition against Corruption (CAC). Moreover, in order to enhance the knowledge and understanding throughout the organization, the Company provided the employees at all levels with the access to the Company's policies through the Company's website including enforcing all employees to train 2019 Code of Conduct through the Company's e-Learning.

For the year ended December 31, 2019, an average training time of the executives and employees of the Company and its subsidiaries which engage in core businesses is 7.11 hours/person/year.

7. Policy on Prevention of Conflict of Interest

The Company is aware of potential conflict of interest which may arise from conflicts between (a) interest of the Company's personnel and their related persons, i.e. Board of Directors, executives, permanent employees, temporary employees and outsourced employees and (b) interest of the group companies, customers or trading partners. To effectively prevent potential conflict of interest, the Company has thus devised the policy on prevention of conflict of interest to serve as a compliance guideline for the Company's personnel which can be summarized as follows:

- (1) In making any business decision, each of the Company's personnel must take the best interest of the Company into consideration rather than his/her personal interest.
- (2) In a meeting, if any of the Company's personnel has interest in any agenda item, he/she must abstain from casting a vote or refrain from attending the meeting while such agenda item is being discussed, and must neither exploit nor utilize any information derived from such agenda item for his/her personal interest.
- (3) The Company's personnel must prepare a written report disclosing his/her direct or indirect interest, and present the report in accordance with the criteria set out by the law.
- (4) The Company's directors are forbidden to operate a business of the same nature as and in competition with that of the Company, or to enter to be a partner in an ordinary partnership or a partner of unlimited liability in a limited partnership or a director of a private company or other company which operates a business of the same nature as and in competition with that of the Company, unless the meeting of shareholders had been notified prior to the appointment.
- (5) The Company's personnel must not take advantage of any inside information which he/she has obtained in capacity of his/her position and responsibility.
- (6) The Company's personnel must not take up any position outside organization or non-for-profit organization, unless he/she has notified or has been permitted by an authorized person in accordance with the criteria set out by the Company.
- (7) The Company's personnel must not take any decision-making roles in recruiting new staff who appears to be his/her related person, such that to allow transparency in the Company's staff recruitment process as well as fair treatment to all candidates with similar calibres.
- (8) In entering into a connected transaction, the Company will apply the similar criteria used with other regular customers to such connection transactions in terms of price and commercial conditions, and a connected transaction classified as a financial assistance must also be made on fair terms and conditions to provide the best benefits for the Company.
- (9) In case that a transaction is considered a connected transaction pursuant to the relevant notifications of the Stock Exchange of Thailand, the Capital Market Supervisory Board and the Securities and Exchange Commission, the Company's personnel must strictly comply with rules set out by such regulations.

CORPORATE

GOVERNANCE

1. Corporate Governance Policy

The Board of Directors adheres to and places importance on compliance with the corporate governance principle, which forms part of the fundamental management of the Company. In this light, the Board of Directors, the management team, and employees all take into account their roles and responsibility to deliver systematic management with transparency and efficiency so as to enhance the competitive edge and build confidence for shareholders, investors, and all related parties.

In the year 2019, the Company achieved score of "4 stars" or "very good" from the "Corporate Governance Report of Thai Listed Companies 2019" conducted by Thai Institute of Directors (IOD). The Company has been selected in the "Thailand Sustainability Investment (THSI)" list for the year 2019, which reflects its emphasis and commitment to developing Environmental, Social and Governance (ESG) in its business operations. In addition, the Company achieved a full score of 100 from the Annual General Meeting of Shareholders Assessment Project 2019 conducted by Thai Investors Association. The results mentioned above showcase the Company's commitment and ability to conduct business according to Corporate Governance with stability and sustainable growth.

For the year 2019, the Company adhered to the corporate governance principle which adopted from the Principle of Good Corporate Governance for Listed Companies 2012 of the Stock Exchange of Thailand and the Corporate Governance Code 2017 of the Office of the Securities and Exchange Commission, of which could be described into 5 categories as follows:

1.1 Shareholders' Rights

The Board of Directors is obligated to support, promote, and facilitate all shareholders whom will be provided with their basic legal rights by means and standards, which are generally acceptable, transparent, and fair. They are entitled to equitable treatment such as the right to purchase, sell, or transfer shares, the right to participate in meetings of shareholders as well as to receive profits and sufficient information of the Company. The shareholders are entitled to freely express their opinions in Shareholders' Meetings and take part in decision–making on significant matters, appointment or removal of directors, appointment of auditors, and issues which impact the Company such as dividend allocation, amendments to the Articles of Association, capital increase or decrease, and approval of extraordinary items. All shareholders are entitled to exercise their right to vote according to their number of shares held on a one share one vote basis.

Apart from abovementioned rights, the Company or the Board of Directors acting on behalf of the Company shall recognize and place significance on the right of shareholders and shall refrain from taking any actions which would violate or deprive the shareholders of their right. The Company determines the policy to encourage and facilitate shareholders in the following aspects.

(a) Shareholders' Meeting

- (1) The Company shall disclose the policy to encourage all groups of shareholders to attend the meeting of shareholders.
- (2) The Company shall arrange to provide information on date, time, venue and agenda in a form of invitation letter or attachments containing clarification and rationale for each agenda and proposed resolution; and it shall refrain from taking any actions, which would restrain the opportunity of shareholders to study the information of the Company.
- (3) The Company shall encourage shareholders to exercise their right to attend the meeting and cast their vote. In case where any shareholders could not attend the meeting in person, the Company provides an opportunity for such shareholder to appoint the Company' independent directors or any person by proxy to attend the meeting on his/her behalf.
- (4) The Company shall provide an opportunity for shareholders to submit queries regarding each meeting or other information via the email address: cs@gulf.co.th or at the Company address in line with the criteria of stipulated by the Company.
- (5) The Company shall encourage shareholders to use the proxy form in a manner that each shareholder can steer the voting direction and shall nominate at least one Independent Director's name as alternative proxy of shareholder.

(b) Arrangements on the date of Shareholders' Meeting

- (1) The Company shall support and promote the use of technology such as barcode system, ballot casting, or other technology in the Shareholders' Meeting, including shareholder registration, vote counting, and result announcement in order to ensure that the meeting can proceed in a fast, correct, accurate, transparent, and auditable manner. The voting result will be disclosed in the minutes of Shareholders' Meeting, with details of approval, non-approval, and abstention votes for each agenda where voting is required. In case where an agenda requires voting of various items, the Company shall arrange for voting of each of such items to ensure transparency.
 - In this regard, at the Annual General Meeting of Shareholders for the Year 2019, there was neither change in the sequence nor addition of the meeting agenda. Also, there was no other matter proposed to the Meeting for consideration other than specified in the notice of the meeting.
- (2) The Company shall encourage all directors to attend the Shareholders' Meeting where shareholders can ask questions directly to the Chairman of sub-committees and all directors in related matters as deemed appropriate.
- (3) The Company shall provide an independent person as witness for vote counting or to be the counting officer or inspector in the meeting; for example, the auditor of the Company or legal advisor; and shall disclose the result to the meeting for acknowledgement as well as recording the result in the minutes of meeting.
- (4) The Company shall arrange the meeting in an appropriate manner and provide shareholders an opportunity to express opinions and make queries relating to the Company in the meeting.

(c) Preparation of the minutes of the meeting and disclosure of the resolutions of Shareholders' Meeting

- (1) The minutes of Shareholders' Meeting shall record the process of vote casting and result announcement to the meeting prior to proceeding with the meeting, including provision of an opportunity for query session where significant questions and answers thereof will be recorded as well as the voting result of each agenda and the names of Directors who attend and being absent from the meeting.
- (2) The Company shall disclose to the public about the voting result of each agenda of the meeting within the next business day through the SET Portal.

(3) The Company shall prepare the minutes of Shareholders' Meeting within 14 days of the meeting date and submit to SET and/or relevant agencies within the timeframe stipulated by the law and then publish them on the website of the Company.

1.2 Equitable treatment to shareholders

The Company is determined to treat shareholders on an equitable basis, both for major and minor shareholders, institutional shareholders, including foreign shareholders in order to ensure transparency and fairness.

(a) Provision of information prior to the Shareholders' Meeting

- (1) The Company shall notify the meeting program as well as the agenda and opinion of the Board of Directors to SET and publish such details on the Company's website at least 28 days prior to the date of Shareholders' Meeting.
- (2) The Company shall notify shareholders about rules of engagement in the Meeting, the voting process, and the voting right of each type of share.
- (3) The Company shall prepare the Thai and English versions of the invitation letter to Shareholders' Meeting.

(b) Minority shareholders protection

- (1) The Company provides opportunity to one or several shareholders holding in aggregate at least 5% of total issued shares of the Company to propose agenda to the annual general meeting of shareholders. The opportunity for agenda proposal will be opened at least 3 months prior to the end of the fiscal year before presenting them to the Board of Directors for consideration. In case it is deemed appropriate to include the proposed agenda item into the meeting, the Company will specify in the notice of meeting that the agenda item was proposed by a shareholder. However, in the event the proposed agenda item is rejected, the Company will inform shareholders of the reasons at the annual general meeting of shareholders.
- (2) The Company sets up criteria for minority shareholders to nominate any qualified candidate for directorship. The nomination proposal including the information on candidate(s)'s qualifications and consent should be made through the Nomination Committee (if any) or the Board of Directors within 3 months prior to the end of the fiscal year.
 - However, in the past year, the Company provided an opportunity for shareholders to propose agenda item(s) and nominate qualified candidate(s) for directorship before the Annual General Meeting of Shareholders for the Year 2020 during October 1, 2019 December 31, 2019. The Company also disclosed the criteria and procedures on the Company's website and informed the shareholders via SET Portal. However, during the said period, there was no shareholder proposed any agenda item or nominated any qualified candidate for directorship.
- (3) The Company provides opportunity for minority shareholders to elect directors by person according to the criteria determined by the Company.
- (4) The minority shareholders are entitled to express comments, opinions, or file complaint with the Independent Directors at the email address: id@gulf.co.th. The Independent Directors will consider and take actions as deemed appropriate.

(c) Insider trading prevention

- (1) The Company determines the guideline in writing to keep and protect the inside information and communicate such guideline to all relevant parties to ensure adherence thereto.
- (2) The Company determines that all Directors and executives have a duty to report the securities holding in the Company in accordance with the securities and exchange law. Such information will be disclosed in the annual report and reported to the Board of Directors for acknowledgement on a quarterly basis.

(3) The Company determines that Directors, executives as well as head of accounting/finance, whom are informed of significant inside information that has impact towards the Company's share price, shall refrain from trading the Company's stock for a period of 14 days prior to the disclosure of the quarterly and annual financial statements to the public, and should wait at least 24 hours after such disclosure. The Corporate Secretary will notify the Board of Directors and executives as well as Head of Accounting/Finance about the blackout period in advance by verbal and email.

(d) Conflict of interest by directors

- (1) The Company shall disclose the shareholding structure of the Company and subsidiaries in the annual report.
- (2) The Company determines that the Directors and executives report their conflict of interest and that of related persons by reporting such information to the Corporate Secretary, who is obligated to submit a copy of the said conflict of interest to the Chairman of the Board and the Chairman of the Audit Committee within 7 days of the date the report is received.
- (3) The Company determines that Directors are to declare the conflict of interest prior to the agenda consideration and the information shall be recorded in the minutes of the Board of Directors' Meeting.
- (4) The Company determines that any Directors with significant conflict of interest in a nature that may hinder him/her to provide independent opinion shall abstain from voting or refrain from attending the meeting in the agenda involved with such conflict of interest and shall not use any information which cause conflict of interest.

In addition, in case of entering into any related-party transactions, the Company will ensure that the transaction is made in compliance with the Securities and Exchange Act, Notification of the Capital Market Supervisory Board, Notification of the Securities and Exchange Commission Thailand and Notification of the Stock Exchange of Thailand. If any related-party transaction requires approval from the Board of Directors, it will be proposed to the Audit Committee for their opinion on the transaction before proposing to the Board of Directors. Any director who has conflict of interest on the transaction will abstain from consideration and voting. The Company will notify the resolution of the Board of Directors' Meeting via SET Portal and the Company's website to ensure that the matter is widely acknowledged by the shareholders.

1.3 Roles towards stakeholders

The Company adheres to business engagement with transparency and fairness, taking into account all stakeholders, while promoting social and environmental development so as to achieve business growth and sustainability.

(a) Determination of policy relating to stakeholders

- (1) The Company shall treat shareholders with fairness and equitability, taking into account the basic rights of shareholders. Benefit shall be allocated fairly and consistently with transparency while management shall be transparent and auditable with determination to deliver sound performance and continuous and sustainable growth.
- (2) The Company shall treat customers in its willingness, to the best of its ability, and with justness; and shall adhere to the expected ethics without revealing the information or confidentiality of customers while remaining dedicated to build sustainable relationship with the customers.

(3) The Company shall treat trade partners strictly in alignment with fair trade competition, honor all contracts on its end, and behave in accordance to the Code of Conduct. In addition, the Company shall promote the network of cooperation and build the supply chain as well as value chain to deliver optimal, mutual benefits.

The Company puts emphasis on the selection of trade partners. The Company has a process on selecting and treating all trade partners in a fair and equitable manner. The trade partners will have to participate in eBidding and there are selection criteria as follows:

- Own a verifiable business operation
- Produce or sell quality products or services
- Have experience in providing services to industrial clients such as power plant, petrochemical industry, large-scale factory, or experience providing services to at least 4 clients with a contract of at least one year and a documented performance guarantee
- Have reliable management system such as ISO certification or other acceptable standards
- Have business branch or service center located in the same province as the Company and/or power plant or in any nearby province but not over 50-kilometer distance from the Company's and/or power plant's locations
- Have creditable financial records or be able to submit bank guarantee with the limit of 2 times
 of the monthly service fee
- (4) The Company shall treat competitors strictly in alignment with fair trade competition by adhering to fair business engagement under the laws and Code of Conduct of the Company.
- (5) The Company shall care for communities surrounding the area of its operations with accountability and focus on promoting activities to uplift the quality of life of the community members in respect of education, occupation, art, and technology, including provision of relief in time of any disaster.
- (6) The Company shall treat creditors with ethics by honoring the agreement or contract on its end and ensure just treatment for both parties. In case of failure to comply with the conditions, the creditors shall be informed in advance in order to mutually consider remedy. Also, the Company shall not demand for, or accept any fraudulent benefits.
- (7) The Company shall treat public agencies and government authorities with political objectivity as stated in the Company's Code of Conduct as well as the anti-corruption policy.
- (8) The Company shall treat employees with fairness and provide training to develop their knowledge and potential. Furthermore, the Company shall provide sound working environment and determine a standard of safety in compliance with the laws.

The Company also determined a policy and practical guideline about environmental, health and safety as follows:

- 1. Safety in workplace is the first responsibility of all employees.
- 2. The Company and group companies shall promote a safety workplace including any other activity in order to embrace the attitude and consciousness of safety at work.
- 3. Supervisors at all levels shall constantly lead, supervise, and support employees to work safely.
- 4. During work, employees must always be aware of their own safety as well as the safety of colleagues and assets of the Company and group companies.
- 5. Every employee should participate in the Company's safety & health projects and provide recommendation for improving the working environment and safe working process.
- 6. Employees aim to achieve the targets of the zero-accent project.

In 2019, employees of the Company and its subsidiaries did not have any accident, absence or sickness caused by work.

(9) The Company shall care for the environment in accordance with its corporate social responsibility policy, contribute in environmental conservation, and promote as well as support environmental conservation programs.

Moreover, in order to create true understanding and cultivate consciousness for environmental and natural resources conservation, the Company provides employees with trainings and knowledge on the environment as follows:

- CFO CFP WF Project and 2020 Plan
- Environmental Manager
- Green Office Fundamental
- Waste Management in Office
- Integrated ISO9001, 14001 and ESMS
- Carbon Footprint and Water Footprint
- Environmental Law and Regulation
 Compliance Assessment
- High Efficiency Resources and Energy Consumption

- Environmental Friendly Procurement :
 Green Procurement
- Senior Energy Responsibility Personnel
- Radioactive Substance Safety Officer
- Energy Conservation Report Monitoring and Verification Technique
- Greenhouse Gas Knowledge
- Environmental Aspect Assessment
- Environmental Management System (ISO14001:2015)

The trainings include understanding the roles and responsibilities in environmental management, safety, efficient use of resources and energy, environmentally friendly procurement guidelines and assessment regarding compliance with environmental laws and regulations, etc.

(b) Disclosure of activities in compliance with the policy as well as preparation of corporate social responsibility report

- (1) The Company shall disclose activities reflecting compliance with the corporate social responsibility policy and its mechanism to encourage employees to comply with the corporate social responsibility policy.
- (2) The Company arranges for preparation of the corporate social responsibility report of the Company, which may form part of the annual report, or a separate report.

1.4 Information disclosure and transparency

The Company shall disclose material information via appropriate channels in a correct, adequate, accountable, and timely manner, both in Thai and English versions to ensure equitable treatment to all shareholders.

(a) Information disclosure

- (1) The Company shall arrange for the mechanism to ensure the correctness of information disclosure, which is sufficient for the investors' decision making, and to prevent any misunderstanding in the essence of information.
- (2) In this sense, material information of the Company is defined as the information relating to its business operations that requires proper disclosure method due to its impact towards the share price or the investment decision of investors.
- (3) The Company delegates that only authorized persons have the right to disclose the information yet to be revealed to the public.
- (4) The Company prohibits disclosure of information in the period of 2 weeks prior to the date of significant information announcement.
- (5) The Company shall disclose the corporate governance policy, Code of Conduct, risk management policy, corporate social responsibility policy and result of compliance thereof via various channels such as the annual report, the Company's website, and so on.

- (6) The Board of Directors shall encourage the Company to prepare the Management Discussion and Analysis or MD&A together with disclosure of the financial statements of each quarter. This is to provide investors with information and better understanding about the changes of financial position and performance of the Company in each quarter in addition to figures stated in the financial statements.
- (7) The Company shall determine the disclosure of audit fee and other service fees related to the auditors' services.
- (8) The Company shall disclose the roles and responsibilities of the Board of Directors and sub-committees, the number of meetings held and the number of attendance of each Director in the past year, their opinions, and the training sessions and professional development of the Board of Directors in the annual report.
- (9) The Company shall disclose the remuneration policy to Directors and executives as required by the law. Such policy shall reflect the duties, obligations, and responsibility of each person, including the form or nature of remuneration. In this regard, the remuneration to be disclosed shall include that provided to each Director who also assume directorship of subsidiaries.
- (10) The Company shall disclose the information in line with the requirements of the Securities and Exchange Commission (SEC), SET and related laws, including the disclosure of information to shareholders and/or the public in an equitable manner.

(b) Minimum disclosure on the Company's website

- (1) The Company discloses activities which reflect compliance with its policy whereby employee participation is encouraged.
- (2) The Company discloses the information as per requirements of SET, SEC, and related laws. Such disclosure will be made via SET's channel and the Company's website both in Thai and English versions on a continuous basis. The information shall be the most current version and contain, at the minimum, of the following information.
 - 2.1 Vision and mission of the Company
 - 2.2 Nature of business
 - 2.3 List of Directors and executives
 - 2.4 Financial statements and report on financial position and performance of the current and previous year
 - 2.5 The Annual Registration Statement (Form 56-1) and the annual report in downloadable versions
 - 2.6 Direct and indirect shareholding structure
 - 2.7 Group company structure, including subsidiaries
 - 2.8 Direct and indirect shareholding of Directors, major shareholders, and executives as required by the law
 - 2.9 Invitation letter to annual general meeting and extraordinary meeting of shareholders
 - 2.10 Articles of Association and Memorandum of Association
 - 2.11 Corporate governance policy of the Company
 - 2.12 Risk management policy
 - 2.13 Charter or responsibilities, qualifications, and term of office of the Company's Board of Directors
 - 2.14 Charter or responsibilities, qualifications, and term of office of the Company's sub-committees
 - 2.15 Company Code of Conduct
 - 2.16 Contact information of department or persons responsible for investor relations function
 - 2.17 Information or other documents that the Company presented to analysts, fund managers or press

In 2019, the Company published the Annual Report in both Thai and English versions within 120 days of the fiscal year end and sent to the shareholders together with the notice of the Annual General Meeting of Shareholders. Such Annual Reports and notice of the Annual General Meeting of Shareholders can also be downloaded from the Company's website.

Moreover, in the past year, the Company presented the operating results in terms of finance and non-finance information to the shareholders, retail investors, institutional investors, securities analysts, credit rating agencies, and relevant regulatory agencies through various channels such as the disclosure of information via SET Link, the Securities and Exchange Commission of Thailand and the Company's website for those who are interested. The Company organized events, attended by executives, to provide information, clarify any enquiries, communicate ideas and exchange opinions for those who participate. The events include:

- 1. 4 Analyst Meetings, held on a quarterly basis
- 2. 2 SET Opportunity Day events, hosted by The Stock Exchange of Thailand
- 3. 12 Company Visits by meeting with executives for deeper understanding of business operations, business direction and various information of the Company
- 3 Site Visits for knowledge and understanding regarding electricity generation process and CSR activities
- 5. 10 Domestic Roadshows
- 5 Overseas Roadshows
- 7. 1 Annual General Meeting of Shareholders

In addition, there were 4 Management Discussion and Analysis (MD&A) disclosed through SET Portal and the Company's website, and replies to enquiries from shareholders, investors and securities analysts via e-mail and telephone on a regular and equitable basis.

1.5 Directors' responsibilities

(a) The Board of Directors structure

- (1) Composition of the Board of Directors of the Company shall accord with the Board of Directors Charter, details are as summarized in the clause 3.1 "Board of Directors".
- (2) Qualifications of the Board of Directors of the Company shall accord with the Board of Directors Charter, details are as summarized in the clause 3.1 "Board of Directors".
- (3) The qualifications of the Independent Directors shall accord with the Board of Directors Charter, details are as summarized in the clause 3.2 "Independent Directors".
- (4) The appointment, term of office, and retirement from office shall be made in accordance with the Board of Directors Charter, details are as summarized in the clause 3.1 "Board of Directors".
- (5) Appointment of the Corporate Secretary and determination of responsibilities as well as the conditions for discharge and the appointment of the new Corporate Secretary shall be in compliance with the Board of Directors Charter and the Corporate Secretary Charter, the essence of which are as follows:
 - 5.1 The Corporate Secretary was appointed by the Board of Directors to act on behalf of the Company or the Board of Directors.
 - Prepare and maintain the Directors' register, invitation letters for the Board of Directors'
 meetings, the invitation letters for the Shareholders' Meetings, the minutes of the Board of
 Directors' meetings, the minutes of the Shareholders' Meetings and the annual report of
 the Company
 - To maintain records of conflict of interest reported by Directors or executives
 - To arrange the Board of Directors meetings and Shareholders' Meeting

- To provide recommendations about the rules and regulations to be aware by Directors and executives
- To arrange for training and orientation as well as provide information necessary for current or newly appointed Directors in performing their duties
- To oversee and coordinate in order to ensure that the Company complies with the laws, rules, regulations, and resolutions of the Board of Directors' and the Shareholders' Meetings including the good corporate governance policy and the Code of Conduct
- To partake in other engagements as required by the Securities and Exchange Act as well as the Notifications of the Capital Market Supervisory Board
- 5.2 The Corporate Secretary shall perform duty with accountability, prudence, and honesty as well as ensure compliance with the laws, objectives, Articles of Association, resolutions of the Board of Directors as well as those of the Shareholders' Meeting.
- 5.3 The Board of Directors may pass a resolution to dismiss the Corporate Secretary.
- 5.4 In a case where the Corporate Secretary is dismissed from duty or could not assume the office, the Board of Directors shall appoint the new Corporate Secretary within 90 days of the date the existing Corporate Secretary is relieved from duty or could not perform duty. The Board of Directors is authorized to delegate any Director to perform the duty in lieu of the Corporate Secretary during the vacuum period. The Chairman of the Board of Directors shall inform the name of the Corporate Secretary to SEC within 14 days of the date where the position is assumed.

(b) The sub-committees

- (1) The Board of Directors appoints the Audit Committee and/or other committees as deemed appropriate.
- (2) The Board of Directors shall ensure that performance of the sub-committees is carried out with independence and objectivity.
- (3) The Board of Directors has put in place the charter of each sub-committee to ensure that each committee perform duty effectively and deliver the objectives of their duties and responsibilities.

(c) Roles and responsibilities of the Board of Directors

- (1) The Board of Directors has responsibilities as stated in the Board of Directors Charter in various aspects, details are as summarized in the clause 2.1 "Scope of authority and responsibility of the Board of Directors".
 - 1.1 Policy and Governance
 - 1.2 Finance
 - 1.3 Internal Control and Audit and Risk Management
 - 1.4 Human Resources
 - 1.5 Conflict of Interest Management
 - 1.6 Communication with Shareholders
 - 1.7 Other aspects as specified in the Board of Directors Charter

(d) Determining the number of listed companies in which a director may hold directorships

For the Company's best interests in ensuring that the directors devote their time to perform their duties efficiently, it is therefore determined in the Corporate Governance Policy that each director should hold directorships in no more than 3 of listed companies.

In the year 2019, no director of the Company held directorships in more than 3 listed companies as specified in the Company's Policy.

(e) The Board of Directors' Meeting

- (1) The Board of Directors' Meeting shall be held at least every 3 months.
- (2) The Board of Directors shall elect a Director as the Chairman of the Board. In case where it is deemed appropriate, the Board of Directors may elect one or more Directors to be Vice Chairman of the Board.
- (3) The Chairman of the Board shall call for the Board of Directors' Meeting. In this regard, two or more Directors are entitled to request for an extraordinary meeting. In this regard, the Chairman of the Board or delegated persons shall determine the date of meeting within 14 days of the requesting date.
- (4) The Chairman of the Board or delegated person shall dispatch the invitation letter to Directors at not less than 7 days prior to the meeting, except in case of emergency to protect the right or benefit of the Company where the Company is allowed to make appointment for the meeting by other means and the meeting date could be determined sooner.
- (5) The Corporate Secretary shall prepare the minutes of meeting within 14 days of the meeting date.

(f) Meeting quorum

- (1) At the time of casting vote, the meeting of the Board of Directors requires a minimum of at least 2/3 of the total members of the Board to constitute a quorum. However, in cases of necessity, urgency or circumstances which may affect the Company's operations which 2/3 of the directors are unable to attend, a minimum of half the total number of directors in accordance with the Articles of Association have authority to consider and resolve the agendas.
- (2) The Chairman of the Board shall act as the Chairman of the meeting. In a case where the Chairman of the Board is not present in the meeting or could not carry out his/her duty, the Vice Chairman, if available, shall convene the meeting as the Chairman of the meeting. In a case where the Vice Chairman of the Board is not available or could not carry out his/her duty, the members of the Board present in the meeting shall elect a member to be the Chairman of the meeting.
- (3) The absolute discretion of the Board of Directors is made by the majority whereby one Director has one vote. If the vote is even, the Chairman of the meeting shall have an extra vote as the casting vote. In this regard, a Director with conflict of interest in any agenda shall have no right to vote in that particular agenda.

(g) Self-assessment of the Board of Directors

- (1) The self-assessment of the Board of Directors and sub-committees are made both as a whole and individually on an annual basis for the Board to collaborate in considering its performance and any issues that required solution and improvement.
- (2) The Company may engage third-party advisor to assist in determining the guidelines and propose issues for performance assessment of the Board every 3 years and disclose the result in the annual report.

(h) Remuneration

(1) The remuneration of the Board of Directors, executives, and employees of the Company shall comply with the directors' nomination and remuneration policy and the executives' and employees' compensation policy as determined by the Company.

(i) Self-development of the Board of Directors and executives

(1) Self-development of the Board of Directors and executives shall accord with the policy on development of Directors and those of executives and employees as determined by the Company.

2. Board Structure

The Company's board structure consists of the Board of Directors and the Audit Committee with the scope of authority and responsibility as follows:

2.1 Scope of authority and responsibility of the Board of Directors

(a) Policy and corporate governance

- (1) To carry out duties in compliance with the laws, objectives, Articles of Association, and resolution of the Shareholders' Meeting with honesty and integrity while being prudent in securing the benefit of the Company
- (2) To determine the policy and endorse matters relating to the overall operations of the Company such as vision, mission, business direction, strategies as well as to approve the business plan, annual budget, investment plan, financial decisions, and so on
- (3) To monitor the performance of the Company to ensure that the operation accords with the goal and business plan
- (4) To put in place a written policy on corporate governance that suits the nature of the Company and disclose such policy in the annual report for shareholders' acknowledgement. In this regard, the Board should review the policy on a regular basis of at least on an annual basis.
- (5) To put in place the Code of Conduct in writing to serve as standards for performance of Directors, executives, and employees of the Company. In this regard, the Board should monitor to ensure compliance with the Code of Conduct on a determined basis
- (6) To encourage Directors, executives, and employees of the Company to comply with the policy on corporate governance and Code of Conduct of the Company
- (7) To put in place the filing system of documents and evidence containing information, including ensuring that the documents or evidence are maintained in a complete and correct manner as well as auditable within a period of not less than 5 years of the date such documents or information are prepared. In this regard, the maintenance of documents and evidence, including maintenance using the computer system or other systems which make them retrievable without changes of texts
- (8) To appoint the sub-committees to provide recommendations, to consider matters and perform duty as determined and deemed appropriate by the Board of Directors
- (9) In case where the Board of Directors assigns executives or employees of the Company to perform a duty on its behalf, the assignment shall be clearly made in writing or recorded as the resolution of the Board of Directors.

In this regard, the Board of Directors has reviewed, considered and approved the Company's vision, mission and business plan for the year 2019 in order to ensure that the executives and employees are on the same direction and that the Company's business operations are for the best interest of the Company and its shareholders. The Board of Directors will approve the Company's business plan and budget which have been reviewed by the Executive Committee including a follow-up to such plan. The management shall follow-up and report the progress of the implementation and the Company's operating results to Executive Committee on a regular basis and report to the Board of Directors for acknowledgement of the progress as well as giving suggestions on a quarterly basis.

(b) Finance

- (1) To arrange for preparation and maintenance of the account as well as arrange for the audit thereof in compliance with the related laws
- (2) To arrange for preparation of Balance Sheet and Profit and Loss Statements at least once for every calendar year, which is the Company's annual accounting period

(3) To arrange for preparation of the Balance Sheet and Profit and Loss Statements at least once every calendar year, which is the accounting period of the Company, and propose them to the annual general meeting of shareholders for consideration and approval. In this regard, the Board shall arrange for the audit of such statements to be completed prior to proposing them to the meeting of shareholders

(c) Internal control, internal audit, and risk management

- (1) To establish the Audit Committee consisting of at least three members, which shall comply with the following criteria:
 - 1.1 To be appointed by the Board of Directors or the Shareholders' Meeting of the Company as the Audit Committee member
 - 1.2 To be Independent Director with qualifications and without prohibited characteristics; and not to be Director assigned by the Board to make decisions on the Company's operations, parent company, subsidiaries, associated companies, same-level subsidiaries, major shareholder or shareholders with controlling person of the Company; and not to be the Director of the parent company, subsidiaries, or same-level subsidiaries solely for listed companies
 - 1.3 To perform duty in the same nature as determined by the Notification of the Stock Exchange of Thailand Re: Qualifications and Scope of Work of the Audit Committee
 - 1.4 To have adequate knowledge and experience to perform duty as the member of Audit Committee. In this regard, at least 1 member of the Audit Committee with adequate knowledge and experience to perform duty in reviewing the reliability of the financial statements
- (2) To put in place the risk management policy, as well as risk management and control throughout the organization
- (3) To review the system or assess the efficiency of the internal control system and risk management at least once a year

(d) Human resources

- (1) To arrange for recruiting and screening of appropriate persons and to ensure that the persons, who shall assume directorship or executives of significant positions, have suitable knowledge, ability, and experience
- (2) To arrange for appropriate remuneration of Directors and executives of key positions in order to ensure that they are appropriate for the authority, duty, scope of responsibility, and reflect the ability to perform such duties
- (3) To endorse the succession plan for key positions

(e) Conflict of interest

- (1) A Director with conflict of interest in any agenda shall refrain from voting in that agenda.
- (2) A Director is prohibited from engaging in the business of the same nature as that of the Company and competing against the Company; or hold partnership of ordinary partnership or unlimited liability partner of limited partnership or to be a Director of a private company or other company engaging in the business of the same nature and competing against the Company's business, whether for personal or others' gains unless such engagements were notified to the Shareholders' Meeting prior to the resolution was passed to approve such appointment
- (3) The Company is prohibited from lending, guaranteeing, or agreeing to purchase or purchasing the discounted bills and provide guarantees for loans to Directors, their spouse, or minor offspring, except in line with the employee and staff welfare regulations.

- (4) The Company is prohibited from paying fund or providing other assets to Directors, except remuneration as per the Articles of Association of the Company. In case such matter is not included in the regulations of the Company, remuneration shall be made in accordance with the resolution of the Shareholders' Meeting, which consist of not less than two-third votes of the shareholders attending the meeting.
- (5) Any Director purchasing the assets of the Company or sell theirs to the Company or make any transactions with the Company, whether in their name or others, is required to obtain prior consent from the Board of Directors; otherwise such trading or transactions shall not be binding to the Company.
- (6) Directors are to notify the following matters to the Board without delay.
 - 6.1 Any conflict of interest, whether directly or indirectly, in any agreements entered into by the Company during the accounting year by specifying the facts of agreement, name of counterparts, and the conflict of interest of such Director in the agreement (if any)
 - 6.2 Any shares or debentures of the Company and group companies held whereby the total volumes, which may increase or decrease during the accounting period (if any)

(f) Communications with shareholders

- (1) To arrange for organizing the annual general meeting of shareholders within 4 months of the ending date of the accounting year of the Company. Other meetings shall be called an extraordinary general meeting of shareholders
- (2) To arrange for disclosure of significant information for shareholders in the financial statements and reports prepared for shareholders. Such information should first and foremost be disseminated through SET Portal prior to publishing on the company website. Also, the Investor Relations function shall be established to provide information to investors

(g) Others

- (1) To appoint a corporate secretary as required by the Securities and Exchange Act
- (2) To establish the Board of Directors Charter and sub-committees Charter and approve any amendments to the Charters in order to ensure that they are up-to-date and suitable with the applicable rules, regulations and changing environment
- (3) To perform other duties as stated in the notifications, rules, acts or other laws governing the Company

2.2 Scope of authority and responsibilities of the Audit Committee

- (1) The Audit Committee can seek for report or recommendations from independent professionals for matters within its scope of authority as necessary. Any related fee incurred shall be borne by the Company
- (2) The Audit Committee may invite Directors or employees of the Company to attend the meeting in order to consult with or clarify about the business operations of the Company and projects of subsidiaries, joint venture, and trade partner, which fall within the scope of duty and responsibility of the Audit Committee
- (3) The Audit Committee is entitled to consider and perform audit on any matter necessary for business operations of the Company
- (4) To consider and review correctness and adequacy of disclosure of annual or interim financial reporting of the Company to ensure appropriateness and compliance with the accounting standards by coordinating with the external auditors and executives responsible for preparation of the annual and quarterly financial reports. In this regard, the Audit Committee may arrange for the external auditors to perform review or audit of any transactions deemed necessary and significant during the preparation of the Company's financial statements
- (5) To consider and review to ensure the efficiency of the internal control system of the Company, including the IT security control system

- (6) To study and understand the scope of review of the internal control system of the Company relating to financial reporting conducted by the internal and external auditors; and arrange for the audit report on significant issues, opinions, or recommendations, including comments of executives
- (7) To consider and review the efficiency of the system to monitor compliance with the laws, rules and regulations
- (8) To review and monitor the risk management system of the Company
- (9) To prepare the annual Audit Committee Report, which shall be signed off by the Chairman of the Audit Committee
- (10) To endorse and provide recommendation to the Board of Directors on the appointment and dismiss of the external auditors which include the audit scope and audit fee by taking into account credibility, the adequacy of resources and experiences of the assigned auditors to perform the audit work
- (11) To consider and approve the internal audit charter, annual internal audit plan, and revision thereof
- (12) To take actions related to the Audit Committee Charter as requested by the Company
- (13) To consider and arrange for assessment of the adequacy of the Audit Committee Charter on an annual basis; and to propose any revision thereof to the Board of Directors for approval
- (14) To oversee the Company in order to ensure compliance with the public limited company law, the securities and exchange law, SET rules and regulations and those of SEC relating to listed companies, including other regulations relating to the business operations of the Company

2.3 Scope of authority and duty of Chairman of the Board of Directors

To achieve balance of power and authority in the management, the Company has deemed that the positions of the Chairman of the Board of Directors and the Chief Executive Officer (CEO) are held by different individuals. The Chairman of the Board of Directors is an independent director, according to Principle of Good Corporate Governance for Listed Companies of the Office of Securities and Exchange Commission, and the Stock Exchange of Thailand, and he/she shall not have any relations with the executives. The scope of authority and duty of the Chairman of the Board of Directors shall include the following aspects and affairs.

- (1) Set the Board meeting agenda in consultation with the CEO.
- (2) Chair meetings of the Board.
 - a) Conduct Board meetings in accordance with the agenda, the Company's Articles of Association, and relevant laws and regulations.
 - b) Allocate sufficient time for the directors to thoroughly discuss important matters and exercise their independent judgment during the meeting.
 - c) Achieve meeting resolutions and clearly state any necessary further actions.
- (3) Chair meetings of the Shareholders. Conduct the meetings in accordance with the agenda, the Company's Articles of Association, and relevant laws and regulations by allocating proper amount of time and providing shareholders an opportunity to express opinions. Ensure that the shareholders' inquiries are met with appropriate, thorough and transparent responses.
- (4) Promote and encourage the directors to perform their duties in full capacity as their directorships and in accordance with their scope of duty, responsibility and good corporate governance.
- (5) Ensure the efficient performance of the Board in fulfilling the Company's objectives and main goals.
- (6) Foster harmonious relations between the Board and the management. Support the management's administration without interfering in its day-to-day basis.

2.4 Scope of authority and duty of Chief Executive Officer

The Chief Executive Officer (CEO) is appointed by the Board of Directors and authorized with the authority and responsibility to manage company affairs as assigned by the Board. In this regard, CEO shall strictly run the Company following the business plan or the budget approved by the Board in an honest and prudent nature so as to protect the interest of the Company and shareholders. The scope of authority and duty of CEO shall include the following aspects and affairs.

- (1) Daily operations of the Company
- (2) Formulation of business policy, strategic plan, and annual budget as proposed by the management team and Executive Committee for further proposal for consideration to the Board of Directors
- (3) Appointment and removal of Executive Committee Members and Executive Committee to take actions in different aspects of the Company management, both of which report directly to the CEO
- (4) Determination of scope of duty of the Executive Committee Members and the Executive Committee
- (5) Taking actions in line with the business plan and budget approved by the Board of Directors
- (6) Preparation of financial reporting and financial statements of the Company, which are proposed to the Board of Directors on a quarterly basis
- (7) Formulation of policy and entering into or termination of agreements or obligations related to engagements on behalf of the Company in the present and future within the scope of authority determined and approved by the Board of Directors
- (8) Entering into or termination of agreements or obligations other than stated in Clause (5) within the scope of authority determined and approved by the Board of Directors
- (9) Hiring, appointment, removal, transfer, promotion, demotion, salary or pay cut, take disciplinary action, or employment termination on behalf of the Company, including appointment and determination of remuneration of any other officers in the management team and all subordinates assuming positions lower than the CEO as well as delegation of authority and duties assigned to such officers as deemed appropriate
- (10) Performing other duties as assigned by the Board of Directors on a periodical basis
 In addition, the Board of Directors authorizes the CEO with management authority in accordance with
 the following principles and scope of authority.
 - (a) The authority to manage the operations of the Company as per the objectives, Articles of Association, policy, regulations, requirements, directives, and resolutions of the Board of Directors Meeting and/ or the meeting of shareholders of the Company in all aspects
 - (b) The authority to take command, contact, order, take actions, and signing off on legal transactions, agreements, directives, notifications, or any letters utilized to contact the government agencies, state enterprises, and other parties, including the authority to take actions deemed appropriate and necessary to accomplish any of the aforementioned activities
 - (c) The authority to delegate his authority and/or assign any or several persons to carry out certain tasks on his behalf under supervision of the CEO. Such delegation and/or assignment shall be within the scope of delegation as per the Power of Attorney form and/or the Articles of Association, regulations, requirements, or directives of the Board of Directors and/or as determined by the Company

3. Nomination and appointment of Directors, committees, and CEO

3.1 The Board of Directors

The Board of Directors determines that the Board of Directors should be composed of directors with diverse qualifications (Board Diversity) including gender, age, educational background, professional skills, expertise, knowledge and experiences which are beneficial to the Company's operations.

Director Nomination Criteria and Procedure

Criteria	At present, there is no Nomination Committee appointed by the Company. However, the Board of Directors, excluding directors with conflict of interest, has jointly considered qualifications of candidates to be nominated as the Company's directors in accordance with the Board of Directors Charter whereby capability, knowledge, expertise, experience and necessary skills which conform with the Company's business strategy are being taken into consideration.
Selection	 Recommendation from the directors External Consultant Qualified candidates nominated by the shareholders prior to the annual general meeting of shareholders pursuant to the criteria set out by the Company Director Pool of Thai Institute of Directors
Appointment	The Board of Directors, excluding directors with conflict of interest, will jointly consider the qualifications of candidates pursuant to the criteria set out by the Company and review the Board Skill Matrix to identify skills which are necessary and conform with the Company's business strategy and propose to the shareholders' meeting.
Re - Appointment	Various factors will be taken into consideration such as performance in the past, meeting attendance and contribution in the meetings, etc.

The composition and qualifications of the Board of Directors are determined in the Board of Directors Charter, the essence of which can be summarized as follows:

(1) Composition

- (a) Directors of the Company shall be elected by the meeting of shareholders and in compliance with the methods prescribed in the Articles of Association of the Company as well as other related laws.
- (b) The Board of Directors shall consist of a minimum of 5 Directors and not less than half of the Board must reside in the Kingdom of Thailand.
- (c) The Independent Directors must account for at least one-third of the Board of Directors, and there must be at least 3 of them.
- (d) The Board of Directors shall elect a Director to serve as the Chairman of the Board; and may elect Vice Chairman of the Board as well as other positions as deemed appropriate

(2) Qualifications of Directors

- (a) A natural person and of maturity age
- (b) Not being bankrupted, incompetent, or quasi-incompetent
- (c) Never being imprisoned due to a final judgement for an offence committed through assets acquired by fraud and never be dismissed or discharged from the civil service or public agencies on the charge of fraud
- (d) Duly qualified and having no prohibited characteristics in accordance with the Public Limited Company Act, and shall not possess any inappropriate nature that restrains him from being entrusted to manage a business whose shares are held by the public as stipulated by SEC

- (e) Being an expert with knowledge, capability, experience and diversity of skills that are beneficial to the Company's operation and can fully dedicate his time for the responsibility
- (f) Do not engage in the business of the same nature as that of the Company and competing against the Company; or hold partnership of ordinary partnership or unlimited liability partner of limited partnership or to be a Director of a private company or other company engaging in the business of the same nature and competing against the Company's business, whether for personal or others' gains unless such engagements were notified to the Shareholders' Meeting prior to the resolution was passed to approve such appointment
- (3) Appointment, term of office, and removal from office
 - (a) The meeting of shareholders shall appoint Directors whereby the persons receiving the highest votes and the following ranks shall be elected as Directors until all the seats are occupied. In a case where persons elected receiving equal votes, but the number of elected persons exceed the number of Directors required, a lot drawing method shall be applied until all the seats are occupied.
 - (b) In each annual general meeting of shareholders, one-thirds of Directors shall retire by rotation. If the one-third proportion could not be made, the closest numbers shall apply. Directors who shall retire by rotation shall be the ones with the longest serving period. However, the retired Directors may be re-elected for another term.
 - (c) The meeting of shareholders may pass the resolution to remove any Director prior to his/her end of office term by the votes representing not less than three-fourths of number of shareholders attending the meeting with the right to vote; and total shares shall not be less than half of number of shares held by shareholders attending the meeting with the right to vote.
 - (d) Directors shall vacate the office upon:
 - Death
 - Resignation
 - Being disqualified or having prohibited characteristics as stipulated by the laws
 - Being dismissed by the resolution of shareholders
 - Being dismissed by the court order
 - (e) To resign, Director shall tender the resignation letter to the Company and resignation would become effective on the date the resignation letter is delivered to the Company.

3.2 Independent Directors

The Board of Directors shall mutually consider the qualifications of candidates to serve as the Independent Directors with reference to qualifications and prohibited characteristics as per the Public Company Limited Act, the Securities and Exchange Act, Notifications of the Capital Market Supervisory Board, including related announcements and/or regulations. In addition, the Board of Directors shall select Independent Directors based on experience and suitability in other aspects. Then, the candidates shall be nominated to the meeting of shareholders for further consideration and nomination. The Company has policy to appoint Independent Directors which accounts for at least one-third of total Directors and to have a minimum of 3 Independent Directors. In this regard, the Board of Directors has determined the qualifications of the Independent Directors in accordance with the Notifications of the Capital Market Supervisory Board as follows:

(1) Hold no more than 1% of all shares with voting right of the Company, the parent company, a subsidiary, an associated company, a major shareholder or an entity with controlling authority. This is inclusive of shares held by anyone who is related to such Independent Director.

- (2) Do not involve in the management, employees, staff, consultant with monthly salary or entities with controlling authority over the Company, the parent company, a subsidiary, an associated company, a same-level subsidiary, a major shareholder or an entity with controlling authority, unless he/she is free from such condition not less than two years prior to his/her appointment as an Independent Director. In this regard, the said prohibited characteristics do not include cases where the Independent Director who served as civil servant or advisor to public agencies, who is a major shareholder or entities with controlling authority over the Company.
- (3) Have no connection by blood or legal registration as father, mother, spouse, sibling, son/daughter or spouse of son/daughter of another Director, executive, a major shareholder, and an entity with controlling authority or an individual who will be nominated as Director, executive or entity with controlling authority over the Company or the subsidiary.
- (4) Have no business relationship with the Company, the parent company, a subsidiary, an associated company, a major shareholder or an entity with controlling authority in such a manner that may obstruct their exercise of independent discretion. Further, an Independent Director is not or was a significant shareholder or an entity with controlling authority over a party with business relationship with the Company, the parent company, a subsidiary, an associated company, a major shareholder or an entity with controlling authority, unless he/she is free from such condition at not less than two years prior to his/her appointment as Independent Director.

Such business relationship is inclusive of a trading transaction occurring on a conventional basis for the conduct of business; a rent or lease of property; a transaction involving assets or services; a provision or an acceptance of financial assistance through means of a loan, a guarantee, a use of an asset as collateral against debt; and, other similar actions which result in the Company or the party to the contract having a debt to be repaid to another party for the amount from 3% of net tangible assets (NTA) of the Company or from 20 Million Baht, whichever is lower. This amount is determined by the calculation of Related Transaction value as per the Notification of the Capital Market Supervisory Board. It is inclusive of debt(s) arising within one year prior to the day of business relationship with the same party.

- (5) Never serve nor was an auditor of the Company, the parent company, a subsidiary, an associated company, a major shareholder or an entity with controlling authority, and, not a significant shareholder, an entity with controlling authority or a partner to the audit office with which the auditors of the Company, the parent company, a subsidiary, an associated company, a major shareholder or an entity with controlling authority are associated, unless he/she is free from such condition at not less than two years prior to his/her appointment as Independent Director.
- (6) Never serve as nor was not a person rendering any professional service or a legal or financial consultant who is paid more than Two Million Baht in service fee per year by the Company, the parent company, a subsidiary, an associated company, a major shareholder or an entity with controlling authority, and, not a significant shareholder or an entity with controlling authority over the partner to such professional service provider, unless he/she is free from such condition at not less than two years prior to his/her appointment as Independent Director.
- (7) Not being a Director who is appointed to be a nominee of a Director of the company, a major shareholder or a shareholder who is connected to a major shareholder
- (8) Do not engage in a business of the same nature as and which is significantly competitive to that of the Company or a subsidiary. An Independent Director is not a significant partner to a partnership or a Director with involvement in the management, employees, staff, consultant with monthly salary, or, who holds more than 1% of all shares with voting rights of another company which is engaged in a business of the same nature as and which is significantly competitive to that of the Company or a subsidiary.
- (9) Do not have any other characteristic which prevents him/her from opining freely on the operation of the Company.

3.3 The Audit Committee

The composition and qualifications of the Audit Committee of the Company are determined in the Audit Committee Charter, the essence of which can be summarized below.

- (1) The Board of Directors of the Company appoints the Audit Committee, which includes the Chairman of the Audit Committee and members, and comprises not less than 3 Independent Directors with qualifications in compliance with public limited laws, the securities and exchange law, rules and regulations related to listed companies of SET and SEC as well as the Articles of Association of the Company.
- (2) The Head of Internal Audit function of the Company shall serve as the Secretary of the Audit Committee.
- (3) Each member of the Audit Committee has a 3-year term of office. In this regard, the retired members of the Audit Committee may be re-elected for another term. However, the re-election shall not be on automatic basis.
- (4) The term of office of the Audit Committee members shall end immediately when such member of the Audit Committee retires from the directorship of the Company.

3.4 Chief Executive Officer

The nomination process for the Chief Executive Officer is determined in the Chief Executive Officer Charter, i.e. the Board of Directors appoints the Chief Executive Officer and authorizes him with the authority and duty related to management of company affairs as assigned by the Board as stated in the clause 2.4 "Scope of authority and duty of Chief Executive Officer".

4. Overseeing of Operations of Subsidiaries and Associated Companies

The Company has adopted a policy on corporate governance for the purpose of overseeing and managing the operations of its subsidiaries and associated companies which operate core businesses of the group (the "Policy"). The purpose of the Policy is to prescribe a direct and indirect mechanism to ensure that the Company is able to oversee and manage the operations of its subsidiaries and associated companies (as the case may be) and to monitor that the subsidiaries and associated companies (as the case may be) of the Company are in compliance with the Company's measures, procedures and policies, including the Public Limited Company Act, the Civil and Commercial Code of Thailand, the Securities law and any other relevant laws, notifications, regulations and rules of the Capital Market Supervisory Board, SEC, the Office of the SEC and SET. In addition, in order to protect the Company's interest in the investment in the subsidiaries and associated companies, the Company has adopted the Policy, and prescribed that all of the directors, executives and/or employees appointed by the Company to be director and/or executive of the subsidiaries and associated companies are required to acknowledge the content of the Policy by signing the acknowledgement of the Policy.

5. Performance assessment

Performance assessment of the Board of Directors

The Board of Directors arrange for the annual assessment of overall performance of the Board of Directors and the sub-committees as a whole and on individual bases. This is for the Board to mutually consider its performance and problem for further improvement and efficiency.

The self-assessment process of the Board of Directors and the sub-committees is as follows:

(1) the Corporate Secretary and the Secretary of the Audit Committee submit the assessment form to all Directors to perform the assessment. (2) Such form containing the assessment, opinions and suggestions shall be collected and returned to the Corporate Secretary and the Secretary of the Audit Committee to process the result and summarize the score. (3) The score and suggestions shall be reported to the meeting of the Audit Committee and the Board of Directors for acknowledgement. The key performance assessment topics are as follows:

	Assessmer	nt as a whole	Individual	assessment
•	Board of Directors	Audit Committee	Board of Directors	Audit Committee
(1) Structure and qualifications	•	•	•	•
(2) Board/Committee meetings	•	•	•	•
(3) Roles, duties, and responsibilities of Directors	•	•	•	•
(4) Others such as relationship between the Board and management, self-development of Directors and executives	•			

In 2019, the result of the performance assessment of the Board of Directors and the Audit Committee can be summarized as follows:

	Assessment as a whole (Percent)	Individual assessment (Percent)		
The Board of Directors	98.4	97.8		
The Audit Committee	99.5	95.8		

Performance assessment of the CEO

The Board of Directors arranges for the assessment of CEO's performance with reference to the assessment topics as per SET guideline as follows: (1) leadership; (2) strategy formulation; (3) strategy implementation; (4) financial planning and results; (5) relationship with the Board; (6) relationship with third parties; (7) management and relationship with staff; (8) succession plan; (9) knowledge on products and services; and (10) personal attributes

6. Regulations on approval authority and actions taken to enter into transactions

The Company determines that the Board of Directors has the authority to approve matters of the Company in accordance with the scope of duty determined by the law, the Articles of Association of the Company, the Board of Directors Charter, and the resolution of meeting of shareholders, including the revision of vision, mission, and the operating strategy on an annual basis. The duties extend to improvement of the action plan, annual budget, investment plan and budget, and administrative budget of the Company as well as monitoring and assessment of operating result to ensure alignment with the plans, approval of significant related transactions. The CEO also is obligated to attend to the Company affairs as assigned by the Board of Directors and approved transactions within annual budget approved by the Board of Directors.

7. Oversight on the use of inside information

The Company and subsidiaries recognized the importance of confidentiality of their information and that of their customers, which is essential to the operations and reflect the level of reliability of the Company and subsidiaries. As such, the Company has formulated the Confidentiality policy for the guideline on treatment of confidential information. The policy is applicable to all personnel of the Company and subsidiaries, namely the Board of Directors, executives, permanent and temporary employees, and contract staff. The Company puts in place level of clearance for use of personal or classified information so as to ensure specific use solely for determined objectives. The Company shall separate the confidential information and restrict access only to authorized persons or those with authority granted by the Company. Such authorized personnel are obliged to use the information in an honest and just manner.

In addition, the Company prohibits staff of the Company and subsidiaries from disclosing their confidential information, which is not publicly available (especially trade secrets) without clearance from the Company. Any disclosure or use of such information by third parties shall cause damages towards the Company, subsidiaries, and related parties.

The Company has formulated policy to prevent the use of inside information. It is determined that directors, executives, head of accounting/finance area, as well as executives and officers of investor relations area whom are informed of significant inside information, which has impact towards the price fluctuation of the Company's stock, shall refrain from trading the Company's stock for a period of 14 days (Blackout Period) prior to the disclosure of the quarterly and annual financial statements to the public, and should wait at least 24 hours after such disclosure. The disclosure of information to the public during a period of 2 weeks prior to the date specified for disclosure of important information, such as the Company's operating results, is also prohibited. Executives and officers of investor relations area shall not accept appointments or answer enquiries related to the operating results in the foreseeable future to stakeholders such as investors, securities analysts, the media, etc.

The Directors, executives, and employees of the Company and subsidiaries are obligated to comply with the guideline on the use of inside information as stipulated in the Securities and Exchange Act and the Public Company Limited Act, and other relevant laws.

8. Auditor fee

In 2019, the Company and its subsidiaries paid the audit fee of Baht 12,659,800 to the auditors, comprising the Company's and its subsidiaries' audit fees of Baht 3,000,000 and Baht 9,659,800, respectively. Each of subsidiaries has responsible for its own audit fee.

Non-Audit fee

The Company and its subsidiaries obtained other non-audit services from the auditors and other related parties to the auditors with total fees of Baht 2,350,000. The said amounts were recorded as expenses in 2019.

The details of the non-audit fee are as follows:

- 1. Non-audit services relating to the Company's investment structure and financial agreements, totaling Baht 1,200,000.
- 2. Non-audit services relating to implementation of the Company's subsidiaries in accordance with BOI certificates totaling Baht 1,150,000.

Management had considered that services provided by the auditors and other related parties to the auditors did not result in any conflict of interest or expose to the self-review of auditors that will impair the auditors' independence and judgement when performing the audit as approved by the Audit Committee.

The auditors and the office of auditors have no relationship or conflict of interest with the Company, its subsidiaries, major shareholder, executives or their respective related persons. Thus, the auditors have independent audit performance and express the opinion on the financial statements of the Company.

9. Compliance Unit

The Company has established a compliance unit to support the Company in ensuring that the operations of executives, employees, as well as various departments of the Company are in accordance with the laws and regulations of regulatory agencies, such as the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET), as well as liaise with regulatory agencies to ensure that the Company's operations are in compliance with related laws and regulations.

In the year 2019, Ms. Chattawan Jaijakul, Company Secretary, was the supervisor of the Company's Compliance Unit and there was no violation of any laws, rules and regulations of SEC and SET.

10. Application of Corporate Governance Code 2017: CG Code

In 2019, the Company has reviewed the Corporate Governance Code which was adopted from the Principles of Corporate Governance for Listed Companies 2012 issued by SET and the Corporate Governance Code 2017 issued by the Office of SEC. The Company's Board of Directors' Meeting No. 14/2019 held on December 19, 2019 approved the amendment to the Company's Corporate Governance Policy. The Meeting has also considered the Company's current Corporate Governance Policy and practices in comparison with the guidelines set out in the CG Code and was of the view that the Company has applied most of the governance guidelines recommended by the CG Code. However, for some guidelines which are not practical or not suitable with the business context of the Company, the Board of Directors shall consider possibility of adoption of CG Code or explore appropriate alternative measures. In the past year, guidelines that still have not been adopted by the Company are summarized as follows:

Inapplicable Guidelines

Explanation

The Company should consider establishing a policy for directors and executives to notify the Board of Directors or the person assigned by the Board to oversee the trading of the Company's shares about the transaction at least 1 day in advance before such transaction is made.

The Company has not set a policy regarding this matter as there are regulations regarding the use of inside information. The Board of Directors and executives shall not trade, transfer or accept any transfer of the Company's securities for a period of 14 days prior to the disclosure of the Company's financial statements to the public and should wait at least 24 hours after such disclosure. In certain cases, trading of securities is made using information available at that time, as a result, the notification cannot be made in advance.

The Board of Directors did not set a limit of the term of office for independent directors The Company has considered the capabilities, experiences and past performance of each independent director which are beneficial to all stakeholders and operations of the Company and was of the view that during their directorships, all independent directors could express their opinion independently and did not have any conflict of interest. Moreover, considering the structure of the current business of the Company, the continued directorships would be beneficial to the operations of the Company.

The Company did not establish the Remuneration and Nomination Committees.

The Company determined that the Board of Directors, excluding directors with conflict of interest, jointly performs the duties of the Remuneration and Nomination Committees.

11. Other compliance with good corporate governance

Whistleblower policy

The Company realizes that fraudulent actions and wrongdoings may be committed during the operations and contact with stakeholders, which may affect the decisions made and business operations of the Company. Thus, the whistleblower policy was formulated to determine the channel to receive complaints, related actions to be taken, and protection for whistleblowers. A whistleblower is defined as employees, personnel of the Company, customers, persons hired to work for the Company as well as the stakeholders who file complaints on any fraudulent actions or wrongdoings incurred in the Company. The whistleblower shall be protected as per his/her right by the law and guideline as well as the protection measures determined by the Company.

11.1 Complaint channel

Whistleblowers may file any leads or complaint on fraudulent actions and wrongdoings, together with evidence by downloading the form at the website www.gulf.co.th and submit it via various channels below as deemed appropriate.

- 1. Supervisor of the whistleblower
- 2. Via telephone number: 02-080-4500
- 3. Email to the address: ia@gulf.co.th
- 4. Submit the letter to the Chairman of the Audit Committee or the directors of the Company at the following address:
 - 87 M Thai Tower, 11th floor
 - All Seasons Place, Wireless Road, Lumpini Sub-District, Pathumwan District, Bangkok 10330
 - Or email address: ac@gulf.co.th

11.2 Actions taken subsequent to receiving complaints

The Internal Audit Department shall carry out the investigation of the complaints on fraudulent actions and wrongdoings with independence and fairness so as to acquire evidence which could be used in verification or dispute with received information, including taking disciplinary actions and/or taking legal actions against wrongdoers. The Internal Audit Department has the duty to report progress and result of the complaints to the whistleblower who provides the name and contact details, except for cases where it is necessary to keep confidential the personal information that refrain the Company from providing complete details on the progress and result to the whistleblower. In this regard, the working group or those responsible for related matters shall report the result to the CEO, the Chairman of the Audit Committee, and the Board of Directors for acknowledgement as the case maybe. In case where the investigation result discovers that the complaint is made with mal-intent or deliberation to damage the Company or any person or that it is false statement, the whistleblower, who is the employee of the Company, will be subject to the disciplinary action. The Company will take legal actions against any external whistleblower that cause damages to the Company.

11.3 Whistleblower protection

The Company shall not reveal the name, surname, address, or other information which leads to identification of the whistleblower or persons cooperating with the fact-finding process. The Company shall keep confidentiality and make solely necessary disclosure by prioritizing the safety and damages of the whistleblowers or cooperating parties. In addition, the whistleblower may request the Company to implement the security measures as deemed appropriate in case they feel unsafe or troubled or damaged; or the Company may determine the measure to protect the whistleblower without request. In this light, the whistleblower who suffers damages shall be relieved with the just and appropriate process; and the Company shall refrain from taking any actions which are unfair for the whistleblowers whether by transfer of positions, types of job, work place, career suspension, threatening, disruption of work, employment termination or other actions which are considered unfair treatment against the whistleblower.

In 2019, the Company did not receive any complaint or dispute.

CORPORATE

SUSTAINABILITY

Climate change is an unavoidable topic in the energy industry. As the global population continues to increase, so too do the consequent impacts on the environment. Awareness of these issues has brought us to an era of change within the energy industry, with emphasis on supporting energy transition towards a low carbon economy through investment in renewable energy projects and related technologies with the aim of reducing dependency on fossil fuels.

The Company sees this transition towards a low carbon economy as more of an opportunity rather than a risk as the Company can diversify into other related businesses such as renewable energy. With the direction of the energy industry focused on reducing the use of fossil fuels and emission of greenhouse gases, the Company has therefore shaped its business strategies to include increasing investments in renewable energy and related businesses, supported by a commitment to using highly efficient state-of-the-art technology, in preparation for the coming changes and potential challenges ahead.

However, the Company is also acutely aware of the need to meet the ever-increasing demand for energy, as reflected in its strategy to continue developing large-scale power projects using state-of-the-art technology which will ensure the projects maintain high levels of efficiency in the long term. In addition, the Company has begun studying and investing in the infrastructure business and other businesses related to energy security and economic stability. These business strategies have been developed to ensure that, regardless of how the energy industry may change, the Company will be prepared to continue growing while maintaining its commitment to contribute to the growth of the Thai economy and the improvement of the quality of life for the people in the areas where the Company operates.

Therefore, as the Company places great importance on conducting business sustainably, with a focus on creating opportunities for its stakeholders and for society, and to ensure that the Company's business can meet the needs of society both in the present and the future, the Company has developed a Sustainability Framework that seeks to balance the needs of all three dimensions of sustainability – economic, social and environmental – using the concept of "GULF HELPS the WORLD" which reflects the Company's commitment and focus to grow the business responsibly under the principles of good corporate governance and supported by a sustainable IT system and strong stakeholder engagement.

Economic dimension

The Company aims to support economic growth at the national and regional level through investment in energy and infrastructure projects. The Company believes such projects will bring benefits and improve the quality of life for the general society as energy and infrastructure are key factors that drive industrial growth, creating jobs and improving the country's competitiveness. More importantly, the Company seeks to invest in projects that will create positive impacts in the long term to create opportunities for both the current and future generations.

Social dimension

The Company gives importance to the needs of all its stakeholders with the aim of improving the quality of life for people in society through positive impacts created by the Company's operations. These operations are guided in the social dimension by the concept of "HELPS" which supports equal opportunities for all, especially in the following focus areas:

- **Human rights:** respecting human rights in every aspect of operations, providing equal treatment for all without discrimination, and creating opportunities for the future
- **Employees :** creating good relationships and promoting the well-being of employees, respecting labor rights, and providing opportunities for learning and career development

- Local community: investing in community development in all areas where the Company operates to support the creation of resilient and sustainable communities
- Philanthropy: engaging in projects and activities that improve the quality of life for people in society
- Strategic alliances: building strong relationships with business partners, suppliers and other stakeholders to ensure the creation of shared value for all

Environmental dimension

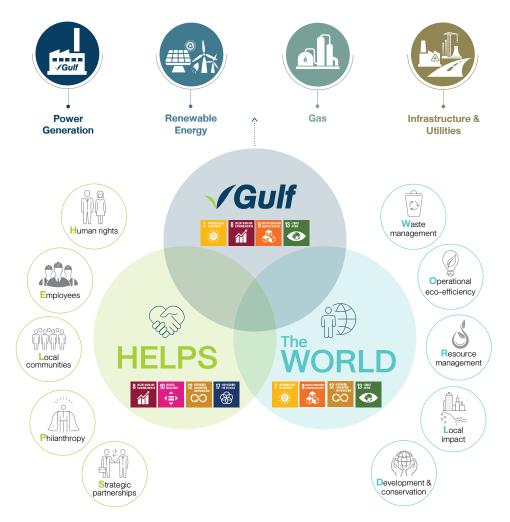
The Company recognizes the importance of the role environmental management has in slowing down the effects of climate change which may impact the economy and people's quality of life, and therefore manages its environmental impacts with a focus on the following:

- Waste management: minimizing waste and emissions, including greenhouse gas emissions
- Operational eco-efficiency: improving operational efficiency to reduce consumption of energy and resources
- Resource management: ensuring efficient use of resources for the long term
- Local impact: monitoring impacts to local communities and developing plans for shared usage of resources
- **Development & conservation :** engaging in projects to raise awareness about climate change and environmental issues

In addition, the Company also recognizes the importance of supporting the United Nations Sustainable Development Goals, with emphasis on the following four goals:

- Goal 7: access to affordable and clean energy
- Goal 8: decent work and economic growth
- Goal 9: industry, innovation and infrastructure
- Goal 13 : climate action

The Company also works to support Goal 10 (reducing inequalities), Goal 12 (responsible production and consumption) and Goal 17 (partnerships for sustainable development), along with the remaining goals.



RISK FACTORS AND

RISK MANAGEMENT

1. Risk Factors and Risk Management

The Company recognizes and places importance on analyzing and managing all aspects of risks that may have an impact on the business operations, which will build up stakeholder confidence and ensure smooth and efficient business operations in accordance with the Company's goal to be a trusted energy company that complies with relevant laws, rules and regulations.

The Company has therefore developed a risk management process in line with COSO standards and has assigned the Sustainability and Risk Management unit, under the Corporate Planning department, to be responsible for gathering information from all departments and units to analyze and assess the Company's risks at the corporate level. This assessment covers strategic, financial, operational and compliance risks as well as ESG (environmental, social, governance) risks and emerging risks. This is presented to the Steering Committee - Risk Management and is reviewed by the Executive Committee and the Audit Committee in the final stage.

The Company's Audit Committee, which comprises 4 members who are independent directors, is responsible for acknowledging, considering and reviewing the Company's risk management system on an ongoing basis to ensure that the Company has an adequate and appropriate risk management system in place and is also responsible for providing support to business functions that have responsibilities to manage risks. The Company produces a Corporate Risk Management Report to help inform the Audit Committee in its oversight, consideration of policy, and support for corporate risk management and stakeholder management in accordance with the Company's business strategies and goals. In addition, the Audit Committee provides recommendations and guidelines on monitoring, assessing and reporting risk management and stakeholder management to the Board of Directors on a regular basis, and in a timely manner in the event that the risk significantly impacts the Company, including establishing guidelines for control measures and mitigation plans, and development of a risk management system for continuous and sustainable efficiency.

In 2019, the Company developed a business continuity plan which will serve as a guide to help the Company prepare appropriate responses to potential threats which may impact its operations, image or reputation, or which may damage investor confidence, in order to mitigate any impacts that may occur during times of emergency or crisis and ensure the Company can resume normal operations.

The Company has analyzed and assessed the key risks that have significant impact on the Company, divided into four categories consisting of:

- 1. Strategic Risks
- 2. Operational Risks
- 3. Financial Risks
- 4. Compliance Risks

which also cover environmental and social risks, as well as emerging risks.

The Company has established guidelines on preventing and managing risks to reduce the occurrence of risks which may have impacts to business operations, as summarized below:

Risk Characteristics

Risk Management Guidelines

1. Strategic Risks

Uncertainty in diversifying and expanding overseas

As part of its climate strategy and to support sustainable growth, the Company has a strategy to expand into other business areas, including renewable energy and infrastructure, especially in the ASEAN region and the Middle East. The Company therefore faces new business environments and challenges, and must learn about different laws and regulations, customs, and other factors. The lack of familiarity with such factors may result in the Company not meeting investment or operational targets.

The Company has established guidelines and measures for selecting new projects with prudence and procedures. Business risk analysis plans have been put in place to analyze various factors related to the projects and surrounding factors, including economy, society, politics, creditworthiness of the country that the Company is looking to invest in, finance costs, corporate income tax privileges, duty exemption/reduction on machinery import and raw materials, laws, regulations and related rules, as well as return on investment, payback period and other factors which may have an impact on the project for consideration before seeking approval from the management and Board of Directors. In addition, the Company has a policy to seek and jointly invest with highly capable business partners, especially local partners with experience and expertise in the infrastructure business and/or related businesses for an extensive period in their respective country, in order to increase the Company's investment capabilities.

2. Operational Risks

Project delay or cost overrun

The Group may not be able to develop or complete construction of power projects and other businesses within the designated period or have cost overruns from different factors such as delays in issuance of permits from the relevant authorities, changes in laws and regulations which adversely affect the Group's business, unrest or protests near the Group's power projects, natural disasters, accidents or other unexpected events, delays in delivery of fuel or key equipment, design and construction flaws and other factors.

The Company has selected internationally recognized contractors who have extensive experience and expertise. The Group's power projects have also entered into agreements with contractors that clearly state the construction value and completion periods, and have included a provision allowing the power projects to levy fines against contractors which are estimated to cover expenses caused by delays in construction. In the past, the Group's power projects have always commenced commercial operation within the designated period and specified budget.

Risk Characteristics

Risk Management Guidelines

• Plant Performance

The Group's power projects may not be able to operate efficiently or there may be unplanned maintenance due to malfunction or deterioration of equipment and machinery, mismanagement of power project plans and human error, which may result in lower-than-expected revenues.

The Company has a power project management department to coordinate and monitor the performance of power projects that have commenced commercial operations. It has also established plant management plans and maintenance schedules. Presently, the Company has developed a pro-active maintenance schedule and has an inventory pooling system which reduces the time and costs associated with replacing parts. A recovery plan and rehearsal plan have also been prepared in the event of an emergency. As such, employees are able to continuously develop all steps of the power project operational plans. Furthermore, the Company utilizes digital tools in the operations and monitoring process in order to increase the efficiency of its project operations and management, and promotes the exchange of knowledge and experience sharing among the Group's employees across projects, which has resulted in a highly skilled team with broad and deep knowledge who are able to learn from past experiences, ensuring a significant reduction in similar incidences.

Manpower shortage

The Company's rapid rate of growth and expansion into renewable energy and other businesses has created a number of new positions. If the Company is not able to fill those positions with qualified employees within a reasonable amount of time, it may affect the efficiency of operations as well as the Company's business structure and succession planning.

The Company has a policy to increase recruitment, selecting candidates based on relevant qualifications such as education, experience, dedication, creativity, analytical and problem-solving skills. In addition, the Company regularly evaluates employees to analyze their strengths and weaknesses and improve its learning and development programs accordingly. The Company has also developed training programs for new and existing recruits which are designed to prepare them for changes that may happen in the future.

IT Security

In this day and age, digital tools and information technology (IT) systems play an important role in business. Accordingly, part of the Company's business strategy includes using state-of-the-art technology and digital tools in operations and management across the organization. However, if employees do not have a sufficient understanding of how to use IT, there may be risks such as risks from external attacks which may allow entities outside the organization to access internal or confidential information.

The Company has an Information Security policy which is in use across the organization. It has also developed strategies to protect against IT security risks. These strategies include selecting digital tools which can help protect against risks to the system, improving and modernizing the IT infrastructure, hiring experts to assess the readiness of the Company's IT system and test its stability through hacking and penetration tests as well as other tests, conducting training for employees and management to provide knowledge on proper use, and developing various media to distribute information across the organization about how to protect against IT risks. Furthermore, the Company's IT department is closely involved in selecting and designing the systems used by other departments to help provide guidance on reducing IT security risks.

Risk Characteristics

Risk Management Guidelines

· Unexpected catastrophes

The Company has policies and measures in place to ensure adequate and appropriate risk management, with a dedicated risk management unit, project and corporate level risk assessment, and continual improvement of risk mitigation plans. In addition, the Company has a Steering Committee on Risk Management and regularly reports risks and progress on risk mitigation to the Executive Committee and the Board of Directors. Despite this, there may be unexpected catastrophes which may affect business operations.

The Company has developed a business continuity plan (BCP) for use in emergency or crisis situations. The BCP covers the head office and all projects of the Company and includes an IT Disaster Recovery Plan. The Company also ensures employees and relevant persons are trained, with simulation tests conducted annually. In addition, the Company has a number of dedicated committees and working teams such as the Risk Management Committee, Asset Management Committee and Executive Committee who are responsible for regularly monitoring, reviewing and improving business practices and risk mitigation plans, as well as project and corporate insurance plans for the whole organization, to ensure that the Company is able to protect against or reduce negative impacts that may occur as a result of emergencies or unexpected changes.

3. Financial Risks

Substantial indebtedness at the Company and project levels

The majority of the Group's indebtedness relates to project financing arrangements for the construction of existing and future power projects and are secured by the relevant project's assets. The Company's debt and that of the Group's power projects contains financial and other covenants. If the Company or the Group's power projects defaults on loan repayment, this may have significant impact on the Company's liquidity.

The Company manages and plans funding sources and utilizes financial instruments to raise funds effectively, with cost of funds and debt to equity ratio at an appropriate level. In the past, the Company has negotiated with the financial institutions providing the loans to ensure that the Company will be able to comply with the financial and other covenants before signing the financing agreements. As a result, the Group's power projects never had any problems with defaulting on loan repayments.

Risks that may arise from currency exchange rate volatility or interest rate volatility

The Group's project costs and operational results may be affected by currency exchange rate volatility as (a) a portion of financing is denominated in US dollars, (b) a portion of payments under EPC contracts is denominated in foreign currencies, (c) a portion of payments under long-term service and parts agreements is denominated in foreign currencies and (d) a portion of the power projects' sales revenues is linked to the US dollar. The Group's project costs and operational results may also be affected by fluctuations in interest rates due to its reliance on obtaining financing for a significant portion of its project development and construction costs. In the past, the Group's borrowings have floating rates of interest based on LIBOR or THBFIX.

The Group manages currency exposure through a natural hedge (cash inflows to offset cash outflows) both during the construction phase as well as after the commencement of commercial operations. Furthermore, the Group utilizes currency forward contracts as derivative financial instruments to reduce the remaining risks from currency exchange rate volatility to the fullest extent possible. In addition, the Group utilizes interest rate swaps as derivative financial instruments for the purpose of reducing risks from interest rate volatility to the fullest extent possible by converting floating interest rates to fixed interest rates.

4. Compliance Risks

Risks from non-compliance of regulations and rules, as well as contracts and agreements

The Company operates its business in both domestic and overseas markets. If the Company neglects to comply with various regulations and rules, as well as contracts and agreements, this may affect the Company's reputation and operations.

The Company places great importance on compliance with laws, regulations and various rules. The Company continuously monitors new laws that are relevant to the Company's business operations as well as disseminates the information to the entire organization to ensure understanding and acknowledgement of consequences and action plans.

· Governance and internal fraud

The Company places great importance on conducting business in a responsible manner, in accordance with the principles of good corporate governance. However, there is a risk of intentional or unintentional misconduct which may affect the Company's reputation and operations.

The Company has established a Code of Conduct and ensures all employees undergo training, with a requirement for employees to pass a test on the Code of Conduct when they first enter the Company and every year after that to ensure every employee is aware of and understands corporate governance and business ethics. In addition, to support knowledge and awareness of anti-corruption and anti-bribery, the Company organized anti-corruption training with an expert from the Thai Private Sector Collective Action Against Corruption (CAC) as a guest speaker. Furthermore, the Company has adequate and appropriate risk management processes and internal controls in place, and has an internal audit division which works independently to audit the work processes of every unit in the Company and which reports directly to the Audit Committee every month. In 2019, the Company began preparations to declare its intention to join the CAC. Since 2017 when the Company listed on the Stock Exchange of Thailand, there have been no complaints or incidences of employees or management breaching the Code of Conduct.

5. Emerging Risks

• Impacts from climate change

Climate change may have both physical impacts, such as impacts to water sources or more severe and unpredictable natural disasters, and transitional impacts, such as the possibility that a carbon tax is implemented which could affect the Company's earnings.

The Company monitors changes to water sources on an on-going basis, both in terms of monitoring for drought and floods. The Company constructs flood walls and drainage around its power plants to prevent flood damage, and continually improves its flood insurance based on 100-year flood calculations. In addition, the Company has put in place water management measures in its operations, with all power plants that have been in operation for at least 1 year having registered their water footprint to ensure efficient use of water and to significantly reduce water consumption in operations. Furthermore, the Company has continually studied global trends and has adjusted its business strategies accordingly. Currently, the Company has directed its focus towards increasing investment in renewable energy and infrastructure projects, as well as other related businesses, to ensure that, no matter what happens in the future, the Company is ready to adapt to the changing world.



Summary of the Board of Directors' evaluation of adequacy and appropriateness of internal control system

The Board of Directors is responsible for appointing an Audit Committee to review the adequacy and appropriateness of the Company's internal control system to ensure the processes comply with internationally accepted guidelines set by The Committee of Sponsoring Organizations of the Treadway Commission (COSO). The review process of internal control covers management control, operation control, accounting and financial control and compliance control, and also takes into consideration the internal and external auditors' reports on the Company's internal control system.

In the Board of Directors' Meeting No. 1/2020 held on January 23, 2020, with the presence of 4 members of the Audit Committee, the Board of Directors evaluated the internal control system through interviews with the Company's management, review of the internal auditors' reports, and acknowledgement of annual results of risk management. The Board of Directors and the Audit Committee were in agreement that the Company's internal control systems were adequate and appropriate, with sufficient monitoring of subsidiary companies' operations to safeguard the assets of the Company and its subsidiaries from misuse by directors or management, as well as to prevent transactions with individuals that may represent conflicts of interest.

The Audit Committee has appointed the internal audit department, which works independently from the management, to audit and review the operations of the various departments within the Company and its subsidiaries to ensure that said departments are operating within the framework of internal control set by the Company, utilizing the following guidelines to evaluate the adequacy and appropriateness of its internal control system in accordance with the principles of good internal control:

1. Control Environment

The Company supports and promotes a positive internal control environment by formally establishing the Company's objectives and operational direction, corporate governance policies, code of conduct and employee manuals. This information, along with relevant punitive measures, is communicated to employees at all levels to ensure awareness and strict compliance. There is a clear organizational structure with a checks and balances mechanism, as well as an internal audit department that works independently and reports directly to the Audit Committee to review and verify operations. All these components together promote a strong internal control environment.

2. Risk Assessment

The Company has implemented a system for risk assessment comprising a risk management team responsible for setting out a policy framework and risk management guidelines in accordance with COSO principles and considering risk management processes and measurement to control any potential damage within an acceptable limit. The team is also responsible for promoting operational practices compliant with risk management policies across the entire organization.

3. Control Activities

The Company has established in writing a framework detailing the authorization of transactions and activities with appropriate segregation of duties and verification processes. The Company has also established administrative procedures for transactions that meet the conditions for connected transactions or transactions that may present a conflict of interest. The internal audit department is responsible for reviewing operations and ensuring compliance with laws and regulations.

4. Information and Communication

The Company has established a consistent and effective information system to provide adequate key information to support the decision-making process of the Board of Directors and management. Documents are securely stored for a specified length of time as per legal requirements. Quarterly and annual financial reports are reviewed and audited to ensure that adequate financial information is made available promptly for the benefit of shareholders, investors and other concerned parties by the Company's auditor. In addition, the Company has established both an internal and external communication system to allow employees to receive information necessary for completing tasks, as well as a team responsible for monitoring and sharing through appropriate channels general information, financial information and information which may affect the Company's share price.

5. Monitoring

The Company monitors performance against its key performance indicators (KPIs) and provides reports, which include analysis of performance gaps to make rectifications in a timely manner, to the management and Board of Directors. With regards to internal control, the Company has tasked the internal audit department with reviewing measures and reporting their findings to the Audit Committee in a timely and consistent manner.

Appointment of the internal audit supervisor

The Company has an internal audit department which reports directly to the Audit Committee and is responsible for overseeing internal audit operations, ensuring that auditing is conducted independently, efficiently and effectively. The Audit Committee's Meeting No. 2/2017 held on April 18, 2017 passed a resolution naming Ms. Chotiros Likitcharoenpanich as the Company's Head of Internal Audit Department, as the Audit Committee determined that she possesses the necessary knowledge and capability, appropriate qualifications, experience in internal auditing, understanding of the Company's business, and ability to effectively monitor and assess the internal control system. That said, the appointment, dismissal and transference, as well as the assessment of independence of Head of the Internal Audit Department must be approved by the Audit Committee.

RELATED PARTY

TRANSACTIONS

The Company and its subsidiaries have entered into related party transactions with persons or entities who may have a conflict of interest as set out in Note 13 to the financial statements of the Company for the year ended December 31, 2019, the details of which can be summarized as follows:

1. Related party transactions of the Company and its subsidiaries with persons or entities who may have a conflict of interest of the Company

Persons or entities who may have a conflict of interest	Characteristics of the transaction	Size of the transaction for the year ended December 31, 2019 (THB)	Necessity and appropriateness of the transaction
Pomodoro Group Co., Ltd. Relation to the Company Mr. Sarath Ratanavadi as common major shareholder	Service expensesOther payables	5,851,165.26 1,398,764.21	The Company and its subsidiaries purchased food and beverages from Pomodoro Group Co., Ltd. The price and payment conditions were in accordance with the price and payment conditions which Pomodoro applied to third parties. In addition, the Company and its subsidiaries used facilities and catering services from Pomodoro Group Co., Ltd. The price and payment conditions were comparable to the price and payment conditions which the Company procured from other service providers.

2. Material related party transactions of the Company and its subsidiaries with persons or entities who may have a conflict of interest of the subsidiaries

Persons or entities who may have a conflict of interest	Characteristics of the transaction	Size of the transaction for the year ended December 31, 2019 (THB)	Necessity and appropriateness of the transaction
Group of Mitsui & Co., Ltd. Relation to the subsidiaries Shareholder of GMP and IPD, the Company's subsidiaries	Management fees	4,200,000.00	GMP paid management fees for advice in relation to business operation and engineering service procurement and provision from the Group of Mitsui & Co., Ltd. pursuant to a management service agreement entered into between GMP and MIT-Power Capital (Thailand) Limited.

Persons or entities who may have a conflict of interest	Characteristics of the transaction	Size of the transaction for the year ended December 31, 2019 (THB)	Necessity and appropriateness of the transaction
	Management fees	4,527,419.36	IPD paid management fees for advice in relation to business operation and engineering service procurement and provision from the Group of Mitsui & Co., Ltd. pursuant to a management service agreement entered into between IPD and MIT-Power Capital (Thailand) Limited.
	 Short-term loans Interest expenses from loans Interest payable 	324,900,000.00 9,747,000.03 16,663,364.43	The Group of Mitsui & Co., Ltd. provided a short-term loan to IPD in accordance with its shareholding proportion for IPD's business operations. The interest charged is fixed per annum, in line with the market rates.
	 Finance costs Construction in progress Accrued expenses 	13,055,561.95 53,178,542.86 248,797,743.51	SPPs under GMP and IPPs under IPD have incurred guarantee fees, payable to the Group of Mitsui & Co., Ltd. which are recorded as finance costs and construction in progress, as Mitsui & Co., Ltd. guaranteed against SPPs under GMP's obligations under the relevant facility agreements and against IPPs under IPD's obligations under the relevant facility agreements with financial institutions pursuant to its shareholding proportion in such power projects, which is in accordance with the provisions of the Shareholders' agreements. IPPs under IPD have incurred management fees for advice in relation to the development of power plant construction projects, payable to the Group of Mitsui & Co., Ltd. which are recorded as construction in progress, in accordance with the service agreement.
2. Group of WHA Industrial Development Public Company Limited Relation to the subsidiaries Indirect shareholders of the 6 SPPs, subsidiaries under GMP	 Cost of sales Administrative expenses Accounts payable Other payables Accrued expenses 	170,156,403.50 16,159,326.35 12,708,508.02 932,717.58 341,624.25	SPPs under GMP used public utility and incurred expenses for the right of way and waste disposal fees, which were recorded as cost of sales and administrative expenses, payable to the Group of WHA Industrial Development Public Company Limited. Such expenses were in accordance with the rates that the Group of WHA Industrial Development Public Company Limited applied to other operators in the industrial estates.

Necessity and appropriateness of related party transactions

The related party transactions of the Company and its subsidiaries in the fiscal year ended December 31, 2019 were the transactions entered into by relevant parties for the ordinary course of businesses of the Company and its subsidiaries, which take into consideration of both parties' benefits and contain the general trading conditions with the characteristics as those entered into by a person of ordinary prudence under the same situation on his own interest and capable of negotiating without being subject to any influence from the other parties who may have a conflict of interest (Arm's Length Basis).

Approval Procedures or Steps for Entry into Related Party Transactions

Entry into any related party transactions or connected transactions of the Company and its subsidiaries must be in accordance with the Notification of the Capital Market Supervisory Board regarding Rules of Connected Transactions and the Notification of the Board of Governors of the Stock Exchange of Thailand regarding Disclosure of Information and Other Acts of Listed Companies Concerning the Related Party Transactions, including the relevant laws, regulations, notifications, orders.

In case where the Company is required under applicable laws to obtain an approval from the Board of Directors' meeting or the shareholders' meeting prior to entering into any related party transaction, the Company will have its Audit Committee review and give opinion on the transaction. The Audit Committee's opinion will then be proposed to the Board of Directors' meeting or the shareholders' meeting (as the case may be) for consideration so as to ensure that entry into the transaction is in the best interest of the Company.

The Audit Committee shall give its opinion on the necessity of the related party transactions of the Company and its subsidiaries with persons who have a conflict of interest or may have a conflict of interest in the future and the appropriateness of the price of such transactions by taking into account various conditions in accordance with the ordinary course of business in the industry and comparisons to the price of the third parties or the market price. In the case where the Audit Committee has no expertise in considering and opining on any potential related party transactions, the Company will procure an independent expert or the auditor of the Company to give the opinion on such related party transactions to be proposed to the Board of Directors, the Audit Committee or the shareholders (as the case may be) for consideration in deciding to enter into such related party transaction in which the director or the shareholder (as the case may be) who has a conflict of interest in any transaction shall have no part in voting the agenda in relation to such transactions.

Trend for Future Related Party Transactions

The Company's related party transactions in the future will be for the ordinary course of business. There will be no benefit transfer between the Company and the related parties. Such related party transactions will have price and general conditions similar to those of transactions with third parties.

With regards to the disclosure of the Company's related party transactions, the Company will comply with the laws and requirements of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand and also with the accounting standards prescribed by the Federation of Accounting Professions. At present, the Company and its subsidiaries do not have a policy to provide loans to persons or entities who may have a conflict with the Company.

REPORT OF THE BOARD OF DIRECTORS' RESPONSIBILITIES

FOR THE FINANCIAL STATEMENTS

The Board of Directors of Gulf Energy Development Public Company Limited (the "Company") is responsible for the consolidated financial statements of the Company and its subsidiaries and the separate financial statements of the Company for the period ended December 31, 2019. These financial statements have been prepared in accordance with Thai Financial Reporting Standards and reflect the Board of Directors' considerations of appropriate and consistent use of accounting policies and practices. In addition, the Board of Directors has ensured that sufficient key information is disclosed in the notes accompanying the financial statements and has established adequate and appropriate systems for internal control and risk management, as reported by the auditor in the Auditor's Report.

The Board of Directors has appointed an Audit Committee, composed of independent directors, to oversee and verify the reliability and accuracy of the financial reports, including related party transactions, as well as verify the internal control, internal audit and risk management. The comments of the Audit Committee are presented in the Audit Committee Report in this annual report.

The Board of Directors holds the opinion that the Company's internal control and internal audit provides reasonable assurance that the consolidated financial statements of the Company and its subsidiaries and the separate financial statements of the Company have been prepared in accordance with Thai Financial Reporting Standards, law requirements and related regulations.

(Mr. Viset Choopiban)
Chairman of the Board

Un Chuni

(Mr. Sarath Ratanavadi)
Chief Executive Officer

Sal Relen.

REPORT OF THE **AUDIT COMMITTEE**

The Audit Committee of Gulf Energy Development Public Company Limited (the "Company") was appointed by the Board of Directors of the Company. The Committee consists of four Independent Directors with varied areas of expertise, knowledge and experience, who are qualified to confirm the validation of the financial statements. The Audit Committee comprises committee members whose traits and qualifications meet the requirements of the Stock Exchange of Thailand and the Notification of Capital Market Supervisory Board, as follows:

Mr. Kasem Snidvongs na Ayudhya
 Chairman of the Audit Committee
 Mr. Sommai Phasee
 Member of the Audit Committee
 Dr. Raweporn Kuhirun
 Member of the Audit Committee
 Mr. Vinit Tangnoi
 Member of the Audit Committee

With Miss Chotiros Likitcharoenpanich, Senior Vice President - Internal Audit, serving as the Secretary of the Audit Committee.

All members of the Audit Committee carried out their duties independently within the scope of responsibility stated in the Audit Committee Charter, which is in alignment with the regulations of the Stock Exchange of Thailand. The audit was performed, and corporate governance was promoted, while a risk management system was put in place, and the adequacy of the internal audit and internal control system was assured so as to ensure that the Company runs its operations with transparency, honesty and fairness to achieve sustainable development and enhance its value, which would be beneficial to shareholders. The Committee received full cooperation from executives, employees, internal auditors and external auditors.

In 2019, the Audit Committee held six meetings to perform duties as stated in the Audit Committee Charter, the essence of which are summarized as follows.

1. Review of financial statements

The Audit Committee conducted a review of the quarterly and annual financial statements as well as the consolidated financial statements, including connected transactions. The auditors were asked about the scope of the audit, the audit plan, accuracy and completeness of the financial statements as well as the independency of the auditors in order to ensure that the financial statements were prepared in a correct manner in compliance with the laws and generally accepted accounting standards whereby the financial statements were disclosed in a complete, correct, adequate and timely manner for the interest of their users.

2. Connected transactions of the Company on a quarterly and annual basis

The Audit Committee conducted a review of the connected transactions of the Company on a quarterly and annual basis to ensure that they are carried out at arm's length and that they are normal business support transactions which are reasonable and appropriate, as well as in compliance with the regulations of the Stock Exchange of Thailand and The Securities and Exchange Commission.

3. Review of adequacy and appropriateness of the internal control system

The Audit Committee arranged to put in place internal audit plans for the parent company and subsidiaries which are appropriate for the nature of business operations in different phases of the Group companies, including projects in the preparation phase, the construction phase and the commercial operations phase whereby the audit focuses on different areas for each phase in order to ensure, to a reasonable degree, that the Company has an adequate and appropriate internal control system in accordance with that of the Securities and Exchange Commission of Thailand (SEC) and the Stock Exchange of Thailand (SET). In this light, the Audit Committee was of the opinion that the Company has an adequate and appropriate internal control system relative to the size and current state of the Company's business, as well as proper monitoring and control of its operations in a manner that allows the Company to safeguard its assets and that of its subsidiaries against abusive or unauthorized utilization by executives or employees. The Audit Committee also reviewed and oversaw that the Company and its subsidiaries are in compliance with SEC's laws, SET's regulations and other laws related to the Company's businesses, including the Company's Articles of Association, policy and corporate governance. The Audit Committee found no indication of any non-compliance and/or practices that conflict with relevant laws and regulations.

4. Proposed appointment of auditors for the year 2019 and 2020

The Audit Committee considered and selected the auditors of the Company based on the qualifications and independence of the auditor, including their expertise, experience, performance, scope of audit as well as the appropriateness of the quoted audit fee. The Committee proposed to the Board of Directors Meeting to approve the appointment as follows:

4.1 Proposed appointment of auditors for the year 2019

Mr. Boonrueng Lerdwiseswit, Certified Public Accountant No. 6552, and/or Miss Amornrat Pearmpoonvatanasuk, Certified Public Accountant No. 4599, and/or Mr. Sa-nga Chokenitisawat, Certified Public Accountant No. 11251 of PricewaterhouseCoopers ABAS Limited as the auditor of the Company for 2019.

4.2 Proposed appointment of auditors for the year 2020

Mr. Waiyawat Kosamarnchaiyakij, Certified Public Accountant No. 6333, and/or Mr. Natthaphong Tantichattanon, Certified Public Accountant No. 8829, and/or Miss Sophit Prompol, Certified Public Accountant No. 10042 of KPMG Phoomchai Audit Limited as the auditor of the Company for 2020.

5. Oversight of Internal Audit

The Audit Committee oversaw the performance of the Internal Audit Department through consideration and approval of the annual internal audit plan to ensure the propriety of the plan as well as its alignment to and comprehensiveness over the internal control system of the Company and companies in the Group, including its appropriateness towards different phases of business operations. The Audit Committee has considered the internal audit results and ensured that the internal audit plan of the Internal Audit Department was accomplished.

6. Risk management

The Audit Committee has considered the policies and risk management plan of the Company to ensure that risk assessment was made in a comprehensive manner when compared to the goals and strategies of the Company, including any chances of significant impacts toward business operations and risk mitigation to ensure such risk is mitigated to an acceptable level. The Audit Committee was of the opinion that the executives as well as employees of the Company placed significance on risk management whereby the risks and factors thereof were analyzed and assessed as well as communicated companywide. In this regard, the Company established a Risk Management Committee consisting of senior executives from each department to consider and determine the procedures, guidelines and action plans to manage all material risks on an acceptable level as well as to follow up and report on risk management in line with the risk management policies of the Company. The Audit Committee has placed high importance on risks related to information technology and emphasized that the Company put in place guidelines on mitigating risks related to information technology.

7. Good corporate governance

The Audit Committee emphasized that the Company conducts its operations in accordance with good corporate governance and consider putting in place additional policies based on the Company's rapid expansion as follows:

- 7.1 Sustainability Framework to ensure that the Company's business is carried out in accordance with the corporate responsibilities to meet the needs of society in the present and in the future. The sustainability framework aims to achieve balance in three dimensions economic, social and environmental with practices that reflect the commitment in expanding business with regards to social and environmental responsibility, good corporate governance, sustainable information systems, and stakeholder engagement policies.
- 7.2 Investor Relations Policy and Code of Conduct to provide guidelines and a framework to executives and employees involved with the investor relations functions, as an intermediary to communicate with investors and analysts, to perform their duties properly and appropriately, in compliance with the law and best practices, in a transparent and fair manner towards stakeholders. The Company's Investor Relations Policy and Code of Conduct is in accordance with the guidelines of the Stock Exchange of Thailand and related laws and regulations including:
 - 1. Investor Relations Code of Conduct
 - 2. Handling Inside Information
 - 3. Information Disclosure Principles
 - 4. Authorized Spokespersons
 - 5. Channels for Information Disclosure
- 7.3 The amendment of the Corporate Governance Policy to support and promote compliance with good corporate governance principles as well as review the appropriateness of adopting the Corporate Governance Code 2017 of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand.
- 7.4 Chairman of the Board Charter the Company has separate individuals holding the positions of Chairman of the Board of Directors and Chief Executive Officer to achieve a balance in operational management. As such, the roles and responsibilities of the Chairman are clearly defined and in accordance with the Public Limited Companies Act and best practices of good corporate governance principles of listed companies.

8. Audit Committee's self-assessment

The Audit Committee conducted a self-assessment of its performance, both on an individual and a committee basis, in order to ensure that its performance was effective and supportive of good corporate governance of the Company as well as to ensure that its composition, qualifications and performance are appropriate within its authority and scope of responsibility. Based on such assessment, it was found that the composition and qualifications of the Audit Committee were appropriate, and the performance was effective and aligned with its authority and scope of responsibility as stated in the Audit Committee Charter.

In conclusion, the Audit Committee fulfilled its duties and responsibilities as stated in the Audit Committee Charter by leveraging its knowledge, caution, prudence and independence, and provided opinions and recommendations which are constructive and in the interest of the stakeholders in an equitable manner. The Audit Committee was of the opinion that the Board of Directors, executives and employees of all levels of the Company are determined to perform their duty to achieve the goals of the Company in an efficient and professional manner, especially with regards to the importance placed on transparent and auditable operation, proper risk management, good corporate governance, and adequate, cautious and prudent internal control.

On behalf of the Audit Committee

Mr. Kasem Snidvongs na Ayudhya Chairman of the Audit Committee

Lason Suisongs.

AWARDS AND **RECOGNITION**

1

Most Socially Responsible Company - Thailand 2019 Award by Global Business Outlook 2

Inclusion in the Thailand Sustainability Investment 2019 list by The Stock Exchange of Thailand 3

Sustainability Disclosure Acknowledgement 2019 by Thaipat Institute

4

Asia Pacific Power Deal of the Year 2019 Award which was awarded to GPD by Project Finance International (PFI) 5

Award for Zero Accident Campaign 2019 by the Ministry of Labour awarded to GKP1, GKP2, GTLC, GNK2, GCRN, GNNK, GNS, GNLL, GUT, GVTP, GTS1, GTS2, GTS3 and GTS4 6

Carbon Footprint for Organization by Thailand Greenhouse Gas Management Organization (Public Organization) awarded to GKP1, GKP2, GNNK, GNLL, GCRN and GUT

7

Carbon Footprint for Product by Thailand Greenhouse Gas Management Organization (Public Organization) awarded to GKP1, GKP2, GNLL, GCRN and GUT 8

Water Footprint Certificate for products by Water Institute for Sustainability, The Federation of Thai Industries awarded to GNNK and GNLL 9

Green Industry Award by the Ministry of Industry awarded to GBL, GBP, GTS3, GTS4, GKP1, GKP2 and GNLL2

INVESTMENTS IN SUBSIDIARIES,

JOINT VENTURES AND ASSOCIATES

Legal entities in which the Company holds 10 percent of shares or more

Company Name	Type of Business	Registered Capital (as of December 31, 2019)	Direct and Indirect Shareholding Percentage (%)	Office Location
Subsidiaries				
Thailand				
Gulf Energy International Company Limited	International Headquarters and Holding Company	THB 3,562,000,000.0	100.00	87 M.Thai Tower, 11 th Floor All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf MP Company Limited	Invest in power generation business	THB 13,515,000,000.0	70.00	87 M.Thai Tower, 11 th Floor All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf VTP Company Limited	Production and distribution of electricity and steam	THB 1,610,000,000.0	52.49	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf TS1 Company Limited	Production and distribution of electricity and steam	THB 1,685,000,000.0	52.49	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf TS2 Company Limited	Production and distribution of electricity and steam	THB 1,690,000,000.0	52.49	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf TS3 Company Limited	Production and distribution of electricity and steam	THB 1,520,000,000.0	52.49	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf TS4 Company Limited	Production and distribution of electricity and steam	THB 1,470,000,000.0	52.49	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf NC Company Limited	Production and distribution of electricity and steam	THB 1,486,000,000.0	70.00	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok

Company Name	Type of Business	Registered Capital (as of December 31, 2019)	Direct and Indirect Shareholding Percentage (%)	Office Location
Subsidiaries				
Thailand				
Gulf BL Company Limited	Production and distribution of electricity and steam	THB 1,515,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf BP Company Limited	Production and distribution of electricity and steam	THB 1,510,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf NLL2 Company Limited	Production and distribution of electricity and steam	THB 1,440,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf NPM Company Limited	Production and distribution of electricity and steam	THB 1,405,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf NRV1 Company Limited	Production and distribution of electricity and steam	THB 1,625,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf NRV2 Company Limited	Production and distribution of electricity and steam	THB 1,495,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Independent Power Development Company Limited	Invest in power generation business	THB 5,128,666,680.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf SRC Company Limited	Production and distribution of electricity	THB 1,740,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf PD Company Limited	Production and distribution of electricity	THB 1,500,000,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf Solar Company Limited	Invest in solar power business	THB 35,442,000.0		87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok

Company Name	Type of Business	Registered Capital (as of December 31, 2019)	Direct and Indirect Shareholding Percentage (%)	Office Location
Subsidiaries				
Thailand				
Gulf Solar BV Company Limited	Production and distribution of electricity from solar PV rooftop	THB 7,660,000.0	74.99	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf Solar KKS Company Limited	Production and distribution of electricity from solar PV rooftop	THB 14,670,000.0	74.99	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf Solar TS1 Company Limited	Production and distribution of electricity from solar PV rooftop	THB 7,380,000.0	74.99	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf Solar TS2 Company Limited	Production and distribution of electricity from solar PV rooftop	THB 5,550,000.0	74.99	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf Chana Green Company Limited	Production and distribution of electricity from biomass	THB 585,000,000.0	100.00	87 M.Thai Tower, 11t ^h Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf Pattani Green Company Limited	Production and distribution of electricity from biomass	THB 1,000,000.0	100.00	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
SBY Biomass Company Limited	Production and distribution of electricity from biomass	THB 2,000,000.0	100.00	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Thepa Clean Energy Company Limited	Production and distribution of electricity from biomass	THB 2,000,000.0	100.00	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf MTP LNG Terminal Company Limited	Infrastructure construction and service provision of liquified natural gas receiving terminal including storage of liquified natural gas and regasification facilities	THB 3,500,000,000.0	70.00	87 M.Thai Tower, 11 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok

Company Name	Type of Business	Registered Capital (as of December 31, 2019)	Direct and Indirect Shareholding Percentage (%)	Office Location
Subsidiaries				
Overseas				
Gulf International Investment (Hong Kong) Limited	Securities investment	USD 100,000	100.00	1401 Hutchison House 10 Harcourt Road Hong Kong
Kolpos Pte. Ltd.	General wholesale trade	USD 1,000,000	100.00	1 Raffles Place #28-02 One Raffles Place Singapore (048616)
Gulf International Holding Pte. Ltd.	Holding company	USD 84,950,000	100.00	1 Raffles Place #28-02 One Raffles Place Singapore (048616)
TTC Green Energy Investment Joint Stock Company	Production and distribution of electricity from solar power	VND 411,000,000,000	90.00	An Hoi Hamlet, An Hoa Commune, Trang Bang District, Tay Ninh Province, Vietnam
TTC Energy Development Investment Joint Stock Company	Production and distribution of electricity from solar power	VND 312,000,000,000	90.00	An Hoi Hamlet, An Hoa Commune, Trang Bang District, Tay Ninh Province, Vietnam
Mekong Wind Power Joint Stock Company	Production and distribution of electricity from solar power and wind power	VND 391,963,620,000	95.00	No. 75, 30/4 Street, Ward 3, Ben Tre City, Ben Tre Province, Vietnam
Gulf Energy (Vietnam) Limited Liability Company	Provide financial managerial, technical, research and other services	VND 2,350,000,000	100.00	Unit 5, Level 11, Saigon Centre, Tower 1, 65 Le Loi Street, Ben Nghe Ward, District 1, Ho Chi Minh City, Vietnam
Gulf Energy Mauritius Company Limited	Holding company	USD 100,000	100.00	Suite 122, 2 nd Floor, Harbour Front Building, President John Kennedy Street, Port Louis, Mauritius

Company Name	Type of Business	Registered Capital (as of December 31, 2019)	Direct and Indirect Shareholding Percentage (%)	Office Location
Associates				
Thailand				
Gulf JP Company Limited	Invest in power generation business	THB 32,890,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP NS Company Limited	Production and distribution of electricity	THB 11,104,550,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP UT Company Limited	Production and distribution of electricity	THB 11,933,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP KP1 Company Limited	Production and distribution of electricity and steam	THB 1,360,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP KP2 Company Limited	Production and distribution of electricity and steam	THB 1,275,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP TLC Company Limited	Production and distribution of electricity and steam	THB 1,365,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP NNK Company Limited	Production and distribution of electricity and chilled water	THB 1,490,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP CRN Company Limited	Production and distribution of electricity and steam	THB 1,440,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP NK2 Company Limited	Production and distribution of electricity and steam	THB 1,370,000,000.0	40.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Gulf JP NLL Company Limited	Production and distribution of electricity, steam and chilled water	THB 1,384,000,000.0	30.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok

Company Name	Type of Business	Registered Capital (as of December 31, 2019)	Direct and Indirect Shareholding Percentage (%)	t Office Location
Joint Ventures				
Thailand				
Gulf WHA MT Natural Gas Distribution Company Limited	Invest in natural gas transmission and distribution business	THB 454,000,000.0	35.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
WHA Eastern Seaboard NGD2 Company Limited	Natural gas transmission and distribution business	THB 216,000,000.0	35.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
WHA Eastern Seaboard NGD4 Company Limited	Natural gas transmission and distribution business	THB 234,000,000.0	35.00	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Bangkok Smart Energy Company Limited	Holding company	THB 3,000,000.0	33.33	87 M.Thai Tower 8 th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan Bangkok
Overseas				
Duqm Power Company L.L.C.	Production and distribution of electricity and desalinated water	OMR 6,204,782	45.00	P.O. Box 80, Post Code 102, Special Economic Zone at Duqm/A1-Duqm, A1 Wusta Governorate, Sultanate of Oman
Other companies				
SPCG Public Company Limited	Invest in businesses related to power generation	THB 1,016,389,000.0	10.55	1 Capital Work Place Building, 10 th Floor, Soi Jamjan Klongton Nua Sub-District, Wattana, Bangkok

DEFINITIONS

Company	Gulf Energy Development Public Company Limited
Group	The Company, its subsidiaries, its associates and its joint ventures
BPG	Burapa Power Generation Company Limited
BPH	Burapa Power Holding Company Limited
BSD	Bangkok Smart DCS Company Limited
BSE	Bangkok Smart Energy Company Limited
BSP	Bangkok Smart Power Company Limited
BTS	BTS Group Holdings Public Company Limited
BTU	British Thermal Unit, a unit of energy which is approximately the energy required to heat one pound of water for one Fahrenheit
Captive	Private power producer who sells electricity to only one customer or a single group of customers
CHEC	China Harbour Engineering Company Limited
DIPWP	Duqm Independent Power & Water Project
DOH	Department of Highways
DPC	Duqm Power Company, DIPWP power project operator under GIH
EDL-Gen	EDL-Generation Public Company
EGAT	The Electricity Generating Authority of Thailand
EPPO	Energy Policy & Planning Office
EVN	Vietnam Electricity
GBL	Gulf BL Co., Ltd., a power project operator under GMP
GBP	Gulf BP Co., Ltd., a power project operator under GMP
GCG	Gulf Chana Green Company Limited
GCRN	Gulf JP CRN Co., Ltd., a power project operator under GJP
GEC	Gulf Electric Public Company Limited
GHC	Gulf Holding Company Limited, whose name has currently been changed to Land and House Property Development Co., Ltd.
GIH	Gulf International Holding Pte. Ltd.
GJP	Gulf JP Company Limited, an associate in which the Company has a 40.0% equity interest
GKP1	Gulf JP KP1 Co., Ltd., a power project operator under GJP
GKP2	Gulf JP KP2 Co., Ltd., a power project operator under GJP

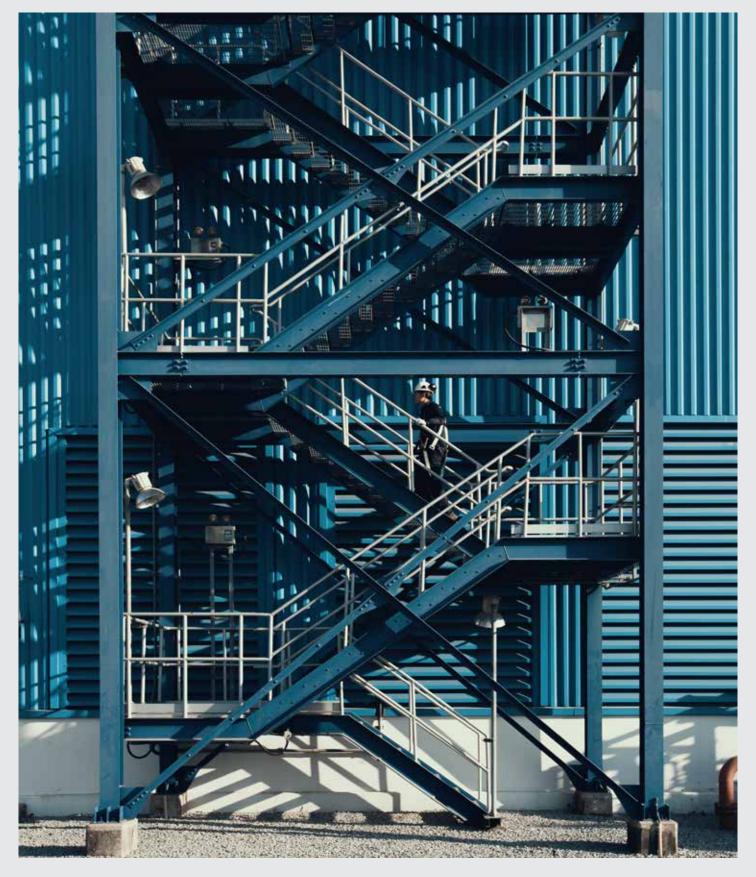
GMP	Gulf MP Company Limited, a subsidiary in which the Company has a 70.0% equity stake
GNC	Gulf NC Co., Ltd., a power project operator under GMP
GNK2	Gulf JP NK2 Co., Ltd., a power project operator under GJP
GNLL	Gulf JP NLL Co., Ltd., a power project operator under GJP
GNLL2	Gulf NLL2 Co., Ltd., a power project operator under GMP
GNNK	Gulf JP NNK Co., Ltd., a power project operator under GJP
GNPM	Gulf NPM Co., Ltd., a power project operator under GMP
GNRV1	Gulf NRV1 Co., Ltd., a power project operator under GMP
GNRV2	Gulf NRV2 Co., Ltd., a power project operator under GMP
GNS	Gulf JP NS Co., Ltd., a power project operator under GJP
GPD	Gulf PD Co., Ltd., a power project operator under IPD
GSRC	Gulf SRC Co., Ltd., a power project operator under IPD
GTLC	Gulf JP TLC Co., Ltd., a power project operator under GJP
GTS1	Gulf TS1 Co., Ltd., a power project operator under GMP
GTS2	Gulf TS2 Co., Ltd., a power project operator under GMP
GTS3	Gulf TS3 Co., Ltd., a power project operator under GMP
GTS4	Gulf TS4 Co., Ltd., a power project operator under GMP
Gulf HK	Gulf International Investment (Hong Kong) Limited
Gulf Mauritius	Gulf Energy Mauritius Company Limited
Gulf MTP	Gulf MTP LNG Terminal Company Limited, an operator of Map Ta Phut Port Phase 3 Project
Gulf Pattani Green	Gulf Pattani Green Co., Ltd.
Gulf Solar	Gulf Solar Co., Ltd., a subsidiary in which the Company has a 75.0% equity interest
Gulf Solar BV	Gulf Solar BV Co., Ltd., a power project operator under Gulf Solar
Gulf Solar KKS	Gulf Solar KKS Co., Ltd., a power project operator under Gulf Solar
Gulf Solar TS1	Gulf Solar TS1 Co., Ltd., a power project operator under Gulf Solar
Gulf Solar TS2	Gulf Solar TS2 Co., Ltd., a power project operator under Gulf Solar
Gulf Sport	Gulf Sport Management Public Company Limited, the Company's former subsidiary
Gulf WHA MT	Gulf WHA MT Natural Gas Distribution Co., Ltd., a joint venture in which the Company has a 35.0% equity interest
Gulf Vietnam	Gulf Energy (Vietnam) Limited Liability Company
GUT	Gulf JP UT Co., Ltd., a power project operator under GJP
GVTP	Gulf VTP Co., Ltd., a power project operator under GMP
HKH	Hin Kong Power Holding Company Limited
HKP	Hin Kong Power Company Limited
IEAT	Industrial Estate Authority of Thailand
IPD	Independent Power Development Company Limited, a subsidiary in which the Company has a 70.0% equity interest
IPP	Independent Power Producer in which capacity sold to EGAT exceeds 90 megawatts

JPHT	J-Power Holdings (Thailand) Company Limited
J-Power	Electric Power Development Co., Ltd., together with its consolidated subsidiaries, including
	GJP. J-Power is one of the world's largest coal-fired power plant developers and operators.
Kolpos	Kolpos Pte. Ltd.
LIBOR	The London Interbank Offered Rate
Mekong Wind Power	Mekong Wind Power Joint Stock Company
MIT-Power	Mit-Power Capitals (Thailand) Limited
Mitsui & Co.	Mitsui & Co., Ltd. and its companies, including MIT-Power
NPS	National Power Supply Public Company Limited
Oman Oil	Oman Oil Company S.A.O.C.
One Bangkok	Large-scale real estate project jointly invested by TCC Assets (Thailand) Company Limited and Frasers Property Holdings (Thailand) Company Limited
PAT	Port Authority of Thailand
PEA	The Provincial Electricity Authority
Pomodoro	Pomodoro Group Co., Ltd., the Company's former subsidiary
PPP Contract	Public Private Partnership Contract
PTT	PTT Public Company Limited
PTT Tank	PTT Tank Terminal Company Limited
RATCH	RATCH Group Public Company Limited
SBY Biomass	SBY Biomass Co., Ltd.
SPCG	SPCG Public Company Limited
SPP	Small Power Producer in which capacity sold to EGAT exceeds 10 megawatts but less than 90 megawatts
STEC	Sino-Thai Engineering and Construction Public Company Limited
TFRIC 4	Revenue recognition standard applied for the IPPs under GJP to record revenue from availability payment as income from finance lease
TGES	Tokyo Gas Engineering Solutions Corporation
TTC Group	Thanh Thanh Cong Group
Thepha Clean Energy	Thepha Clean Energy Co., Ltd.
TTC GE / TTCIZ-01	TTC Green Energy Investment Joint Stock Company, a power project operator under GIH
TTC GREEN / TTCIZ-02	TTC Energy Development Investment Joint Stock Company, a power project operator under GIH
VSPP	Very Small Power Producer in which capacity sold to PEA or MEA is less than 10 megawatts
WHA Group	WHA Corporation Public Company Limited, together with its consolidated subsidiaries, including Hemaraj, WHA Energy and WHAUP
WHA NGD2	WHA Eastern Seaboard NGD2 Co., Ltd.
WHA NGD4	WHA Eastern Seaboard NGD4 Co., Ltd.



FINANCIAL STATEMENTS

2019



Gulf Energy Development Public Company Limited

Independent

Auditor's Report

To the shareholders and the Board of Directors of Gulf Energy Development Public Company Limited

My opinion

In my opinion, the consolidated financial statements of Gulf Energy Development Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial statements of the Company present fairly, in all material respects, the consolidated and separate financial position of the Group and of the Company as at 31 December 2019 and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

What I have audited

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2019;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include a summary of significant accounting policies.

Basis for opinion

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

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. I determined a key audit matter: business combinations achieved in stage. This matter was 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 this matter.

Business combinations achieved in stage

Refer to the accounting policy No. 11 investments in subsidiaries, an associate and joint ventures and Note 29 Business combinations achieved in stage.

During the year 2018, the Group acquired 49% interests of the total registered shares of TTC Green Energy Investment Joint Stock Company (TTCIZ-01), 49% interests of the total registered shares of TTC Energy Development Investment Joint Stock Company (TTCIZ-02) and 49% interests of the total registered shares of Mekong Wind Power Joint Stock Company (Mekong Wind). The Group classified investments in TTCIZ-01, TTCIZ-02 and Mekong Wind as investments in joint ventures. The Group successfully determined the fair value of previously held equity interests of net identifiable assets acquired of TTCIZ-01, TTCIZ-02 and Mekong Wind prior to the date of business combinations achieved in stage, including goodwill and purchase price allocation of TTCIZ-01, TTCIZ-02 and Mekong Wind during the year 2019.

Subsequently, during the year 2019, the Group acquired an additional 41% interests of the total registered shares of TTCIZ-01, resulting in an increase in its shareholding portion in TTCIZ-01 from 49% to 90%, the Group acquired an additional 41% interests of the total registered shares of TTCIZ-02, resulting in an increase in its shareholding portion in TTCIZ-02 from 49% to 90% and the Group acquired an additional 46% interests of the total registered shares of Mekong Wind, resulting in an increase in its shareholding portion in Mekong Wind from 49% to 95%. Therefore, the Group's management considered that such additional shareholding portion resulted in control over TTCIZ-01, TTCIZ-02 and Mekong Wind and reclassified investments in these entities from investments in joint ventures to investments in subsidiaries. The additional investments were considered to be business combinations achieved in stage in accordance with Thai Financial Reporting Standard No. 3 "Business Combination". This accounting standard required the management to measure the fair value of previously held equity interest prior to the date of obtaining control and recognise any gains or losses arising from fair value measurement in statement of comprehensive incomes and determined fair value of net identifiable assets acquired.

I performed the following procedures to obtain supporting evidence of management's determination of the fair value of equity interest on the acquisition date and fair value of net identifiable assets acquired.

- Assessed the change in classification of investments in TTCIZ-01, TTCIZ-02 and Mekong Wind from investments in joint ventures to investments in subsidiaries under the accounting standard related to business combinations achieved in stage.
- Assessed the appropriateness of the measurement of fair value of previously held interests prior to the date of obtaining control in TTCIZ-01, TTCIZ-02 and Mekong Wind and tested the calculation of accounting losses on business combinations achieved in stage.
- Assessed the appropriateness of the net identifiable assets acquired and evaluated management's procedures for determining the net identifiable assets acquired prepared by the management.
- Tested the calculation of fair values of intangible assets from rights in power purchase agreements and challenged management on key assumptions in relation to the following matters:
 - Fair value of rights in power purchase agreements, which comprised power plant capacity and efficiency by comparing these key assumptions to the available public information.
 - Discount rates used by the management by assessing the model of the cost of capital calculation and comparing these key assumptions to the available public information.
- Assessed the appropriateness and tested the calculation of goodwill and gain on bargain purchase.

As a result, I determined that the classifications of the investments were appropriately performed in accordance with the definition and requirement set out in Thai Financial Reporting Standard No. 3. The methodologies and assumptions used by the management to identify the fair values of previously held equity interests in TTCIZ-01, TTCIZ-02 and Mekong Wind prior to the date of obtaining control, net identifiable assets acquired, intangible assets and accounting losses on business combinations achieved in stage, including goodwill and gain on bargain purchase were reasonable and in accordance with the accounting practices for the purchase price allocation on business combinations.

Key audit matter	How my audit addressed the key audit matter
The management determined that the fair value of previously held equity interest in TTCIZ-01, TTCIZ-02 and Mekong Wind prior to the date of obtaining control was Baht 1,136.70 million and the fair value of the net identifiable assets acquired as of the date of obtaining control is Baht 2,115.80 million. The valuation was performed as part of the purchase price allocation of business combinations. After purchase price allocation, the Group recognised rights in power purchase agreements in these entities as intangible assets of Baht 993.18 million and this price allocation resulted in goodwill in the amount of Baht 125.88 million and gain on bargain purchase amount of Baht 38.30 million.	
I focused on the determination of fair value of net identifiable assets acquired because it was complex in nature. The valuation methodology involved assumptions related to significant judgments made by the management. Key assumptions made by the management included discount rates, electricity tariff, power plant capacity and efficiency.	

Other information

The directors are 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 the audit committee.

Responsibilities of the directors for the consolidated and separate financial statements

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as the directors determine 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, the directors are responsible for assessing the Group and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities for overseeing the Group and the Company's financial reporting process.

Auditor's responsibilities for the audit of the consolidated and separate financial statements

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

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

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

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

I also provide the audit committee 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 the audit committee, 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.

PricewaterhouseCoopers ABAS Ltd.

E. Leidurseswit

Boonrueng Lerdwiseswit

Certified Public Accountant (Thailand) No. 6552

Bangkok

21 February 2020

Statements of Financial Position

Gulf Energy Development Public Company Limited

As at 31 December 2019

		Consolidated Separate			Separate
		financial statements		financial statements	
		2019	2018	2019	2018
	Notes	Baht	Baht	Baht	Baht
Assets					
Current assets					
Cash and cash equivalents	7	14,389,795,259	16,698,463,911	4,549,824,347	9,275,392,742
Deposits at financial institutions					
used as collateral	8	420,301,086	2,095,071,113	-	-
Trade accounts receivable	10	5,199,007,555	3,512,053,176	-	-
Accrued service income from					
related parties	30	-	-	151,831,034	129,300,000
Current portion of amount due					
from related parties	30	-	-	5,099,199	227,375
Other accounts receivable		6,148,468	4,036,336	237,850	3,867,489
Current portion of financial					
derivative assets		2,768,712	325,550	-	-
Prepaid expenses		123,046,732	117,877,880	10,170,424	7,660,351
Current portion of advance payments					
under service agreements		464,324,037	352,322,725	-	-
Current portion of advance payments					
to related parties	30	-	-	-	605,560
Short-term loans to related parties	30	-	-	2,628,613,924	178,046,290
Current portion of long-term loans					
to related parties	30	-	-	758,100,000	-
Current portion of interest receivable					
from related parties	30	-	-	57,144,852	74,186
Spare parts		156,882,003	49,688,861	-	-
Available-for-sale investments					
expected to be sold within one year	9	12,374,415	34,114,899	4,787,077	4,725,598
Value added tax		1,302,341,295	2,576,912,836	170,230	-
Other current assets		339,887,712	424,686,015	93,705,786	74,111,650
Total current assets		22,416,877,274	25,865,553,302	8,259,684,723	9,674,011,241

Statements of Financial Position

Gulf Energy Development Public Company Limited

As at 31 December 2019

		Consolidated Separate			
		financial statements		financial statements	
		2019	2018	2019	2018
	Notes	Baht	Baht	Baht	Baht
Assets (continued)					
Non-current assets					
Advance payment for share subscription		-	178,691,076	-	-
Financial derivative assets		1,180,787	122,364,498	-	-
Amount due from related parties	30	-	-	68,621,686	55,107,470
Prepaid expenses		61,349,420	39,549,663	453,184	-
Value added tax		-	4,802,158	-	-
Advance payments to related parties	30	-	-	79,014,301	79,610,923
Long-term loans to related parties	30	2,324,077,623	-	2,381,455,462	2,744,324,531
Interest receivable from related parties	30	-	-	77,233,754	116,606,396
Available-for-sale investments	9	2,102,934,065	1,594,595,638	-	-
Investment in subsidiaries, net	11.1	-	-	16,225,524,083	12,353,413,978
Investment in an associate	11.2	20,865,499,301	19,940,410,349	17,687,559,481	17,687,559,481
Investment in joint ventures	11.3	381,682,513	1,718,517,632	159,899,980	132,824,980
Land deposit, net		4,996,125	4,996,125	-	-
Advance payments for land and					
power plant construction		3,069,903,118	5,417,456,870	-	-
Advance payments under					
service agreements		165,831,972	230,542,690	-	-
Investment property, net		97,595,587	97,595,587	29,704,500	29,704,500
Property, plant and equipment, net	12	80,960,733,233	67,664,244,826	50,218,534	9,549,644
Intangible assets, net	13	1,003,424,524	27,412,449	18,389,559	452,434
Goodwill	14	109,079,993	-	-	-
Deferred financing fee		312,409,555	400,190,927	-	-
Deferred tax assets, net	15	374,272,520	349,485,301	38,772,234	28,051,731
Other non-current assets		25,695,818	12,248,482	14,412,760	10,858,852
Total non-current assets		111,860,666,154	97,803,104,271	36,831,259,518	33,248,064,920
Total assets		134,277,543,428	123,668,657,573	45,090,944,241	42,922,076,161

Statements of Financial Position

Gulf Energy Development Public Company Limited

As at 31 December 2019

		Consolidated Separate			
		financial statements		financial statements	
		2019	2018	2019	2018
_	Notes	Baht	Baht	Baht	Baht
Liabilities and equity					
Current liabilities					
Trade accounts payable		1,689,089,247	1,177,620,343	_	-
Other accounts payable		633,421,930	405,446,555	65,161,578	47,980,254
Amount due to related parties	30	1,698,764	1,354,509	1,674,178	1,305,075
Share subscription payable		-	95,827,140	-	-
Retention		347,840	17,266,474	-	-
Accounts payable for power plant constru	ction	2,772,552,618	5,504,032,594	-	-
Interest payable		237,706,090	212,391,621	108,405,480	45,369,863
Accrued expenses		845,735,000	934,915,471	332,742,652	317,209,798
Short-term loans from financial institutions	s 16	68,000,000	880,000,000	-	-
Short-term loan from a related party	30	324,900,000	324,900,000	-	-
Current portion of long-term loans					
from financial institutions, net	17	2,821,239,128	2,452,893,761	-	-
Current portion of debentures, net	18	-	5,991,388,533	-	5,991,388,533
Current portion of financial					
derivative liabilities		67,282,686	26,227,396	-	-
Corporate income tax payable		9,358,778	185,530	-	-
Other current liabilities		337,615,131	383,836,945	-	8,582,020
Total current liabilities		9,808,947,212	18,408,286,872	507,983,888	6,411,835,543
Non-current liabilities					
Financial derivative liabilities		409,490,533	3,701,330	-	-
Long-term loans from financial					
institutions, net	17	66,452,688,878	59,882,533,183	-	-
Debentures, net	18	7,493,948,245	-	7,493,948,245	-
Retention		-	31,560,389	-	-
Provision for decommissioning costs	19	673,637,271	407,296,432	-	-
Deferred tax liabilities, net	15	191,639,209	65,504	-	-
Employee benefit obligations		207,247,273	146,967,556	175,899,533	122,235,539
Total non-current liabilities		75,428,651,409	60,472,124,394	7,669,847,778	122,235,539
Total liabilities		95 227 509 624	70 000 444 000	0 177 001 600	6 524 074 000
Total liabilities		85,237,598,621	78,880,411,266	8,177,831,666	6,534,071,082

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

Statements of Financial Position

Gulf Energy Development Public Company Limited

As at 31 December 2019

			Consolidated		Separate
		fina	ancial statements	fina	ancial statements
		2019	2018	2019	2018
	Notes	Baht	Baht	Baht	Baht
Liabilities and equity (continued)					
Equity					
Share capital					
Authorised share capital					
2,133,300,000 ordinary shares					
at a par value of Baht 5 each		10,666,500,000	10,666,500,000	10,666,500,000	10,666,500,000
Issued and paid-up share capital					
2,133,300,000 ordinary shares					
at paid-up of Baht 5 each		10,666,500,000	10,666,500,000	10,666,500,000	10,666,500,000
Share premium		20,889,295,058	20,889,295,058	20,889,295,058	20,889,295,058
Surplus from business					
combination under common control		(316,239,277)	(316,239,277)	-	-
Changes in proportion					
of investment/interests in subsidiaries		1,489,752,705	1,489,752,705	-	-
Appropriated retained earnings					
- legal reserve	20	403,771,172	248,771,127	403,771,172	248,771,127
Unappropriated retained earnings		6,084,317,329	3,923,949,856	4,953,453,328	4,583,395,060
Other components of equity	23	(790,291,559)	(365,088,154)	93,017	43,834
Total equity attributable the owners					
of the parent		38,427,105,428	36,536,941,315	36,913,112,575	36,388,005,079
Non-controlling interests	11.1, 22	10,612,839,379	8,251,304,992	-	-
Total equity		49,039,944,807	44,788,246,307	36,913,112,575	36,388,005,079
Total liabilities and equity		134,277,543,428	123,668,657,573	45,090,944,241	42,922,076,161

Statements of Comprehensive Income

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

			Consolidated		Separate
		fir	nancial statements	fin	ancial statements
		2019	2018	2019	2018
	Notes	Baht	Baht	Baht	Baht
Revenue from sales		29,721,114,696	16,881,116,338	-	-
Revenue from management fee		318,553,333	300,000,000	947,873,855	786,014,648
Cost of sales		(22,631,090,675)	(12,515,796,524)	-	-
Cost of management fee		(159,958,902)	(164,957,852)	(425,879,305)	(363,218,417)
Gross profit		7,248,618,452	4,500,361,962	521,994,550	422,796,231
Other income		14,274,774	9,427,830	19,204,893	38,807,452
Interest income		188,886,742	181,226,784	221,218,372	232,198,476
Dividend income		100,534,563	107,238,331	3,519,198,659	3,480,671,999
Gain (loss) on exchange rate, net		1,003,475,651	134,761,530	(86,674,426)	(16,903,757)
Administrative expenses		(1,713,102,133)	(1,489,591,382)	(841,308,421)	(701,433,206)
Finance costs	25	(2,895,735,498)	(1,938,329,381)	(260,602,279)	(210,229,257)
Share of profit from an associate and joint ventures	11.2, 11.3	3,205,443,006	2,615,462,294	-	
Profit before corporate		7,152,395,557	4,120,557,968	3,093,031,348	3,245,907,938
income tax benefits (expenses)					
Corporate income tax benefits (expenses)	26	13,676,629	20,630,193	6,969,561	(735,889)
Profit for the year		7,166,072,186	4,141,188,161	3,100,000,909	3,245,172,049
Other comprehensive income (expenses),					
net of corporate income tax					
Items that will not be reclassified to profit or los	s				
Actuarial losses		(8,085,674)	(27,895,638)	(15,052,952)	(17,371,264)
Share of other comprehensive income					
(expenses) of an associate accounted for					
using the equity method		8,428,109	(6,340,903)	-	-
Items that will be reclassified to profit or loss					
Change in value of available-for-sale investments		108,204,327	(333,870,531)	49,183	536,947
Reclassification adjustments to profit or loss					
of available-for-sale investments		(266,509)	(5,962,707)	-	(1,145,143)
Change in value of cash flow hedges		(585,679,366)	66,851,030	-	-
Reclassification adjustments to property, plant					
and equipment and advance payments under					
service agreements of cash flow hedges		20,721,477	90,281,855	-	-
Currency translation differences		(96,460,199)	(6,403,963)	-	-
Share of other comprehensive income					
(expenses) of an associate accounted for					
using the equity method		(43,653,818)	13,725	-	<u>-</u>
Other comprehensive expense					
for the year, net of corporate income tax		(596,791,653)	(223,327,132)	(15,003,769)	(17,979,460)
Total comprehensive income for the year		6,569,280,533	3,917,861,029	3,084,997,140	3,227,192,589

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

Statements of Comprehensive Income

Gulf Energy Development Public Company Limited

			Consolidated		Separate
		fin	nancial statements	fir	nancial statements
		2019	2018	2019	2018
_	Note	Baht	Baht	Baht	Baht
Profit attributable to:					
Owners of the parent		4,886,563,655	3,028,134,959	3,100,000,909	3,245,172,049
Non-controlling interests		2,279,508,531	1,113,053,202	-	
			_		
		7,166,072,186	4,141,188,161	3,100,000,909	3,245,172,049
Total comprehensive income					
attributable to:					
Owners of the parent		4,450,053,757	2,768,115,278	3,084,997,140	3,227,192,589
Non-controlling interests		2,119,226,776	1,149,745,751	-	-
		6,569,280,533	3,917,861,029	3,084,997,140	3,227,192,589
Earnings per share for the owners of the parent	:				
Basic earnings per share	27	2.29	1.42	1.45	1.52

Statements of Changes in Equity

Gulf Energy Development Public Company Limited

														Ö	Consolidated financial statements	ial statements
																Baht
	٠										Attributa	Attributable to the owners of the parent	of the parent			
												Other components of equity	ents of equity			
					!	Ŗ	Retained earnings			Other com	Other comprehensive income (expenses)	me (expenses)	Ī			
				Surplus from	Change in											
				business	porportion				,			Share of other				
		Issued and paid-up		combination	of investments/ interests	Appropriated			Currency	Available- for-sale	c Cash flow	comprehensive	l otal other	Total owners	Non- controlling	
	Notes	share capital	Share premium	common	in subsidiaries	legal reserve	Unappropriated	Actuarial losses	differences	investments		of an associate	ofequity	of the parent	interests	Total equity
Opening balance as at																
1 January 2018		10,666,500,000	20,889,295,058	(316,239,277)	1,432,424,227	86,512,524	1,935,038,462	•	81,428	(83,673,425)	(42,854,282)	(2,270,196)	(128,716,475) 3	34,564,814,519	4,783,436,398	39,348,250,917
Call for additional paid-up capital		1	•	•	•	•	•	•	'	•	•	•	•	•	2,712,172,920	2,712,172,920
Surplus (discount) from changes																
in interests in subsidiaries		•	•	•	57,328,478	•	•	•	•	•	•	•	•	57,328,478	(57,328,478)	•
Transfer actuarial losses			•	•		1	(23,648,002)	23,648,002	•	•	•		23,648,002		1	•
Legal reserve	20	1	1	•	1	162,258,603	(162,258,603)	1	•	1	1	1	•	•	1	1
Dividend paid		1	1	•	1	1	(853,316,960)	•	•	,	1	1	•	(853,316,960)	(336,721,599) (1,190,038,559)	1,190,038,559)
Total comprehensive																
income (expense) for the year	٠	,	,	'	,	,	3,028,134,959	(23,648,002)	(6,403,963)	(339,776,191)	116,135,653	(6,327,178)	(260,019,681)	2,768,115,278	1,149,745,751	3,917,861,029
Closing balance as at 31 December 2018	•	10,666,500,000	20,889,295,058	(316,239,277)	1,489,752,705	248,771,127	3,923,949,856		(6,322,535)	(423,449,616)	73,281,371	(8,597,374)	(365,088,154) 3	36,536,941,315	8,251,304,992	44,788,246,307
Opening balance as at																
1 January 2019		10,666,500,000	20,889,295,058	(316,239,277)	1,489,752,705	248,771,127	3,923,949,856	•	(6,322,535)	(423,449,616)	73,281,371	(8,597,374)	(365,088,154) 36,536,941,315		8,251,304,992	44,788,246,307
Call for additional paid-up capital		1	•	•	,	•	'	'	•	•	•	'		'	1,153,451,115	1,153,451,115
Increase from a business combination achieved in stage	22	,	,	,	,	,	,	,	'	,	'	'			204.008.344	204.008.344
Transfer actuarial losses		1	r	•	ľ	ľ	(11,306,493)	11,306,493	•		1	1	11,306,493	1		
Legal reserve	20	1	ľ	1	ľ	155,000,045	(155,000,045)	,	•	•	•	,		,		T
Dividend paid	21	1	,	•	,	1	(2,559,889,644)	,	•	1	,	,	'	(2,559,889,644) (1	(1,115,151,848) ((3,675,041,492)
Total comprehensive																
income (expense) for the year		1	ı	1	1	1	4,886,563,655	(11,306,493)	(96,460,199)	107,973,656 (401,491,153)	(401,491,153)	(35,225,709)	(436,509,898)	4,450,053,757	2,119,226,776	6,569,280,533
Closing balance as at 31 December 2019		10,666,500,000	20,889,295,058	(316,239,277)	1,489,752,705	403,771,172	6,084,317,329	,	(102,782,734)	(102,782,734) (315,475,960) (328,209,782)	(328,209,782)	(43,823,083)	(790,291,559) 38,427,105,428	18,427,105,428	10,612,839,379 49,039,944,807	9,039,944,807

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

Statements of Changes in Equity

Gulf Energy Development Public Company Limited

								Separate fina	Separate financial statements
									Baht
							Other compor	Other components of equity	
			•		Retained earning	Other comprehensive income (expenses)	(sesuedxe) eucou		
		Issued and paid-up		Appropriated			Available- for-sale	Total other components	
	Notes	share capital	Share premium	legal reserve	Unappropriated	Actuarial losses	investments	of equity	Total equity
Opening balance as at 1 January 2018		10,666,500,000	10,666,500,000 20,889,295,058	86,512,524	2,371,169,838	1	652,030	652,030	34,014,129,450
Transfer actuarial losses		ı	1	1	(17,371,264)	17,371,264	1	17,371,264	1
Legal reserve	20	ı	1	162,258,603	(162,258,603)		1	1	1
Dividend paid		ı	1	1	(853,316,960)	•	1	1	(853,316,960)
Total comprehensive income (expenses) for the year		•	'	1	3,245,172,049	(17,371,264)	(608,196)	(17,979,460)	3,227,192,589
Closing balance as at 31 December 2018		10,666,500,000	20,889,295,058	248,771,127	4,583,395,060	'	43,834	43,834	36,388,005,079
Opening balance as at 1 January 2019		10,666,500,000	20,889,295,058	248,771,127	4,583,395,060		43,834	43,834	36,388,005,079
Transfer actuarial losses		ī	1	1	(15,052,952)	15,052,952	ı	15,052,952	1
Legal reserve	20	r	ı	155,000,045	(155,000,045)	•	•	Γ	1
Dividend paid	21	r	•	1	(2,559,889,644)	•	1	ľ	(2,559,889,644)
Total comprehensive income (expenses) for the year		T	•	1	3,100,000,909	(15,052,952)	49,183	(15,003,769)	3,084,997,140
Closing balance as at 31 December 2019		10,666,500,000	20,889,295,058	403,771,172	4,953,453,328	ı	93,017	93,017	36,913,112,575

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

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

			Consolidated		Separate
		fi	inancial statements	f	inancial statements
		2019	2018	2019	2018
	Notes	Baht	Baht	Baht	Baht
-		24			
Cash flows from operating activities					
Profit before corporate income tax benefits (expenses)		7,152,395,557	4,120,557,968	3,093,031,348	3,245,907,938
Adjustment to reconcile profit before corporate income tax					
for cash generated from (used in) operating activities					
- Loss on disposal of investments in a subsidiary		-	-	-	1,171,570
- Gain on sales of available-for-sale investments		(333,136)	(6,422,094)	-	(1,431,429)
- Interest income		(188,886,742)	(181,226,784)	(221,218,372)	(232,198,476)
- Dividend income		(100,534,563)	(107,238,331)	(3,519,198,659)	(3,480,671,999)
- Reversal of an impairment loss on assets		-	-	-	(3,255,450)
- Depreciation and amortisation	12, 13	2,433,921,620	1,391,656,087	6,104,154	1,353,960
- Loss from disposal and write-off assets	12	57,096	-	14,852	-
- Employee benefit expenses		55,026,188	23,495,841	42,211,537	18,447,592
- Finance costs	25	2,895,735,498	1,938,329,381	260,602,279	210,229,257
- Share of profit from an associate					
and joint ventures	11.2, 11.3	(3,205,443,006)	(2,615,462,294)	-	-
- Accounting losses on business combinations	24, 29	81,961,726	-	-	-
- Net (gain) loss on exchange rate		(1,009,888,503)	(25,119,716)	86,674,426	16,214,679
Cash flows before changes in working capital		8,114,011,735	4,538,570,058	(251,778,435)	(224,232,358)
Changes in westing conital (avaluating impost					
Changes in working capital (excluding impact					
from acquisition and disposal of subsidiaries)		(4.624.002.047)	(4.050.540.045)		
- Trade accounts receivable		(1,634,282,817)	(1,852,540,215)	(00 504 004)	-
- Accrued service income from related parties		-	-	(22,531,034)	69,068,000
- Amounts due from related parties		0.550.040	(2,000,072)	(18,386,040)	19,744,665
- Other accounts receivable		2,559,819	(3,800,373)	3,629,639	(3,680,713)
- Prepaid expenses		(25,875,272)	(29,987,621)	(4,662,538)	1,299,319
- Advance payments under service agreements		(47,290,594)	(293,928,625)	-	-
- Spare parts		(106,869,860)	(48,834,729)	(470.220)	- 5 704 020
Value added tax Other current assets		1,369,919,099	(807,637,643)	(170,230)	5,701,930
		147,183,215 3,305,474	(234,229,115)	140,470	(796,441)
Other non-current assets Trade accounts payable		511,468,904	(1,281,397) 672,707,266	(3,553,908)	(2,239,663)
- Other accounts payable			86,308,598	0.536.052	(19.294.120)
· •		210,877,482	(4,950,568)	9,536,952 369,103	(18,284,120)
 Amount due to related parties Accrued expenses 		344,255 (424,141,317)	187,949,321	15,532,854	(4,040,728) 115,125,937
·		, , , , , , ,	107,949,321	15,552,654	110,120,937
 Corporate income tax payable Other current liabilities 		(13,372) (46,221,814)	236 111 459	(9.592.020)	(2,221,921)
- Employee benefit obligations paid		(8,004,453)	236,111,458 (12,371,400)	(8,582,020) (7,363,733)	(10,180,500)
		(8,004,455)	(12,371,400)	(1,303,133)	(10,180,300)
- Employee benefit obligations proceeded		3 150 900			
from employee transfer		3,150,890		-	
Cash generated from (used in) operating activities		8,070,121,374	2,432,085,015	(287,818,920)	(54,736,593)
- Corporate income tax paid		(31,083,571)	(30,400,807)	(29,490,504)	(28,791,890)
- Withholding tax refunded		9,399,064	-	8,713,821	-
-		, ,		, ,	
Net cash generated from (used in) operating activities		8,048,436,867	2,401,684,208	(308,595,603)	(83,528,483)

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

Gulf Energy Development Public Company Limited

			Consolidated		Separate
		fi	inancial statements	f	inancial statements
		2019	2018	2019	2018
	Notes	Baht	Baht	Baht	Baht
Cash flows from investing activities					
Payments for short-term investments		(2,000,000,000)	(7,000,000,000)	(2,000,000,000)	(7,000,000,000)
Proceeds from short-term investments		2,000,000,000	7,000,000,000	2,000,000,000	7,000,000,000
Payments for advance share subscription		-	(178,691,076)	-	-
Deposits at financial institutions used as collateral	8	1,674,770,027	(1,918,096,713)	-	-
Proceeds from interest income		189,081,106	185,098,791	203,912,990	262,519,584
Proceeds from dividend income		2,337,054,563	3,225,210,331	3,519,198,659	3,480,671,999
Proceeds from available-for-sales investments		22,000,000	845,452,330	-	370,000,000
Payments for available-for-sales investments		(400,341,712)	-	-	-
Payments for investement in subsidiaries	11.1	-	-	(3,872,110,105)	(6,461,699,945)
Payments for share subscription		(49,710,017)	-	-	(3,255,450)
Proceeds from sales of investments in a subsidiary	11.1	-	-	-	2,083,880
Payments for investment in joint ventures	11.3	(27,075,000)	(1,672,455,760)	(27,075,000)	(126,822,487)
Payments for advance payments to subsidiaries		-	-	(304,132)	(3,722,872)
Proceeds from advance payments to subsidiaries		-	-	1,506,314	29,494,317
Payments for short-term loans to subsidiaries	30	-	-	(4,983,119,286)	(2,826,004,757)
Proceeds from short-term loans to subsidiaries	30	-	-	2,446,531,308	2,631,720,723
Payments for loans to subsidiaries	30	-	-	(395,230,931)	(758,100,000)
Proceeds from loans to subsidiaries		-	-	-	51,572,486
Payments for loans to a joint venture	30	(2,403,271,481)	-	-	-
Proceeds from loans to a joint venture		-	37,485,000	-	37,485,000
Payments for business combinations achieved in stage	29	(265,800,639)	-	-	-
Payments for advance payments for land and power plant of	construction	(235,957,795)	(6,341,234,197)	-	-
Purchases of property, plant and equipment		(12,504,938,579)	(11,029,347,005)	(38,879,137)	(10,044,210)
Proceeds from disposals of property, plant and equipment		1,000	-	1,000	-
Payments for borrowing costs capitalised					
in property, plant and equipment		(830,289,939)	(1,178,018,383)	-	-
Payments for retention		(53,018,634)	(27,905,309)	-	-
Purchases of intangible assets		(25,151,982)	(9,417,467)	(18,207,156)	
Net cash used in investing activities		(12,572,649,082)	(18,061,919,458)	(3,163,775,476)	(3,324,101,732)

Gulf Energy Development Public Company Limited

			Consolidated		Separate
		f	inancial statements	f	inancial statements
		2019	2018	2019	2018
_	Notes	Baht	Baht	Baht	Baht
Cash flows from financing activities					
Proceeds from short-term loans from					
financial institutions	16	2,932,000,000	1,930,000,000	-	-
Payments for short-term loans from					
financial institutions	16	(3,744,000,000)	(1,622,000,000)	-	-
Proceeds from long-term loans from					
financial institutions	17	11,197,213,205	18,142,931,536	-	-
Payments for long-term loans from					
financial institutions	17	(4,282,772,938)	(5,974,495,056)	-	(1,000,000,000)
Proceeds from short-term loans		-	924,900,000	-	-
Payments for short-term loans		-	(600,000,000)	-	-
Payments for dividend	21	(2,559,889,644)	(853,316,960)	(2,559,889,644)	(853,316,960)
Proceeds from issuing of debentures		7,500,000,000	-	7,500,000,000	-
Payment for debentures		(6,000,000,000)	-	(6,000,000,000)	-
Payments for interest expenses		(2,648,279,297)	(1,554,116,159)	(179,545,588)	(133,890,411)
Payments for deferred financing fees		(49,037,404)	(463,515,255)	-	-
Payment for deferred financing fee for debentures		(7,500,000)	(72,599,177)	(7,500,000)	(72,599,177)
Proceeds from increase in share capital and call for					
additional paid-up capital		1,153,451,115	2,712,172,920	_	-
Payments for other finance costs		(155,492,555)	(96,894,576)	(6,262,084)	(4,720,575)
Dividend paid to non-controlling interests		(, - ,,	(==,==,==,==,	(2, 2, ,22, ,	(,
of subsidiaries	22	(1,115,151,848)	(336,721,599)	_	_
		(1,110,101,010)	(000), 0000)		
Net cash generated from (used in) financing activities		2,220,540,634	12,136,345,674	(1,253,197,316)	(2,064,527,123)
riot odor generatod nem (dood m) midnem g detirities		2,220,010,001	,,	(1,200,101,010)	(2,00:,02:,:20)
Net increase (decrease) in cash and cash equivalents	i	(2,303,671,581)	(3,523,889,576)	(4,725,568,395)	(5,472,157,338)
Cash and cash equivalents at the beginning of the year		16,698,463,911	20,222,174,961	9,275,392,742	14,747,550,080
Gain (loss) adjustment from foreign exchange translation					
of cash and cash equivalents		(4,997,071)	178,526	_	-
•		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,		
Cash and cash equivalents at the end of the year		14,389,795,259	16,698,463,911	4,549,824,347	9,275,392,742

Gulf Energy Development Public Company Limited

		Consolidated		Separate
	fina	ancial information	f	inancial information
	2019	2018	2019	2018
	Baht	Baht	Baht	Baht
Non-cash transactions				
Significant non-cash transactions for the years ended				
31 December comprise:				
Increase in deferred financing fees from payables	-	33,350,520	-	-
Increase in construction in progress from				
advance payment for power plant construction	2,633,696,863	2,741,556,557	-	-
Accounts payable for power plant constuction	2,772,552,618	5,504,032,594	-	-
Increase in assets from other accounts payable	15,301,621	-	7,639,728	-
Retention	347,840	48,826,863	-	-
Increase in assets from provision for				
decommissioning costs	251,198,793	195,316,398	-	-
Increase in construction in progress from amortisation				
of deferred financing fees	15,736,113	34,069,611	-	-
Increase in investment in a joint venture by payable	-	95,827,140	-	-
Business combinations achieved in stage from				
advance payment for share subscription	178,691,076	-	-	-
Payable for a business combination achieved in stage	46,117,123	-	-	-
Increase in assets from business combination achieved				
in stage	3,230,923,540	-	-	-

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

1 General information

Gulf Energy Development Public Company Limited (the Company) is a public company limited. The Company is incorporated and resides in Thailand. The address of its registered office is 87 M Thai Tower 11th Floor, All Seasons Place, Wireless Road, Lumpini, Pathumwan, Bangkok.

The Company is listed on the Stock Exchange of Thailand. For reporting purposes, the Company and its subsidiaries are referred to as the Group.

The principal business operation of the Group is to generate and sell electricity and steam, and other business in domestic and international.

These consolidated and separate financial statements were authorised for issue by the Board of Directors on 21 February 2020.

2 Accounting policies

The principal accounting policies applied in the preparation of these consolidated and separate financial statements are set out below:

2.1 Basis of preparation

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards (TFRSs) and the financial reporting requirements issued under the Securities and Exchange Act.

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting policies below.

The preparation of financial statements in conformity with Thai generally accepted accounting principles requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, and areas where assumptions and estimates are significant to the consolidated and separate financial statements are disclosed in Note 4.

An English version of the consolidated and separate financial statements have been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.2 New and amended financial reporting standards that are relevant and have significant impacts to the Group

2.2.1 New and amended financial reporting standards that are effective for accounting period beginning or after 1 January 2019.

Commencing from 1 January 2019, the Group adopted new and amended Thai Financial Reporting Standards effective for the period beginning on or after 1 January 2019 and relevant to the Group. The adoption of these standards does not have a significant impact to the Group. Except for the adoption of Thai Financial Reporting Standard No. 15 (TFRS 15) Revenue from contracts with customers, which affects the Group's accounting treatment as follows;

Revenue recognition

According to previous revenue recognition standards, the Group recognised Availability Payments according to the terms set out in the Power Purchase Agreement.

Under TFRS 15, Availability Payments in relation to availabilities of the power plants, as agreed with the EGAT and in accordance with terms of the Power Purchase Agreements are recognised over time as the services rendered. If the payments exceed the services rendered, a contract liability is recognised. On the other hand, if the payments are less than the services rendered, a contract asset is recognised.

2.2.2 New and amended financial reporting standards that are effective for accounting period beginning or after 1 January 2020. The Group has not yet adopted these standards.

a) Financial instruments

TAS 32

The new financial standards relate to financial instruments are:

TFRS 7	Financial Instruments: Disclosures
TFRS 9	Financial Instruments
TFRIC 16	Hedges of a Net Investment in a Foreign Operation
TFRIC 19	Extinguishing Financial Liabilities with Equity Instruments

Financial Instruments: Presentation

These new standards address the classification, measurement, derecognition of financial assets and financial liabilities, impairment of financial assets, hedge accounting, and presentation and disclosure of financial instruments.

The Group's management is currently assessing the impact of adoption of these standards.

b) TFRS 16, Leases

Where the Group is a lessee, TFRS 16, Leases will result in almost all leases being recognised on the statement of financial position as the distinction between operating and finance leases is removed. A right-of-use asset and a lease liability will be recognised, with exception on short-term and low-value leases.

The Group's management is currently assessing the impact of adoption of this standard.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.3 Principles of consolidation

a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group 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. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method.

Direct cost attributable to the acquisition of investment is recognised as part of initial recognition of investment.

b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting.

In the separate financial statements, investments in associates are accounted for using cost method.

c) Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

Joint ventures

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Interests in joint ventures are accounted for using the equity method.

In the separate financial statements, investments in joint ventures are accounted for using cost method.

d) Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group's subsequently recognises shares of its associates and joint ventures' profits or losses and other comprehensive income in the profit or loss and other comprehensive income, respectively. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

e) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint ventures is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in associates and joint ventures is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

f) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.4 Business combination

The Group applies the acquisition method to account for business combination with an exception on business combination under common control. The consideration transferred for the acquisition of a subsidiary comprises.

- fair value of the assets transferred
- liabilities incurred to the former owners of the acquiree
- equity interests issued by the Group

Identifiable assets and liabilities acquired and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

On an acquisition-by-acquisition basis, the Group initially recognises any non-controlling interest in the acquiree at the non-controlling interest's proportionate share of the acquiree's fair value of net assets.

The excess of the consideration transferred, the amount of any non-controlling interest recognised and the acquisition-date fair value of any previous equity interest in the acquiree (for business combination achieved in stage) over the fair value of the identifiable net assets acquired is recorded as goodwill. In case of a bargain purchase, the Group recognised the difference directly in profit or loss.

Acquisition-related cost

Acquisition-related cost are recognised as expenses in profit or loss.

Step-up acquisition

If the business combination is achieved in stages, the carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measured are recognised in profit or loss.

Changes in fair value of contingent consideration paid/received

Subsequent changes to the fair value of the contingent consideration that is an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured.

Business combination under common control

The Group accounts for business combination under common control by measuring acquired assets and liabilities of the acquiree at their carrying values presented in the highest level of the consolidation. The Group retrospectively adjusted the business combination under common control transactions as if the combination had occurred on the later of the beginning of the preceding comparative period and the date the acquiree has become under common control.

Consideration of business combination under common control are the aggregated amount of fair value of assets transferred, liabilities incurred and equity instruments issued by the acquirer at the date of which the exchange in control occurs.

The difference between consideration under business combination under common control and the acquirer's interests in the carrying value of the acquiree is presented as "surplus arising from business combination under common control" in equity and is derecognised when the investment is disposed of by transferring to retained earnings.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.5 Foreign currency translation

a) Functional and presentation currency

The financial statements are presented in Thai Baht, which is the Company's and the Group's functional and presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or the date of revaluation where items are re-measured.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

Any component of foreign exchange gains and losses on a non-monetary item that recognised in profit or loss, or other comprehensive income is recognised following the initial recognition of such non-monetary item transactions.

c) Group companies

The operational results and financial position of the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a different functional currency from the Group's presentation currency are translated into the presentation currency as follows:

- Assets and liabilities are translated at the closing rate at the date of respective statement of financial position;
- Income and expenses for statement of comprehensive income are translated at average exchange rates; and
- All resulting exchange differences are recognised in other comprehensive income.

2.6 Cash and cash equivalents

In the statements of cash flows, cash and cash equivalents includes cash on hand, deposits held at call, short-term highly liquid investments with maturities of three months or less from acquisition date.

2.7 Trade accounts receivable

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

Trade receivables are recognised initially at the amount of consideration that does not have payment condition. If receivables contain significant financing components, they are recognised at their present value. Subsequently, the Group recognises trade receivables at cost less allowance for doubtful accounts.

2.8 Spare parts

Spare parts are stated at cost less allowance for obsolescence.

Cost of spare parts is determined by the moving average method. Cost of spare parts comprise all purchase cost and costs directly attributable to the acquisition of the inventory less all attributable discounts. Spare parts are common spare parts. They are subsequently recognised at cost less allowance for obsolete, slow-moving and defective.

The Group reviews its allowance for obsolete, slow-moving and defective spare parts on specific cases.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.9 Investments in debt and equity securities

Investments other than investments in subsidiaries, associates and joint ventures are initially recognised at fair value of consideration paid plus direct transaction cost.

Trading and available-for-sale investments

Trading investments and available-for-sale investments are subsequently measured at fair value. The unrealised gains and losses of trading investments are recognised in profit or loss. The unrealised gains and losses of available-for-sale investments are recognised in other comprehensive income and are subsequently reclassified to profit or loss when the investment is disposed.

Disposal of investments

On a disposal of an investment, the difference between the net disposal proceeds and the carrying amount, including cumulative changes in fair value recognised in equity is recognised to the profit or loss. When the Group partially disposes an investment, the carrying amount of the disposed part is determined by the weighted average method.

2.10 Advance payments for land and power plant construction

Advance payments for land and power plant construction is cash paid to contractor prior the construction begins. The advance payments will be transferred to property, plant and equipment proportionately according to cash progress milestones payment under Engineering, Procurement and Construction (EPC) contract.

2.11 Investment property

Investment property, principally land, is held for capital appreciation and is not occupied by the Group.

Investment property is measured initially at cost, including directly attributable costs and borrowing costs.

Subsequently, it is carried at cost less accumulated depreciation and impairment.

Land is not depreciated.

2.12 Property, plant and equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and allowance for impairment (if any). The costs of property, plant and equipment comprise of the purchase price, import duty, non-refundable value added tax (after deducting trade discount and amount returned from seller) and any costs directly attributable to bring the assets to location and condition necessary for them to be capable of operating in the manner intended by management. These costs also include the initial estimated costs of dismantling and removing the item and restoring the site on which they are located, the obligation for which the Group incurs either when the items are acquired or as a consequence of having used the items during a particular period.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

Years

Power plant and solar system Tools, equipment and vehicle

10 - 25 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The asset's carrying amount is written-down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains or losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within other gains or losses - net in profit or loss.

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2.13 Goodwill

Goodwill is tested for impairment annually, or more frequently if events or changes in circumstances indicate that it might be impaired, and is carried at cost less accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose. The units or groups of units are identified at the lowest level at which goodwill is monitored for internal management purposes.

2.14 Intangible assets

Acquired intangible assets

Separately acquired intangible assets is measured at historical cost.

The assets with infinite useful life are subsequently measured at cost less impairment losses.

The assets with limited life are subsequently carried and cost less accumulated amortisation and impairment losses. The amortisation is calculated using the straight-line method over their estimated useful lives.

Acquired computer software

Acquired computer software is measured at cost. These costs are amortised over their estimated useful lives, but not more than 10 years.

Cost associated with maintaining computer software are recognised as an expense as incurred.

Right in Power Purchase Agreements

Right in Power Purchase Agreements acquired as part of the acquisition is recognised at fair value and will be amortised over the contract term of Power Purchase Agreements not over than 20 years.

2.15 Impairment of assets

The Group reviews impairment whenever there is an indicator of impairment. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value-in-use.

Where the reasons for previously recognised impairments no longer exist, the previously recognised impairment losses on the assets other than goodwill is reversed.

2.16 Leases

Leases - where the Group is the lessee

Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

At the inception of finance lease, the lower of the fair value of the leased property and the present value of the minimum lease payments is capitalised. Each lease payment is allocated between the liability and finance charges to achieve a constant rate on the liabilities balance outstanding. The corresponding rental obligations is presented net of finance charges. Finance cost is charged to profit or loss over the lease period.

Leases - where the Group is the lessor

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

Rental income under operating leases (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.17 Borrowings

Borrowings are recognised initially at the fair value, net of directly attributable transaction costs incurred. Borrowings are subsequently stated at amortised cost.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it will be drawn down. The fee is deferred until the drawn down occurs and included in effective interest calculation. However, if it is probable that facility will not be drawn down, that portion of the fee paid is recognised as a prepayment and amortised over the period of related facility.

Borrowings are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled, or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

2.18 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets (assets that take long periods to get ready for its intended use or sale) are added to the cost of those assets less investment income earned from those specific borrowings. The capitalisation of borrowing costs is ceased when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Other borrowing costs are expensed in the period in which they are incurred.

2.19 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

Current tax

The current income tax is calculated on the basis of the tax laws enacted or substantially enacted at the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax

Deferred income tax is recognised on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is not recognised for temporary differences arise from:

- initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss is not recognised
- investments in subsidiaries, associates and joint arrangements where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax is measured using tax rates of the period in which temporary difference is expected to be reversed, based on tax rates and laws that have been enacted or substantially enacted by the end of the reporting period.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same tax authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

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For the year ended 31 December 2019

2.20 Employee benefits

a) Short-term employee benefits

Liabilities for short-term employee benefits such as wages, salaries, paid annual leave and paid sick leave, profit-sharing and bonuses, and medical care that are expected to be settled wholly within 12 months after the end of the period are recognised based on employees' service rendered up to the end of the reporting period. They are measured at the amount expected to be paid.

b) Defined contribution plan

The Group pays contributions to a separate fund in accordance with the Provident Fund Act. B.E. 2530. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due.

c) Defined benefit plans

Amount of retirement benefits is defined by the agreed benefits the employees will receive after the completion of employment. It usually depends on factors such as age, years of service and an employee's latest compensation at retirement.

The defined benefit obligation is calculated annually by an independent actuary using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using government bonds that matches the terms and currency of the expected cash outflows, and that have terms to maturity approximating to the terms of the related retirement liabilities.

Remeasurement gains and losses are recognised directly to other comprehensive income in the period in which they arise. They are included in retained earnings in the statements of changes in equity and presented as a separate item in statements of changes in equity.

Past-service costs are recognised immediately in profit or loss.

2.21 Provisions

a) General provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The increase in the provision due to passage of time is recognised as interest expense.

b) Provision for decommissioning costs

The Group recognises provision for decommissioning costs based on present value of estimated costs of removal the power plants at the end of project's contracts. The provision for decommissioning costs are based on future removal cost estimates and incorporate many assumptions such as abandonment times and future inflation rate and discounted to present value at the discount rate estimated by the management. Those costs are included as part of the power plants.

2.22 Share capital

Ordinary shares with discretionary dividends are classified as equity.

Incremental costs directly attributable to the issue of new shares or options (net of tax) are shown as a deduction in equity.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.23 Revenue recognition

Revenue are recorded net of value added tax. They are recognised in accordance with the provision of goods or services, provided that collectability of the consideration is probable.

The Group recognises contracts that involve delivery or provision of multiple products or services separately based on each distinct performance obligation. Total transaction price of the bundled contract is allocated to each performance obligation based on their relative standalone selling prices or estimated standalone selling prices. Each performance obligation is recognised as revenue on fulfilment of the obligation to the customers.

The Group recognises each type of revenue as follows:

Revenue from rendering and consulting services

The Group recognises revenue from continuous rendering and consulting services as the percentage of services performed up until the reporting date over the contract term.

Revenue under the Power Purchase Agreements (PPA)

a) Revenue under the PPA which are not classified as lease

- The Group recognises Capacity Payments or Availability Payments which are the revenue for maintaining availabilities of power plants as agreed with EGAT in accordance with terms of PPA. The Group recognises this revenue in profit or loss when rendering services to customer according to the agreements. If the Group receives consideration above the services rendered, the Group recognises the excess consideration as a contract liability. On the other hand, if the Group receives consideration less than the services rendered, the Group recognises the consideration as a contract asset.
- Energy Payments are recognised at a point in time when the controls over the products are transferred to the customers at destinations as stated in the agreements. The revenue from Energy Payments are recognised based on transaction price net of output tax, rebates and discounts.

b) Revenue under the PPA which are classified as lease

- Finance lease income under the power purchase agreements is recognised on an effective interest method over the period of the agreements.
- Service income under finance lease agreements related to power purchase agreements, which comprises revenue for maintaining availabilities of power plants received from financial lease receivables with respect to the leased assets, is recognised when the services are rendered.

Revenue under the steam purchase agreements

Revenue under the steam purchase agreements are recognised at a point in time when the controls over the products are transferred to customers at destinations as stated in the agreements. The revenue under the steam purchase agreements is recognised based on transaction price net of output tax, rebates and discounts.

Interest income

Interest income is recognised on a time proportion basis, taking into account of the principal outstanding and the effective interest rate over the period to maturity, when it is determined that such income will accrue to the Group.

Dividend income

Dividend income is recognised when the right to receive payment is established.

Other income

Other income is recognised on an accrual basis.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

2.24 Dividend distribution

Dividend distributed to the Company's shareholders is recognised as a liability when the annual dividends are approved by the shareholders, and when interim dividends are approved by the Board of Directors.

2.25 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as Chief Executive Officer and President and who make strategic decisions.

3 Financial risk management

3.1 Financial risk factors

The Group's activities are exposed to a variety of financial risks such as impact of changes in the market price of debt and equity instruments, changes in exchange rate and changes in interest rate. The Group's overall risk management programme focuses on managing the fluctuation of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. Therefore, the Group uses derivative financial instruments such as foreign currency forward contracts to hedge the risk.

Risk management is carried out by management under policies approved by the Board of Directors. The Board of Directors will determine the overall principles for managing the risks and related policies to cover foreign exchange rate risk, interest rate risk, specific credit risk, derivatives, and the used of liquidity-based investment to manage risk.

3.1.1 Foreign exchange risk

The Group is exposed to foreign exchange risk particularly in US Dollar (USD), Japanese Yen (JPY), Krona Swedish (SEK) and European Euro (EUR). Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations. The Group uses foreign currency forward contracts to hedge their exposure to foreign currency risk.

3.1.2 Interest rate risk

Most of the Group's income and operating cash flows are independent of changes in market interest rates. The Group has no significant interest-bearing assets. The Group policy is to hedge cash flow for interest payment by using interest rate swap contracts from floating rates to fixed rates. Interest rate swap contracts allow the Group to raise long-term borrowings at floating rates and swap them into fixed rates. Under the interest rate swap contracts, the Group agrees with the counter parties to exchange, at specified intervals, the difference interest amounts between fixed contract rates and floating rates, which is calculated by referencing notional principal amounts as agreed. Any differences to be paid or received on an interest rate swap contract is recognised as a component of interest revenue or expense over the period of the agreement. All interest rate derivative transactions are subject to approval by the Chief Executive Officer before execution.

3.1.3 Credit risk

The Group has no significant concentrations of credit risk. The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history and good credit profiles. Derivative counter parties and cash transactions are limited to high credit quality financial institutions.

3.1.4 Liquidity risk

Liquidity risk is the risk that suitable sources of fund for the Group's business activities may not be available. The Group applies prudent liquidity risk management in which the Group maintains sufficient cash and marketable securities to use for its business activities. The Group's availability of fund is managed through an adequate amount of committed credit facilities provided to the Group.

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3.2 Accounting for financial derivative financial and hedge accounting

The Group is a party to derivative financial instruments, which comprise foreign currency forward contracts and interest rate swap contracts. The Group applies the hedge accounting for foreign currency forward contracts, whereas interest rate swap contracts are not recognised in the financial statements on inception.

Foreign currency forward contracts

The Group initially recognises derivative financial instruments at fair value on the contract date and subsequently recognises any changes in fair value as gain (loss) from derivative instruments in profit or loss.

The Group chooses to apply the hedge accounting which is appropriate based upon the specific criteria in accordance to hedging requirement, the impact of recording the derivative instrument is offset to the extent that the hedging relationship is effective. If a hedge is designated as a cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in other comprehensive income and the ineffective portion of the gain or loss on the hedging instrument is recognised immediately in profit or loss.

Interest rate swap contracts

Interest rate swap contracts protect the Group from movements in interest rates. Any differences to be paid or received on an interest rate swap contract is recognised as a component of interest revenue or expense over the period of the agreement. Gains and losses on early termination of interest rate swaps or on repayment of the borrowing are taken into profit or loss.

Disclosures about derivative financial instruments to which the Group is a party are provided in Note 28.

3.3 Fair value

Fair values are categorised into hierarchy based on inputs used as follows:

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

3.3.1 Financial assets and liabilities that are measured at fair value

The following table presents financial assets and liabilities that are measured at fair value.

		Co	onsolidated finan	cial statements
As at 31 December 2019	Level 1	Level 2	Level 3	Total
	Baht	Baht	Baht	Baht
Assets				
Assets				
Derivatives used				
for hedging				
Foreign currency				
forward contracts	-	3,949,499	-	3,949,499
Available-for-sale				
investments				
Equity securities	40.074.445			40.074.445
Money market fund	12,374,415	-	-	12,374,415
Common stock in	0.400.004.005			0.400.004.005
energy industry	2,102,934,065	-		2,102,934,065
Total assets	2,115,308,480	3,949,499		2,119,257,979
Total assets	2,115,500,400	3,949,499	<u>-</u>	2,119,237,979
Liability				
,				
Derivatives used				
for hedging				
Foreign currency				
forward contracts	-	476,773,219	-	476,773,219
Total liability	-	476,773,219	-	476,773,219

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

		Co	onsolidated finan	cial statements
As at 31 December 2018	Level 1	Level 2	Level 3	Total
	Baht	Baht	Baht	Baht
Assets				
Derivatives used for hedging Foreign currency				
forward contracts Available-for-sale	-	122,690,048	-	122,690,048
investments				
Equity securities Money market fund Common stock in	34,114,899	-	-	34,114,899
energy industry	1,594,595,638	-	-	1,594,595,638
Total assets	1,628,710,537	122,690,048		1,751,400,585
Liability				
Derivatives used for hedging Foreign currency forward contracts		29,928,726		29,928,726
iorward contracts	_	29,920,720	<u> </u>	29,920,720
Total liability	-	29,928,726	-	29,928,726
The Group does not have any	transfer between level	s during the year.		
			Separate finan	cial statements
	Level 1	Level 2	Level 3	Total
As at 31 December 2019	Baht	Baht	Baht	Baht
Assets				
Available-for-sale investments Equity securities				
Money market fund	4,787,077	-	-	4,787,077
Total assets	4,787,077	-	-	4,787,077
			Separate finan	cial statements
	Level 1	Level 2	Level 3	Total
As at 31 December 2018	Baht	Baht	Baht	Baht
Assets				
Available-for-sale investments Equity securities				
Money market fund	4,725,597		-	4,725,597

The Company does not have any transfer between levels during the year.

4,725,597

3.3.2 Financial assets and liabilities that are not measured at fair value

The carrying amounts approximate its fair value a)

Total assets

The carrying amounts of the following financial assets and financial liabilities approximate their fair values: cash and cash equivalents, short-term investments, trade accounts receivables and payables, amounts due from and due to related parties, other accounts receivables and payables, short-term loans and secured debentures due to the short maturities of these instruments. For the long-term loans from financial institutions, the carrying amounts approximate its fair value due to the floating interest rate have been applied.

4,725,597

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

b) Long-term loans to related parties and debentures

The fair values of long-term loans to related parties, and debentures with fixed interest rates have been calculated from the net present value of future cash flows discounted by market interest rates using rates at the date of the financial statements and measured using the level 2 of fair value hierarchy.

The contract amounts and fair values are as follows:

	Consolidated fina	ncial statements
As at 31 December 2019	Contract amount Baht	Fair value Baht
	Built	Bunt
Asset Long-term loans to related parties	2,324,077,623	2,791,019,542
Total asset	2,324,077,623	2,791,019,542
Liability Debentures	7,500,000,000	9,821,585,720
Total liability	7,500,000,000	9,821,585,720
	Consolidated fina	ncial statements
As at 31 December 2018	Contract amount Baht	Fair value Baht
Asset Long-term loans to related parties		_
Total asset		
Liability Debentures		<u>-</u>
Total liability		<u>-</u>
	Separate fina	ncial statements
As at 31 December 2019	Separate fina Contract amount Baht	ncial statements Fair value Baht
As at 31 December 2019 Asset Long-term loans to related parties	Contract amount	Fair value
Asset	Contract amount	Fair value
Asset Long-term loans to related parties Total asset	Contract amount	Fair value
Asset Long-term loans to related parties	Contract amount	Fair value
Asset Long-term loans to related parties Total asset Liability	Contract amount Baht -	Fair value Baht - -
Asset Long-term loans to related parties Total asset Liability Debentures	Contract amount Baht 7,500,000,000 7,500,000,000	Fair value Baht 9,821,585,720
Asset Long-term loans to related parties Total asset Liability Debentures	Contract amount Baht 7,500,000,000 7,500,000,000	Fair value Baht - 9,821,585,720 9,821,585,720 ncial statements
Asset Long-term loans to related parties Total asset Liability Debentures Total liability	7,500,000,000 7,500,000,000 Separate fina Contract amount Baht	Fair value Baht - 9,821,585,720 9,821,585,720 ncial statements Fair value
Asset Long-term loans to related parties Total asset Liability Debentures Total liability As at 31 December 2018 Asset	7,500,000,000 7,500,000,000 Separate fina Contract amount Baht	Fair value Baht - 9,821,585,720 9,821,585,720 ncial statements Fair value Baht
Asset Long-term loans to related parties Total asset Liability Debentures Total liability As at 31 December 2018 Asset Long-term loans to related parties	7,500,000,000 7,500,000,000 Separate fina Contract amount Baht	Fair value Baht - 9,821,585,720 9,821,585,720 ncial statements Fair value Baht

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

c) Financial derivatives

The Group applies the hedge accounting for foreign currency forward contracts, which the related accounting policy is disclosed in Note 3.2. The Group does not apply the hedge accounting for interest rate swap contracts; therefore, the fair value of interest rate swap contract are not recognised in the financial statements.

The fair values of the interest rate swap contracts have been calculated using the level 2.

The fair values of the interest rate swap contracts are as follows:

	Consolidated fina	ancial statements
As at 31 December	2019	2018
	Baht	Baht
Asset		
Derivatives used for hedging		
Interest rate swap contracts	-	193,179,491
Total asset	-	193,179,491
Liability		
Derivatives used for hedging		
Interest rate swap contracts	9,763,071,297	3,794,343,977
Total liability	9,763,071,297	3,794,343,977

3.3.3 Fair value valuation techniques

(a) Valuation techniques used to derive financial instruments in level 1

Available-for-sale investments are subsequently measured at fair value. The fair value of investments is based on quoted price at the close of business day of statement of financial position date from Stock Exchange of Thailand and Lao Securities Exchange for the common stock in energy industry and on the latest offering price by a financial institution for the Short-term fixed income fund. The unrealised gains and losses of available-for-sale investments are recognised in equity.

(b) Valuation techniques used to derive financial instruments in level 2 and level 3

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to measure fair value of an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs are not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments;
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves;
- The fair value of forward foreign exchange contracts is determined using forward exchange rates at the statement of financial position date, with the resulting value discounted back to present value;
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

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For the year ended 31 December 2019

4 Critical accounting estimates, assumptions and judgements

Estimates, assumptions and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Fair value of certain financial assets and derivatives

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Group uses judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period. Details of key assumptions used are included in Note 3.

Fair value estimation of intangible assets arising from business combination achieved in stage

The Group estimates fair value of intangible assets arising from business combinations achieved in stage based on the valuation technique (the discounted cash flows) that involves many assumptions for example the power plant capacity and efficiency, etc. The assumptions used also involved significant management judgement to assess the future cash flows and discounted rate applied for the future cash flows (Note 29).

Impairment of goodwill

The Group annually tests for impairment of goodwill in accordance with the accounting policy stated in Note 2.13. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets covering the remaining period of the power purchase agreements of the Group and assumed power plant capacity stated in the agreements. Discount rates used are based on pre-tax weighted average cost of capital (Note 14). If the discount rate used in the calculation increases by 1% per annum, no impairment of goodwill is recognised in the consolidated financial statements for the year ended 31 December 2019.

5 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that they can continue to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amounts of dividends paid to shareholders, return capital to shareholders, issue new shares, or sell assets to reduce debt.

6 Segment information

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker is President and Chief Executive Officer who are responsible for allocating resources and assessing performance of the operating segments.

The Group has three segments which comprise of power business, consulting business, particularly in power business, and infrastructure business.

Significant information relating to revenue and profit of the reportable segments are as follows:

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

	Power busines:	siness	Consulting business		Infrastructure business			
	Thailand Baht	Others Baht	Thailand Baht	Others Baht	Thailand Baht	Total Baht	Eliminating Baht	Total Baht
For the year ended 31 December 2019 Revenue from sales Revenue from management fee Cost of sales Cost of management fee	30,102,589,774 - (23,234,429,395)	210,101,519 - (79,371,153) -	- 947,873,855 - (425,879,305)	6,818,700 - (3,891,316)		30,312,691,293 954,692,555 (23,313,800,548) (429,770,621)	(591,576,597) (636,139,222) 682,709,873 269,811,719	29,721,114,696 318,553,333 (22,631,090,675) (159,958,902)
Gross profit	6,868,160,379	130,730,366	521,994,550	2,927,384	•	7,523,812,679	(275,194,227)	7,248,618,452
Gross profit margin (%)	23	62	55	43	•	24		24
Interest income Dividend income Administrative expenses	81,270,711 - (787,425,739)	20,098,219 - (112,116,925)	282,747,839 5,484,020,954 (891,292,881)	62,654,176 100,534,563 (28,678,725)	1,124,772 - (150,025)	447,895,717 5,584,555,517 (1,819,664,295)	(259,008,975) (5,484,020,954) 106,562,162	188,886,742 100,534,563 (1,713,102,133)
Profit from operating before finance costs and corporate income tax benefits Other income Gains on exchange rate, net Finance costs	6,162,005,351	38,711,660	5,397,470,462	137,437,398	974,747	11,736,599,618	(5,911,661,994)	5,824,937,624 14,274,774 1,003,475,651 (2,895,735,498)
Share of net profit from an associate and joint ventures Corporate income tax benefits Profit for the year							1	3,205,443,006 13,676,629 7 166 072 186
Timing of revenue recognition At a point in time Overtime	24,992,708,257 5,109,881,517	210,101,519	947,873,855	6,818,700	1 1	25,202,809,776 6,064,574,072	(591,576,597) (636,139,222)	24,611,233,179 5,428,434,850
Total revenue	30,102,589,774	210,101,519	947,873,855	6,818,700		31,267,383,848	(1,227,715,819)	30,039,668,029
As at 31 December 2019 Total segmented assets Total unallocated assets	80,669,570,726	2,958,161,963	50,218,536	ı	53,780,316	83,731,731,541	(2,770,998,308)	80,960,733,233 53,316,810,195
Total assets								134,277,543,428

Gulf Energy Development Public Company Limited

	Power business Thailand Baht	Consulting business Thailand Baht	usiness Others Baht	Total Baht	Eliminating Baht	Total Baht
For the year ended 31 December 2018 Revenue from sales Revenue from management fee Cost of sales Cost of management fee	17,361,499,424 - (13,071,411,165)	- 786,014,648 - (363,218,417)		17,361,499,424 786,014,648 (13,071,411,165) (363,218,417)	(480,383,086) (486,014,648) 555,614,641 198,260,565	16,881,116,338 300,000,000 (12,515,796,524) (164,957,852)
Gross profit	4,290,088,259	422,796,231	1	4,712,884,490	(212,522,528)	4,500,361,962
Gross profit margin (%)	25	54	•	26		26
Interest income Dividend income Administrative expenses	41,226,939 - (791,535,123)	287,329,697 4,024,458,256 (727,205,910)	7,581 107,238,332 (11,410,335)	328,564,217 4,131,696,588 (1,530,151,368)	(147,337,433) (4,024,458,257) 40,559,986	181,226,784 107,238,331 (1,489,591,382)
Profit from operating before finance costs and corporate income tax benefits	3,539,780,075	4,007,378,274	95,835,578	7,642,993,927	(4,343,758,232)	3,299,235,695
Other income Gains on exchange rate, net Finance costs Share of net profit from an associate and joint ventures						9,427,830 134,761,530 (1,938,329,381) 2,615,462,294
Corporate income tax benefits						20,630,193
Tionicol die year						, , ,
At a point in time Overtime	14,385,138,524 2,976,360,900	- 786,014,648	1 1	14,385,138,524 3,762,375,548	(480,383,086) (486,014,648)	13,904,755,438 3,276,360,900
Total revenue	17,361,499,424	786,014,648	•	18,147,514,072	(966,397,734)	17,181,116,338
As at 31 December 2018 Total segmented assets Total unallocated assets	70,218,900,932	9,680,455	1	70,228,581,387	(2,564,336,561)	67,664,244,826 56,004,412,747
Total assets						123 668 657 573

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

For the year ended 31 December 2019, the Group has one major customer, which represented the sales and services amounting to Baht 22,568.89 million from revenue from sales of electricity, representing 74.45% of total sales and services (for the year ended 31 December 2018: the Group has one major customer, which represented the sales and services amounting to Baht 12,680 million from revenue from sales of electricity, representing 73.80% of total sales and services).

7 Cash and cash equivalents

	fina	Consolidated ncial statements	finar	Separate ncial statements
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Cash on hand Deposits held in bank	2,296,939	755,110	60,000	40,000
- current accounts - savings accounts	487,947,225 11,311,739,838	69,272,827 14,478,435,974	555,166 4,549,209,181	325,755 7,775,026,987
- fixed accounts less than 3 months	2,587,811,257	2,150,000,000	-	1,500,000,000
Total	14,389,795,259	16,698,463,911	4,549,824,347	9,275,392,742

As at 31 December 2019, the interest rates on deposits in savings accounts are 0% - 1.30% per annum (31 December 2018: 0.01% - 1.46% per annum).

As at 31 December 2019, the interest rates on deposits in fixed accounts less than 3 months are 1% - 5% per annum (31 December 2018: 1.20% - 1.45% per annum) and due within approximately 90 days.

8 Deposits at financial institutions used as collateral

As at 31 December 2019, the Group's deposits at financial institutions used as collateral of Baht 420.30 million (31 December 2018: Baht 2,095.07 million) were used to pledge under short-term and long-term loans from financial institutions (Note 16 and Note 17).

9 Available-for-sale investments		
<u>-</u>	Consolidated financial statements	Separate financial statements
	Baht	Baht
As at 1 January 2018 Cost Add Unrealised gain (loss)	2,891,038,727 (83,267,963)	373,239,377 815,038
Fair value	2,807,770,764	374,054,415
For the year ended 31 December 2018 Opening net book value Disposal of investments Changes in fair value	2,807,770,764 (839,030,236) (340,029,991)	374,054,415 (368,568,571) (760,246)
Closing net book value <u>Less</u> Available-for-sale investments expected to be sold within one year _	1,628,710,537 (34,114,899)	4,725,598 (4,725,598)
Available-for-sale investments	1,594,595,638	
As at 31 December 2018 Cost Add Unrealised gain (loss)	2,052,008,491 (423,297,954)	4,670,806 54,792
Fair value	1,628,710,537	4,725,598

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

	Consolidated financial statements	Separate financial statements
	Baht	Baht
For the year ended 31 December 2019		
Opening net book value	1,628,710,537	4,725,598
Acquisition of investments	400,341,712	-
Disposal of investments	(21,666,864)	-
Changes in fair value	107,923,095	61,479
Closing net book value	2,115,308,480	4,787,077
Less Available-for-sale investments expected to be sold within one year	(12,374,415)	(4,787,077)
Available-for-sale investments	2,102,934,065	-
As at 31 December 2019		
Cost	2,430,683,339	4,670,806
Add Unrealised gain (loss)	(315,374,859)	116,271
	(= 2,011,000)	,
Fair value	2,115,308,480	4,787,077

During 2019, the Group disposed investments at the considerations of Baht 21.67 million. The Group recognised gain from these disposals of Baht 0.33 million in the consolidated statement of comprehensive income for the year ended 31 December 2019.

The fair value of investments is based on quoted price at the close of business day of statement of financial position date from Stock Exchange of Thailand and Lao Securities Exchange for the common stock in energy industry and on the latest offering price by a financial institution for the Money market fund. These fair values are categorised into level 1 hierarchy.

10 Trade accounts receivable

Trade accounts receivable as at 31 December can be analysed as follows:

	finan	Consolidated cial statements	finan	Separate cial statements
As at 31 December	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Within due Overdue	5,199,007,555	3,512,039,678	-	-
Up to 3 months	-	- 12 400	-	-
3 - 6 months 6 - 12 months	-	13,498	-	-
Over 12 months	-	-	-	<u> </u>
Total	5,199,007,555	3,512,053,176	-	_

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

11 Investment in subsidiaries, an associate and joint ventures

11.1 Investment in subsidiaries, net

As at 31 December, the Group's subsidiaries comprise as per listed below.

Subsidiaries are included in the preparation of the consolidated financial statement of the Group. The authorised shares of subsidiaries comprise ordinary and preferred shares. The proportion of the interests in the subsidiaries held by the Group do not differ from voting rights in subsidiaries, except for the proportion of the interests in Independent Power Development Company Limited (IPD), which is 75% but the voting rights in IPD is 70%.

							Separate Final	Separate Financial Statements
		Established	Proportion of ordinary shares directly held by the parent (%)	y shares arent (%)	Proportion of ordinary shares held by the subsidiaries (%)	dinary shares	Proportion of ordinary shares non-controlling interest (%)	dinary shares
Name	Type of Business	in country	2019	2018	2019	2018	2019	2018
Independent Power Development Company Limited (IPD)	Investing in electricity generating	Thailand	70.00	70.00	ı	•	30.00	30.00
Subsidiaries of IPD: - Gulf SRC Company Limited - Gulf PD Company Limited	Electricity generating Electricity generating	Thailand Thailand	1 1		99.99	99.99 99.99	1 1	1 1
Gulf MP Company Limited (Gulf MP) Subsidiaries of Gulf MP:	Investing in electricity generating	Thailand	70.00	70.00	1	1	30.00	30.00
- Gulf VTP Company Limited	Electricity generating	Thailand	1	'	74.99	74.99	r	1
- Gulf 1S1 Company Limited - Gulf TS2 Company Limited	Electricity generating Flectricity generating	Thailand			74.99	74.99		
- Gulf TS3 Company Limited	Electricity generating	Thailand	r	•	74.99	74.99		•
 Gulf TS4 Company Limited 	Electricity generating	Thailand	1	'	74.99	74.99	1	•
- Gulf NC Company Limited	Electricity generating	Thailand	•	•	66.66	66.66	•	•
- Gulf BL Company Limited	Electricity generating	Thailand	•	'	75.00	75.00	•	•
 Gulf BP Company Limited 	Electricity generating	Thailand	1	•	75.00	12.00	•	
 Gulf NLL2 Company Limited 	Electricity generating	Thailand	•	'	74.99	74.99	•	
- Gulf NPM Company Limited	Electricity generating	Thailand	•	'	99.99	99.99	•	•
- Guir NRV1 Company Limited	Electricity generating	Theiland	1	'	99.99	99.99	1	
- Guii INRVZ COITIPAITY LITTIEG	Electricity generating		ı	•	99.99	99.99	•	•
Gulf Solar Company Limited (Gulf Solar) Subsidiaries of Gulf Solar:	Investing in electricity generating	Thailand	74.99	74.99	•	•	25.01	25.01
- Gulf Solar TS1 Company Limited	Electricity generating	Thailand	•	•	99.99	99.99	1	•
- Gulf Solar TS2 Company Limited	Electricity generating	Thailand	•	•	66.66	99.99	•	
 Gulf Solar BV Company Limited 	Electricity generating Electricity generating	Thailand		' '	66. 66. 66.	56 56 56 56 56 56 56 56 56		
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Gulf Energy Development Public Company Limited

							Separate Financial Statements	ial Statements
		Established	Proportion of ordinary shares directly held by the parent (%)	rdinary shares	Proportion of ordinary shares held by the subsidiaries (%)	Proportion of ordinary shares held by the subsidiaries (%)	Proportion of ordinary shares held by non-controlling interest (%)	thares held by
Name	Type of Business	in country	2019	2018	2019	2018	2019	2018
Gulf Energy International Company Limited *	Provide managerial, technical and supporting services	Thailand	66.66	66.66	•	•	0.01	0.01
Subsidiaries of Gulf Energy International Company: Limited								
 Gulf International Holding Pte. Ltd. Gulf Energy Mauritius Company Limited Gulf Energy (Vietnam) Limited Liability Company 	Investment in electricity generating Investment in electricity generating Provide managerial, technical and sumonting services.	Singapore Mauritius Vietnam	1 1 1	1 1 1	100.00 100.00 100.00	100.00 100.00 100.00		1 1 1
Subsidiaries of Gulf International Holding Pte. Ltd: - TTC Green Energy Investment Joint Stock Company** - TTC Energy Development Investment Joint Stock Company ** - Mekong Wind Power Joint Stock Company**	Electricity generating Electricity generating Electricity generating	Vietnam Vietnam Vietnam			90.00 90.00 95.00	1 1 1	10.00 10.00 5.00	1 1 1
Kolpos Pte. Ltd.	Trading	Singapore	100.00	100.00	1	'	,	•
Gulf Pattani Green Company Limited	Electricity generating	Thailand	66.66	66.66	1	•	0.01	0.01
Gulf Chana Green Company Limited SBY Biomass Company Limited	Electricity generating Electricity generating	Thailand Thailand	66.66 66.66	66.66 66.66	1 1	1 1	0.01	0.01
Thepha Clean Enegy Company Limited	Electricity generating	Thailand	66.66	66.66	•	•	0.01	0.01
Gulf International Investment (Hong Kong) Limited	įυ	Hong Kong	100.00	100.00	•	•	•	
Gulf MTP LNG Terminal Company Limited	Storing and converting natural gas from liquid to gas	Thailand	70.00	'	1	'	30.00	ı

On 21 June 2019, Gulf Energy International Company Limited was approved by the Revenue Department to be International Business Centre.

During 2019, TTC Green Energy Investment Joint Stock Company, TTC Energy Development Investment Joint Stock Company and Mekong Wind Power Joint Stock Company were reclassified from investment in joint ventures to investment in subsidiaries from business combinations achieved in stage as per detail disclosed in Note 29. *

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

The summarised financial information of each subsidiary that has significant non-controlling interests to the Group are summarised below. The amounts of each subsidiary are disclosed by the amount before the inter-company elimination.

See Note 22 for transactions with non-controlling interests.

Summarised Statements of Financial Position

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Current

Assets Liabilities Net current assets

Non-current

Assets Liabilities Net non-current assets

Net assets

Non-controlling interests

Gulf MP Con	Gulf MP Company Limited	Gulf VTP Con	Gulf VTP Company Limited	Gulf TS1 Com	Gulf TS1 Company Limited
2019 Baht	2018 Raht	2019 Raht	2018 Raht	2019 Baht	2018 Raht
146,462,576 (6,279,744)	161,946,180 (5,591,434)	1,211,706,060 (562,756,944)	1,353,516,261 (740,997,220)	1,321,520,643 (711,134,775)	1,536,411,887 (847,176,214)
140,182,832	156,354,746	648,949,116	612,519,041	610,385,868	689,235,673
15,350,713,312 (4,390)	15,350,713,312 12,621,445,948 (4,390) (48,481)	5,222,883,323 (3,976,472,307)	5,425,230,656 (4,176,977,050)	5,618,288,242 (4,147,862,462)	5,816,606,196 (4,442,528,262)
15,350,708,922	12,621,397,467	1,246,411,016	1,248,253,606	1,470,425,780	1,374,077,934
15,490,891,754	15,490,891,754 12,777,752,213	1,895,360,132	1,860,772,647	2,080,811,648	2,063,313,607
3,942,640,598	3,551,838,395	742,315,639	657,127,208	825,587,887	528,546,515

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

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Current

Assets Liabilities .

Net current assets

Non-current

Assets Liabilities Net non-current assets

Net assets

Non-controlling interests

Gulf TS2 Con	Gulf TS2 Company Limited	Gulf TS3 Con	Gulf TS3 Company Limited	Gulf TS4 Con	Gulf TS4 Company Limited
2019 Baht	2018 Baht	2019 Baht	2018 Baht	2019 Baht	2018 Baht
1,232,746,262 (606,744,714)	1,406,777,260 (755,474,411)	1,102,178,910 (499,206,350)	1,263,643,117 (574,060,536)	1,150,829,504 (582,786,285)	1,263,192,919 (750,091,297)
626,001,548	651,302,849	602,972,560	689,582,581	568,043,219	513,101,622
5,673,099,108 (4,262,942,979)	5,914,458,962 (4,557,381,069)	5,062,992,193 (3,798,744,941)	5,262,512,225 (4,064,343,502)	4,972,714,442 (3,631,096,070)	5,182,369,532 (3,892,444,724)
1,410,156,129	1,357,077,893	1,264,247,252	1,198,168,723	1,341,618,372	1,289,924,808
2,036,157,677	2,008,380,742	1,867,219,812	1,887,751,304	1,909,661,591	1,803,026,430
806,000,401	711,950,724	751,096,405	642,275,486	779,415,452	633,202,988

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

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Current

Assets Liabilities

Net current assets

Non-current

Assets Liabilities

Net non-current assets

Net assets

Non-controlling interests

				Independent Power	ent Power
Gulf BL Com	Gulf BL Company Limited	Gulf BP Com	Gulf BP Company Limited	Development Co	Development Company Limited
2019	2018	2019	2018	2019	2018
Bant	Bant	Bant	Bant	Bant	Baht
1,282,262,697	1,258,376,244	1,262,078,073	1,153,435,893	1,229,644,950	1,220,374,781
(629,199,019)	(789,397,959)	(609,964,404)	(949,679,949)	(1,147,117,914)	(1,109,708,937)
653,063,678	468,978,285	652,113,669	203,755,944	82,527,036	110,665,844
	1				
5,179,562,213	5,340,867,153	5,193,746,595	5,362,334,069	3,101,149,951	3,101,149,951
(3,880,006,747)	(4,387,832,430)	(3,963,720,276)	(4,415,515,109)	(34,093)	(17,023)
1,189,003,466	943,014,703	1,210,026,317	947,020,900	3,101,115,856	3,101,132,928
00000		7 000	0 0 0 0	000000000000000000000000000000000000000	7700
1,842,067,144	1,411,992,988	1,862,139,986	1,150,776,844	3,183,042,892	3,211,786,772
875,129,259	670,809,629	884,665,465	546,711,062	955,092,867	831,608,032

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Summarised Statements of Comprehensive Income

	Gulf MP Comp	MP Company Limited	Gulf VTP Company Limited	pany Limited	Gulf TS1 Company Limited	pany Limited
For the year ended 31 December	2019 Baht	2018 Baht	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Revenue from sales Other income Expenses Finance costs	1,968,621,910 (25,406,732)	552,277,234 (23,116,077)	2,822,419,728 94,274,682 (2,237,095,483) (225,456,448)	2,694,160,923 20,248,574 (2,072,596,617) (232,043,745)	3,016,798,608 98,635,492 (2,398,486,056) (241,842,292)	2,938,707,995 28,502,734 (2,250,090,252) (245,665,832)
Profit before corporate income tax benefit Corporate income tax benefit	1,943,215,178	529,161,157	454,142,479 655,006	409,769,135 1,120,847	475,105,752 712,288	471,454,645 1,096,014
Profit from continuing operation	1,943,215,178	529,161,157	454,797,485	410,889,982	475,818,040	472,550,659
Total comprehensive income	1,943,215,178	529,161,157	454,797,485	410,889,982	475,818,040	472,550,659
Total comprehensive income allocated to non-controlling interests (NCI) Dividend paid to NCI	582,964,553 549,184,071	158,748,348 155,442,858	216,092,477 105,094,521	195,201,504 53,151,255	226,080,184 114,625,832	224,494,647 48,463,130

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

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For

Revenue from sales Other income Expenses Finance costs Profit before corporate income tax benefit Corporate income tax benefit

Profit from continuing operation

Total comprehensive income

Total comprehensive income allocated to non-controlling interests (NCI) Dividend paid to NCI

I	Gulf TS2 Company Limited	pany Limited	Gulf TS3 Con	Gulf TS3 Company Limited	Gulf TS4 Company Limited	pany Limited
I	2019	2018	2019	2018	2019	2018
	Baht	Baht	Baht	Baht	Baht	Baht
	3,006,883,276	2,927,249,106	2,899,536,900	2,713,159,166	3,065,929,097	2,850,314,855
	(2.391.617.850)	(2.232.328.536)	(2.277.407.006)	(2.061.449.433)	(2.384.986.350)	(2.148.837.445)
	(246,016,833)	(252,174,161)	(220,263,366)	(235,323,165)	(210,107,688)	(229,683,519)
	458,079,073	460,671,263	492,566,588	438,990,250	544,024,660	489,700,618
	647,860	690,233	661,920	957,318	670,502	327,332
	458,726,933	461,361,496	493,228,508	439,947,568	544,695,162	490,027,950
	458,726,933	461,361,496	493,228,508	439,947,568	544,695,162	490,027,950
	347 050 545	040 040	004 050 500	900 900 000	010 000 450	107 707 600
	515,858,712	219,179,010	254,552,595	209,005,696	256,606,459	232,797,364
	107,780,595	53,678,966	128,491,376	7,603,040	109,558,806	18,382,350

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

					Independent Power Development	er Development
	Gulf BL Company Limited	any Limited	Gulf BP Company Limited	oany Limited	Company Limited	Limited
For the year ended 31 December	2019	2018	2019	2018	2019	2018
	Baht	Baht	Baht	Baht	Baht	Baht
Revenue from sales Other income	2,688,010,680	920,061,900 3,237,648	2,911,708,454 68,086,894	448,514,064 4,282,169	23,212,634	- 47,133,250
Expenses Finance costs	(2,142,483,044) (226,794,036)	(763,543,187) (83,977,018)	(2,255,654,490) (233,384,189)	(402,042,188) (46,060,634)	(18,946,800) (32,490,000)	(2,243,584) (48,534,000)
Profit (loss) before corporate income tax benefit (expense)	385,376,903	75,779,343	490,756,669	4,693,411	(28,224,166)	(3,644,334)
Profit (loss) from continuing operation	386,074,156	69,688,210	491,363,142	495,734	(28,224,166)	(3,644,334)
Total comprehensive income (expense)	386,074,156	69,688,210	491,363,142	495,734	(28,224,166)	(3,644,334)
Total comprehensive income (expense) allocated to non-controlling interests (NCI) Dividend paid to NCI	183,416,110	33,107,475	233,436,802	235,513	(8,467,250)	(742,176)

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Summarised Statements of Cash Flows	Gulf MP Company Limited	pany Limited	Gulf VTP Company Limited	pany Limited	Gulf TS1 Company Limited	pany Limited
For the year ended 31 December	2019	2018	2019	2018	2019	2018
	Baht	Baht	Baht	Baht	Baht	Baht
Net cash generated from (used in) operating activities	(19,318,193)	(15,720,238)	860,489,204	719,971,274	1,066,921,316	824,790,212
Net cash generated from (used in) investing activities	(746,034,362)	(4,087,279,841)	194,267,481	(50,493,889)	196,409,290	(18,692,036)
Net cash generated from (used in) financing activities	770,100,729	4,181,857,143	(923,639,395)	(984,403,507)	(1,056,079,583)	(869,869,242)
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at the beginning of the year Gain (loss) adjustment from foreign exchange translation of cash and cash equivalents	4,748,174 133,955,088	78,857,064 55,098,024	131,117,290 553,226,195 (109,060)	(314,926,122) 868,138,229	207,251,023 538,466,936	(63,771,066) 602,133,987
Cash and cash equivalents at the end of the year	138,703,262	133,955,088	684,234,425	553,226,195	744,815,988	538,466,936
For the year ended 31 December	Gulf TS2 Company Limited	pany Limited	Gulf TS3 Company Limited	pany Limited	Gulf TS4 Company Limited	pany Limited
	2019 20	2018	2019 20	2018	2019 20	2018
	Baht Ba	Baht	Baht Ba	Baht	Baht Ba	Baht
Net cash generated from operating activities	1,022,777,686	867,746,430	1,009,863,325	836,998,746	912,128,669	676,581,563
Net cash generated from (used in) investing activities	236,899,076	(11,191,276)	184,358,583	(242,376,718)	237,285,975	(119,270,300)
Net cash used in financing activities	(1,030,029,254)	(862,169,887)	(1,007,777,281)	(959,547,514)	(994,927,486)	(823,338,524)
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at the beginning of the year	229,647,508	(5,614,733)	186,444,627	(364,925,486)	154,487,158	(266,027,261)
	426,638,641	432,247,096	363,913,051	728,816,326	446,022,975	712,036,948
cain (loss) adjustment from foreign exchange translation of cash and cash equivalents	(54,440)	6,278	(171,924)	22,211	(102,856)	13,288
Cash and cash equivalents at the end of the year	656,231,709	426,638,641	550,185,754	363,913,051	600,407,277	446,022,975

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

	Gulf BL Company Limited	oany Limited	Gulf BP Company Limited	oany Limited	Independ Development C	Independent Power Development Company Limited
For the year ended 31 December	2019	2018	2019	2018	2019	2018
	Baht	Baht	Baht	Baht	Baht	Baht
Net cash generated from (used in) operating activities	802,465,124	(118,536,818)	1,001,825,108	(272,990,055)	(14,383,637)	72,462,872
Net cash used in investing activities	(34,276,739)	(1,057,902,364)	(90,317,402)	(1,497,691,298)	(306,418,941)	(2,065,993,193)
Net cash generated from (used in) financing activities	(633,406,073)	1,434,175,662	(652,712,973)	2,073,857,370	-	2,257,520,558
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at the beginning of the year	134,782,312	257,736,480	258,794,733	303,176,017	(320,802,578)	263,990,237
	562,242,474	304,505,295	444,120,882	140,944,462	842,471,409	578,481,172
Gain (loss) adjustment from foreign exchange translation of cash and cash equivalents	(654,390)	669	(723,978)	403	•	1
Cash and cash equivalents at the end of the year	696,370,396	562,242,474	702,191,637	444,120,882	521,668,831	842,471,409

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Movements of investment in subsidiaries can be analysed as follows:

	Separate financial statements
	Baht
For the year ended 31 December 2019	
Opening book value Increase in share capital and call for paid-up capital of subsidiaries	12,353,413,978 3,872,110,105
Closing book value	16,225,524,083

Increase in share capital and call for paid-up capital of subsidiaries

Gulf MP Company Limited

On 6 November 2019, at the Extraordinary Shareholders' Meeting of Gulf MP Company Limited, the Shareholders passed a resolution to approve an increase in the authorised share capital from Baht 13,314 million to Baht 13,515 million by issuing 20.07 million new ordinary shares at a par value of Baht 10 each, amounting to Baht 200.71 million. The Company fully paid-up the share subscription of Baht 140.50 million according to its shareholding portion of 70% on 13 November 2019. Gulf MP Company Limited has registered an increase in share capital with the Ministry of Commerce on 14 November 2019.

On 16 August 2019, at the Board of Directors' Meeting of Gulf MP Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 180 million ordinary shares at Baht 0.56 each, amounting to Baht 100 million. The Company paid the share subscription of Baht 70 million according to its shareholding portion of 70% on 6 September 2019.

On 18 April 2019, at the Board of Directors' Meeting of Gulf MP Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 720 million ordinary shares at Baht 0.03 each, amounting to Baht 20 million and 180 million ordinary shares at Baht 5.44 each, amounting to Baht 980 million. The total additional paid-up capital was Baht 1,000 million. The Company paid the share subscription of Baht 700 million according to its shareholding portion of 70% on 23 April 2019.

On 17 January 2019, at the Extraordinary Shareholders' Meeting of Gulf MP Company Limited, the Shareholders passed a resolution to approve an increase in the authorised share capital from Baht 11,514 million to Baht 13,314 million by issuing 180 million new ordinary shares at a par value of Baht 10 each by calling for additional paid-up capital at Baht 4 each, amounting to Baht 720 million. The Company paid the share subscription of Baht 504 million according to its shareholding portion of 70% on 18 January 2019. Gulf MP Company Limited has registered an increase in share capital with the Ministry of Commerce on 18 January 2019.

On 21 December 2018, at the Board of Directors' Meeting of Gulf MP Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 720 million ordinary shares at Baht 0.81 each, amounting to Baht 580 million. The Company paid the share subscription of Baht 406 million according to its shareholding portion of 70% on 18 January 2019.

Gulf Solar Company Limited

On 18 June 2019, at the Extraordinary Shareholders' Meeting of Gulf Solar Company Limited, the Shareholders passed a resolution to approve an increase in the authorised share capital from Baht 14.63 million to Baht 35.44 million by issuing 2.08 million new ordinary shares at a par value of Baht 10 each and calling for fully paid-up capital, amounting to Baht 20.81 million. The Company paid the share subscription of Baht 15.61 million according to its shareholding portion of 74.99% on 25 June 2019. Gulf Solar Company Limited has registered an increase in share capital with the Ministry of Commerce on 25 June 2019.

Kolpos Pte. Ltd.

On 20 June 2019, at the Extraordinary Shareholders' Meeting of Kolpos Pte. Ltd., the Shareholders passed a resolution to approve an increase in the authorised share capital from USD 73,000 to USD 250,000 by issuing 177,000 new ordinary shares at a par value of USD 1 each and calling for fully paid-up capital, amounting to USD 177,000, equivalent to Baht 5.50 million.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Gulf Energy International Company Limited

On 12 December 2019, at the Extraordinary Shareholders' Meeting of Gulf Energy International Company Limited, the Shareholders passed a resolution to approve an increase in the authorised share capital from Baht 2,755 million to Baht 3,562 million by issuing 80.70 million new ordinary shares at a par value of Baht 10 each by calling for additional paid-up capital at Baht 9.18 each, amounting to Baht 741.20 million. The Company paid the share subscription of Baht 741.20 million according to its shareholding portion of 99.99% on 12 December 2019. Gulf Energy International Company Limited has registered an increase in share capital with the Ministry of Commerce on 16 December 2019.

On 19 November 2019, at the Board of Directors' Meeting of Gulf Energy International Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 180 million ordinary shares at Baht 2.07 each, amounting to Baht 371.80 million. The Company paid the share subscription of Baht 371.80 million according to its shareholding portion of 99.99% on 12 December 2019.

On 11 September 2019, at the Board of Directors' Meeting of Gulf Energy International Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 180 million ordinary shares at Baht 0.31 each, amounting to Baht 55 million. The Company paid the share subscription of Baht 55 million according to its shareholding portion of 99.99% on 24 September 2019.

Gulf Chana Green Company Limited

On 4 October 2019, at the Extraordinary Shareholders' Meeting of Gulf Chana Green Company Limited, the Shareholders passed a resolution to approve an increase in the authorised share capital from Baht 520 million to Baht 585 million by issuing 6.50 million new ordinary shares at a par value of Baht 10 each by calling for additional paid-up capital at Baht 2.50 each, amounting to Baht 16.25 million. The Company paid the share subscription of Baht 16.25 million according to its shareholding portion of 99.99% on 7 October 2019. Gulf Chana Green Company Limited has registered an increase in share capital with the Ministry of Commerce on 8 October 2019.

On 19 September 2019, at the Board of Directors' Meeting of the Gulf Chana Green Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 0.10 million ordinary shares at Baht 7.50 each, amounting to Baht 0.75 million and 51.90 million ordinary shares at Baht 4.49 each, amounting to Baht 233 million. The total additional paid-up capital was Baht 233.75 million. The Company paid the share subscription of Baht 233.75 million according to its shareholding portion of 99.99% on 7 October 2019.

Gulf MTP LNG Terminal Company Limited

On 27 May 2019, at the Board of Directors' Meeting of the Company, the Board of Directors passed a resolution to approve the registration of Gulf MTP LNG Terminal Company, a registered Thai Company. The registered capital of Gulf MTP LNG Terminal Company comprises 350 million ordinary shares, with a par of Baht 10 per share, amounting to Baht 3,500 million. Gulf MTP LNG Terminal Company called for additional paid-up capital of 350 million ordinary shares at Baht 2.50 each, amounting to Baht 875 million. The Company paid the share subscription of Baht 612.50 million according to its shareholding portion of 70% on 1 October 2019.

Increase in share capital and call for paid-up capital of indirect subsidiaries

Subsidiaries of Gulf MP Company Limited

During 2019, the subsidiaries of Gulf MP Company Limited call for additional paid-up capital of Baht 2,731.24 million.

Subsidiaries of Gulf Energy International Company Limited Group

During 2019, the subsidiaries of Gulf Energy International Company Limited Group call for additional paid-up capital of USD 37.75 million and Vietnam Dong (VND) 39,865.44 million, equivalent to Baht 1,198.24 million.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

11.2 Investment in an associate

Movements of investment in an associate can be analysed as follows:

	Consolidated	Separate
	financial statement	financial statement
	Baht	Baht
For the year ended 31 December 2019		
Opening book value	19,940,410,349	17,687,559,481
Share of profit from an associate	3,196,834,661	-
Share of other comprehensive expense from an associate	(35,225,709)	-
Dividend income from an associate	(2,236,520,000)	-
Closing book value	20,865,499,301	17,687,559,481

Consolidated

As at 31 December, the investments in an associates is as follows:

			ship interest
Name of entity	Place of business/ country of incorporation	2019 %	2018 %
Gulf JP Company Limited	Thailand	40	40

There are no contingent liabilities in respect of the Group's interest in an associate.

Gulf JP Company Limited is principally engaged in the investment in power business especially electricity generation and management services for energy business.

Summarised financial information for an associate

The table below is summarised of financial information for an associate that is material to the Group. The financial information is included in an associate own financial statement which has been adjusted with the adjustments necessary for the equity method including, adjusting fair value and differences in accounting policy.

Summarised statements of financial position

	Gulf JP	Company Limited
As at 31 December	2019	2018
	Baht	Baht
Current assets	23,267,343,694	22,950,074,823
Non-current assets	101,385,503,997	105,741,141,378
Current liabilities	(8,285,786,399)	(8,454,678,943)
Non-current liabilities	(66,941,451,387)	(72,983,322,738)
Net assets	49,425,609,905	47,253,214,520

Summarised statements of comprehensive income

For the year ended 31 December	Gulf JP (2019 Baht	Company Limited 2018 Baht
Revenue Profit from continuing operations after income tax Other comprehensive expense Total comprehensive income	47,358,973,854 7,914,579,749 (92,386,975) 7,822,192,774	39,086,631,695 6,508,286,139 (15,656,300) 6,492,629,839

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Reconciliation to carrying amounts

	Gulf JP C	Company Limited
For the year ended 31 December	2019	2018
	Baht	Baht
Opening net assets	46,874,562,035	48,262,585,420
Profit for the year	7,843,621,186	6,422,724,559
Other comprehensive expense	(88,064,273)	(15,817,944)
Dividend payment	(5,591,300,000)	(7,794,930,000)
Closing net assets	49,038,818,948	46,874,562,035
Group's share in an associate (%)	40*	40*
Group's share in an associate (Baht)	19,207,966,373	18,282,877,421
Goodwill	1,657,532,928	1,657,532,928
An associate's carrying value	20,865,499,301	19,940,410,349

^{*} The Group has recognised the interest in Gulf JP Company Limited at 10% until 14 August 2016. After 14 August 2016, the Group has recognised the interest in Gulf JP Company Limited in the portion of 40%.

11.3 Investment in joint ventures

Movements of investment in joint ventures can be analysed as follows:

	Consolidated	Separate
	financial statements	financial statements
For the year ended 31 December 2019	Baht	Baht
Opening book value	1,718,517,632	132,824,980
Increase in share capital and call for paid-up capital		
of joint ventures	27,075,000	27,075,000
Share of profit from joint ventures	8,608,345	_
Decrease from business combinations achieved in stage	(1,256,968,058)	-
Decrease in consideration paid before business combinations		
achieved in stage	(46,117,123)	-
Currency translation differences	(69,433,283)	-
	·	
Closing book value	381,682,513	159,899,980

As at 31 December 2019, the details of investment in joint ventures are as follows:

Name	Type of Business	Established country
Gulf WHA MT Natural Gas Distribution Company Limited	Investing in gas distribution and transmission	Thailand
Duqm Power Company L.L.C.	Electricity generating and water desalinating Electricity generating	Oman
Bangkok Smart Energy Company Limited	Investing in power distribution system and district cooling system	Thailand

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Increase in share capital and call for paid-up capital of joint ventures

Gulf WHA MT Natural Gas Distribution Company Limited

On 24 October 2019, at the Extraordinary Shareholders' Meeting of Gulf WHA MT Natural Gas Distribution Company Limited, the shareholders passed a resolution to approve an increase in the authorised share capital from Baht 436 million to Baht 454 million by issuing 1.80 million new ordinary shares at a par value of Baht 10 each. The ordinary shares were fully paid-up amounting of Baht 18 million. The Company paid the share subscription of Baht 6.30 million according to its shareholding portion of 35% on 30 October 2019. Gulf WHA MT Natural Gas Distribution Company Limited has registered an increase in share capital with the Ministry of Commerce on 31 October 2019.

On 3 April 2019, at the Board of Directors' Meeting of Gulf WHA MT Natural Gas Distribution Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 30.96 million ordinary shares at Baht 1.82 each, amounting to Baht 56.50 million. The Company paid the share subscription of Baht 19.78 million according to its shareholding portion of 35% on 5 April 2019.

Bangkok Smart Energy Company Limited

On 20 June 2019, the Company invested in Bangkok Smart Energy Company Limited and the the Group's management of classified this investment as an investment in a joint venture.

On 2 July 2019, the Company entered into the Shareholder Agreement with Mitsui & Co., Ltd. and Tokyo Gas Engineering Solutions Corporation, both companies registered in Japan. Its shareholding proportion in Bangkok Smart Energy Company Limited is 33.33%:33.33%:33.33%, respectively. The Company paid the share subscription of Baht 1 million according to its shareholding portion of 33.33%.

Individually immaterial joint ventures

The table below is the carrying amount of its interests, in aggregate, all individually immaterial joint ventures that are accounted for using equity method.

For the year ended 31 December	2019 Baht	2018 Baht
The Group's share of Profit from continuing operations Total comprehensive income	8,055,057 8,055,057	(33,548,908) (33,548,908)

There are no contingent liabilities in respect of the Group's interest in joint ventures.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

net	
Property, plant and equipment, net	
plant and	
Property,	
12	

					Consolidated financial statements	ncial statements
	Land	Tools, equipments and vehicle Baht	Power plant Baht	Assets under construction Baht	Solar system Baht	Total Baht
As at 1 January 2018 Cost <u>Less</u> Accumulated depreciation	3,314,108,701	51,203,902 (5,950,738)	22,378,077,797 (361,291,559)	25,132,896,980	43,437,732 (5,349,275)	50,919,725,112 (372,591,572)
Net book value	3,314,108,701	45,253,164	22,016,786,238	25,132,896,980	38,088,457	50,547,133,540
For the year ended 31 December 2018 Opening net book value Additions Increase in assets from decommissioning costs Transfers in (out) Depreciation charged for the year	3,314,108,701 5,000,000 - -	45,253,164 105,503,635 - 8,505,072 (19,938,007)	22,016,786,238 6,362,813 195,316,398 20,221,586,762 (1,365,561,062)	25,132,896,980 18,192,170,423 - (20,230,091,834)	38,088,457 - - - - (1,742,914)	50,547,133,540 18,309,036,871 195,316,398 -
Closing net book value	3,319,108,701	139,323,864	41,074,491,149	23,094,975,569	36,345,543	67,664,244,826
As at 31 December 2018 Cost <u>Less</u> Accumulated depreciation	3,319,108,701	165,212,609 (25,888,745)	42,801,343,770 (1,726,852,621)	23,094,975,569	43,437,732 (7,092,189)	69,424,078,381 (1,759,833,555)
Net book value	3,319,108,701	139,323,864	41,074,491,149	23,094,975,569	36,345,543	67,664,244,826

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

					Consolidated financial statements	ncial statements
	Land Baht	Tools, equipments and vehicle Baht	Power plant Baht	Assets under construction Baht	Solar system Baht	Total Baht
For the year ended 31 December 2019 Opening net book value Additions Increase in assets from decommissioning costs	3,319,108,701 23,408,240	139,323,864 81,210,630	41,074,491,149 41,791,679 251,198,793	23,094,975,569 13,121,418,550	36,345,543	67,664,244,826 13,267,829,099 251,198,793
in crease in assets from business combinations achieved in stage Transfers in (out) Disposals, net	102,532,366	930,389	47,997,101 19,997,509,489	576,791,721 (21,392,871,249) -	1,610,736,291 1,292,829,394	2,236,455,502
Depreciation charged for the year Currency translation differences	1 1	(41,427,164) (17,018)	(2,303,190,240) (772,466)	(15,382,496)	(65,617,794) (32,529,713)	(2,410,235,198) (48,701,693)
Closing net book value	3,445,049,307	179,962,605	59,109,025,505	15,384,932,095	2,841,763,721	80,960,733,233
As at 31 December 2019 Cost Less Accumulated depreciation	3,445,049,307	246,907,147 (66,944,542)	63,140,691,297 (4,031,665,792)	15,384,932,095	2,972,197,502 (130,433,781)	85,189,777,348 (4,229,044,115)
Net book value	3,445,049,307	179,962,605	59,109,025,505	15,384,932,095	2,841,763,721	80,960,733,233

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

		Separate financ	ial statements
	0.00	Assets	
	Office	under	T.4.1
	equipment	construction	Total
	Baht	Baht	Baht
As at 1 January 2019			
As at 1 January 2018 Cost	2,564,802		2,564,802
Less Accumulated depreciation	(636,023)	<u>-</u>	(636,023)
Less Accumulated depreciation	(030,023)	<u> </u>	(030,023)
Net book value	1,928,779	_	1,928,779
	.,020,		.,020,0
For the year ended 31 December 2018			
Opening net book value	1,928,779	-	1,928,779
Additions	8,908,610	-	8,908,610
Depreciation charged for the year	(1,287,745)	-	(1,287,745)
Closing net book value	9,549,644	<u> </u>	9,549,644
As at 31 December 2018	44.470.440		44.470.440
Cost	11,473,412	-	11,473,412
Less Accumulated depreciation	(1,923,768)	-	(1,923,768)
Net book value	9,549,644		9,549,644
Net book value	3,343,044	_	9,049,044
For the year ended 31 December 2019			
Opening net book value	9,549,644	_	9,549,644
Additions	28,290,237	17,161,838	45,452,075
Disposals, net	(15,852)	-	(15,852)
Depreciation charged for the year	(4,767,333)	-	(4,767,333)
,			, , ,
Closing net book value	33,056,696	17,161,838	50,218,534
-			
As at 31 December 2019			
Cost	39,741,649	17,161,838	56,903,487
<u>Less</u> Accumulated depreciation	(6,684,953)	-	(6,684,953)
		.=	
Net book value	33,056,696	17,161,838	50,218,534

For the year ended 31 December 2019, borrowing costs of Baht 832.59 million (for the year ended 31 December 2018: Baht 1,212.09 million) represented the specific borrowing to finance the construction of new power plants. These capitalised borrowing costs were calculated using the loan balance weighted average capitalisation rate of each entity within the Group of 4.06% - 5.19% per annum (for the year ended 31 December 2018: 3.38% - 5.92% per annum) and are included in 'additions' during the year.

As at 31 December 2019, the Group pledged land, future construction thereon, machinery and power plant equipment at the net book value amounting to Baht 77,978.16 million as collateral for loans from financial institutions as disclosed in Note 16 and 17 (31 December 2018: Baht 66,338.54 million).

As at 31 December 2019 and 2018, the Group has capital expenditure related to the power plant construction and purchase of power plant equipment which were not recognised in the consolidated financial statements as disclosed in Note 33.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

13 Intangible assets, net			
	Consolida	ated financial sta	tements
	Concona	Right in Power	tomonto
	Computer Software Baht	Purchase Agreements Baht	Total Baht
As at 1 January 2018			
Cost	27,362,390	-	27,362,390
<u>Less</u> Accumulated amortisation	(4,953,304)	-	(4,953,304)
Net book value	22,409,086	-	22,409,086
For the year ended 31 December 2018			
Opening net book value	22,409,086	-	22,409,086
Additions	9,417,467	-	9,417,467
Amortisation charged for the year	(4,414,104)	-	(4,414,104)
Closing net book value	27,412,449	-	27,412,449
As at 31 December 2018			
Cost	36,779,857	-	36,779,857
<u>Less</u> Accumulated amortisation	(9,367,408)	-	(9,367,408)
Net book value	27,412,449	-	27,412,449
For the year ended 31 December 2019			
Opening net book value	27,412,449	-	27,412,449
Additions	26,218,772	-	26,218,772
Increase in assets from business combinations achieved			
in stage	1,292,013	993,176,025	994,468,038
Amortisation charged for the year	(9,470,062)	(14,216,360)	(23,686,422)
Currency translation differences	(32,269)	(20,956,044)	(20,988,313)
Closing net book value	45,420,903	958,003,621	1,003,424,524
As at 31 December 2019			
Cost	64,614,973	972,027,374	1,036,642,347
<u>Less</u> Accumulated amortisation	(19,194,070)	(14,023,753)	(33,217,823)
Net book value	45,420,903	958,003,621	1,003,424,524

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019	Separate financial statements
	Computer software <u>Baht</u>
As at 1 January 2018 Cost	681,402
Less Accumulated amortisation	(162,753)
Net book value	518,649
For the year ended 31 December 2018 Opening net book value Additions	518,649
Amortisation charged for the year	(66,215)
Closing net book value	452,434
As at 31 December 2018 Cost Less Accumulated amortisation	681,402 (228,968)
Net book value	452,434
For the year ended 31 December 2019 Opening net book value Additions Amortisation charged for the year Closing net book value	452,434 19,273,946 (1,336,821) 18,389,559
As at 31 December 2019 Cost Less Accumulated amortisation Net book value	19,955,348 (1,565,789) 18,389,559

14 Goodwill

	Consolidated financial statements Baht
As at 1 January 2019 Cost Less Provision for impairment	
Net book value	
For the year ended 31 December 2019 Opening net book value Increasing from business combinations achieved in stage (Note 29) Currency translation difference	- 125,875,963 (16,795,970)
Closing net book value	109,079,993
As at 31 December 2019 Cost Less Provision for impairment	109,079,993
Net book value	109,079,993

Goodwill of Baht 125.88 million arising from the business combinations achieved in stage of TTC Green Energy Investment Joint Stock Company (TTCIZ-01) and TTC Energy Development Investment Joint Stock Company (TTCIZ-02), which operate solar power projects in Vietnam (Note 29).

Goodwill is allocated to the Group's cash-generating units (CGUs) identified according to business segment.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

A segment-level summary of the goodwill allocation is presented below;

	Consolidated
finan	cial statements
2019	2018
Baht	Baht
109,079,993	-
109.079.993	_

Goodwill allocation to; Power business - Others

Total

Goodwill is tested annually for impairment by comparing the carrying amount to the recoverable amount which is determined based on value-in-use calculations. The value-in-use was calculated by using a cash flow projection, which is approved by the management, covering the remaining periods of Power Purchase Agreements and using the estimation of the power plant capacity. The inflation rates and discount rates which are the weighted average costs of capital used were as follows:

Consolidated financial statements

2019

Power
Business - Others

3.00
11.20

Inflation rate Discount rate

15 Deferred income taxes

Deferred tax assets and deferred tax liabilities can be analysed as follows:

		Consolidated		Separate
	finar	ncial statements	finan	cial statements
	2019	2018	2019	2018
	Baht	Baht	Baht	Baht
Deferred income tax assets:				
to be recovered within 12 months	_	_	_	_
to be recovered after 12 months	585,315,680	478,799,139	38,795,488	28,062,689
Total deferred income tax assets	585,315,680	478,799,139	38,795,488	28,062,689
Deferred income tax liabilities:				
to be settled within 12 months	(619,673)	(777,217)	(23,254)	(10,958)
to be settled after 12 months	(402,062,696)	(128,602,125)		-
Total deferred income tax liabilities	(402,682,369)	(129,379,342)	(23,254)	(10,958)
Deferred income taxes, net	182,633,311	349,419,797	38,772,234	28,051,731

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

The movements in deferred income tax assets and deferred income tax liabilities are as follows:

					O	Consolidated financial statements	ial statements
						Unrealised loss	
	Employee benefit	Elimination of fixed	Allowance for	Provision for decommissioning	Loss carried	on exchange rate for	
	obligations Baht	assets Baht	impairment Baht	cost Baht	forward Baht	long-term loans Baht	Total Baht
Deferred income tax assets:							
As at 1 January 2019	29,393,511	332,869,404	3,615,582	81,562,912	2,385,583	28,972,147	478,799,139
Charged to profit or loss Charged to other comprehensive income	9,404,349 2,021,418	41,803,892	1 1	53,286,882	1 1		104,495,123 2,021,418
As at 31 December 2019	40,819,278	374,673,296	3,615,582	134,849,794	2,385,583	28,972,147	585,315,680
As at 1 January 2018	20,194,713	306,344,210	4,266,672	40,749,626	2,399,837	22,367,353	396,322,411
Charged (credited) to profit or loss Charged to other comprehensive income	2,224,888 6,973,910	26,525,194	(651,090)	40,813,286	(14,254)	6,604,794	75,502,818 6,973,910
As at 31 December 2018	29,393,511	332,869,404	3,615,582	81,562,912	2,385,583	28,972,147	478,799,139

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

					Consc	Consolidated financial statements	Il statements
	Changes in fair value of available-for sale investment Baht	Commissioning expense Baht	Decommissioning expense Baht	Cash flow hedge Baht	Interest payable and deferred financing fee from application of effective interest rate method	Right in Power Purchase Agreements Baht	Total Baht
Deferred income tax liabilities : As at 1 January 2019 Increased from business combinations	(76,462)	(61,165,406)	(75,988,868)	(700,755)	8,552,149	'	(129,379,342)
Charged) credited to profit or loss Credited to other comprehensive income Currency translation differences	14,723	(25,073,482)	(44,986,954) - -	- 142,821	(11,799,411)	(194,405,475) 2,843,273 - (38,522)	(194,405,475) (79,016,574) 157,544 (38,522)
As at 31 December 2019	(61,739)	(86,238,888)	(120,975,822)	(557,934)	(3,247,262)	(3,247,262) (191,600,724) (402,682,369)	(402,682,369)
As at 1 January 2018 (Charged) credited to profit or loss Credited to other comprehensive income	(273,215) - 196,753	(30,880,963) (30,284,443)	(39,450,209) (36,538,659)	(2,060,535) - 1,359,780	(3,595,877) 12,148,026 -		(76,260,799) (54,675,076) 1,556,533
As at 31 December 2018	(76,462)	(61,165,406)	(75,988,868)	(700,755)	8,552,149	-	(129,379,342)

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

			Separate financia	al statements
	Employee benefit obligations Baht	Allowance for impairment Baht	Interest payable and deferred financing fee from application of effective interest rate method Baht	Total Baht
Deferred income tax assets: As at 1 January 2019 Charged to profit or loss Charged to other	24,447,108 6,969,561	3,615,581 -	- -	28,062,689 6,969,561
comprehensive income	3,763,238	-	-	3,763,238
As at 31 December 2019	35,179,907	3,615,581	-	38,795,488
As at 1 January 2018 Charged (credited) to profit or loss Credited to other	18,450,874 1,653,418	4,266,672 (651,091)	1,738,217 (1,738,217)	24,455,763 (735,890)
comprehensive income	4,342,816	-	-	4,342,816
As at 31 December 2018	24,447,108	3,615,581	-	28,062,689
		=	Separate financia Available-for sale investment Baht	Total Baht
Deferred income tax liabilities: As at 1 January 2019 Charged to other comprehensive income			(10,958) (12,296)	(10,958) (12,296)
As at 31 December 2019			(23,254)	(23,254)
As at 1 January 2018 Credited to other comprehensive income		_	(163,008) 152,050	(163,008) 152,050

Deferred income tax assets are recognised for taxable loss carry forwards only to the extent that realisation of the related tax benefit through the future taxable profit is probable. The Group has taxable losses amounting to Baht 3,080.04 million (31 December 2018: Baht 2,988.86 million) that can be carried forward against future taxable profit, which the Group did not recognise deferred tax assets of Baht 614.31 million (31 December 2018: Baht 597.77 million). There is taxable losses amounting to Baht 414.23 million that will expire within 31 December 2020 (31 December 2018: There is taxable losses amounting to Baht 234.98 million that will expire within 31 December 2019).

(10,958)

(10,958)

As at 31 December 2018

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

16 Short-term loans from financial institutions

Movement of short-term loans from financial institutions can be analysed as follows:

	Consolidated financial statements	Separate financial statements
For the year ended 31 December 2019	Baht	Baht
Opening book value	880,000,000	-
Cash flow: Proceeds from short-term loans from financial institutions Payments for short-term loans from financial institutions	2,932,000,000 (3,744,000,000)	- -
Closing book value	68,000,000	_

Credit facilities

As at 31 December 2019, the Group had available credit facilities from short-term loans from financial institutions amounting to Baht 10,239.23 million (As at 31 December 2018: Baht 9,427.23 million).

17 Long-term loans from financial institutions, net

Long-term loans from financial institutions are secured loans and consist of USD, Baht and VND.

Movements of long-term loans from financial institutions can be analysed as follows:

	Consolidated financial statements	Separate financial statements
For the year ended 31 December 2019	Baht	Baht
Opening net book value	62,335,426,944	-
Cash flow: Proceeds from long-term loans from financial institutions Payments for long-term loans from financial institutions	11,197,213,205 (4,282,772,938)	<u>-</u>
Other non-cash movement: Increase in liabilities from business combinations achieved in stage Additional deferred financing fee Amortisation of deferred financing fee Gain on exchange rate Currency translation differences	1,242,048,748 (130,237,785) 61,033,149 (1,148,807,317) 24,000	- - - -
Closing net book value Less Current portion of long-term loans from financial institutions, net	69,273,928,006 (2,821,239,128)	-
Long-term loans from financial institutions, net	66,452,688,878	-

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

	finar	Consolidated ncial statements	Finar	Separate ncial statements
	2019	2018	2019	2018
	Baht	Baht	Baht	Baht
Current portion of long-term loans from financial institutions, net Current portion of long-term loans				
from financial institutions, net	2,874,149,752	2,507,834,845	=	_
Less Deferred financing fee within 1 year	(52,910,624)	(54,941,084)	-	_
Current portion of long-term loans from financial institutions, net	2,821,239,128	2,452,893,761		<u> </u>
Long-term loan from financial institutions, net				
Long-term loan from financial institutions Less Deferred financing fee	67,124,390,967	60,483,000,176	-	-
more than 1 year	(671,702,089)	(600,466,993)	-	
Long-term loan from financial institutions, net	66,452,688,878	59,882,533,183	_	
Total long-term loan from financial institutions, net	69,273,928,006	62,335,426,944	-	_

Long-term loans from financial institutions of the subsidiaries

The subsidiaries have entered into long-term loan facility agreements with financial institutions. The available credit facilities amounted to Baht 31,607.53 million and USD 1,039.47 million which is equivalent to Baht 31,528.48 million (2018: Baht 15,060.70 million and USD 512.37 million which is equivalent to Baht 16,710.85) as follows:

Thai Baht loans

Number	Outstanding balance As at 31 December 2019 (Million Baht)	Outstanding balance As at 31 December 2018 (Million Baht)	Interest rate	Interest payment period
1 2 3	5,413.90 26,022.23 171.40	13,983.70 - 1,077.00	THBFIX plus a certain fixed margin per annum THBFIX plus a certain fixed margin per annum THBFIX plus a certain fixed margin per annum	Payment every three months Payment every three months Payment every three months
Total	31,607.53	15,060.70		

USD loans

Number	Outstanding balance As at 31 December 2019 (Million USD)	Outstanding balance As at 31 December 2018 (Million USD)	Interest rate	Interest payment period
1 2	512.37 527.10	512.37 -	LIBOR plus a certain fixed margin per annum LIBOR plus a certain fixed margin per annum	Payment every three months Payment every three months
Total	1,039.47	512.37		

These long-term loans are secured by the land, future construction thereon, machinery and power plant equipment as discussed in Note 12. In addition, the rights to Power Purchase Agreements, Supply Agreements, Construction Agreements, Deposit Accounts, Insurance Policies, investments, bonds and the pledge of shares of subsidiaries have been assigned to the lenders as collateral in accordance with the Credit Facilities Agreement. These subsidiaries are also required to comply with certain terms and conditions, such as maintaining of debt to equity ratio and debt service coverage ratio. In addition, under the conditions the Credit Facilities Agreements, these subsidiaries must enter into forward contract to prevent the fluctuation of exchange rates in SEK, EUR, USD, and JPY, and interest rate swap contracts to swap the interest rate from float interest rate to fixed interest rate to prevent the cash flow risk of these subsidiaries. whereas the principal will be payable on maturity date as specified in the agreement.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

18		tures.	

Movements of debentures can be analysed as follows:

For the year ended 31 December 2019	Consolidated and Separate financial statements Baht
Opening net book value	5,991,388,533
Cash flow: Proceeds from debentures Payments for debentures Payments for guarantee of debenture	7,500,000,000 (6,000,000,000) (7,500,000)
Other non-cash movement: Amortisation of guarantee of debenture	10,059,712
Closing net book value <u>Less</u> Current portion of debentures, net	7,493,948,245
Debentures, net	7,493,948,245

	finar	ncial statements
	7,500,000,000 (6,051,755) 7,493,948,245 7,493,948,245	2018 Baht
Current portion of debentures, net Current portion of debentures Less Deferred guarantee fee due	-	6,000,000,000
within 1 year	-	(8,611,467)
Current portion of debentures, net	_	5,991,388,533
Debentures, net Debentures Less Deferred quarantee fee due	7,500,000,000	-
later than 1 year	(6,051,755)	
Debentures, net	7,493,948,245	<u>-</u>
Total debentures, net	7,493,948,245	5,991,388,533

During 2019, the Company issued unsubordinated and unsecured debentures of Baht 7,500 million with debentures' representative. These debentures will be redeemable between 3 years to 10 years. The Company is also required to maintain of debt-to-equity ratio under certain terms and conditions as specified in the agreement.

19 Provision for decommissioning costs

Opening book value Increase during the year Finance cost

Closing book value

fina	Consolidated ncial statements	finar	Separate cial statements
2019 Baht	2018 Baht	2019 Baht	2018 Baht
Daiit	Dani	Daiit	Daiit
407,296,432	203,074,716	-	-
251,198,793	195,316,398	-	-
15,142,046	8,905,318		
673,637,271	407,296,432	-	-

Consolidated and Separate

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

20 Legal reserve

		d and Separate cial statements
For the year ended 31 December	2019	2018
	Baht	Baht
Opening book value	248,771,127	86,512,524
Appropriation during the year	155,000,045	162,258,603
Closing book value	403,771,172	248,771,127

Under the Public Companies Act B.E. 2535, the Company is required to set aside as a legal reserve at least 5% of its net profit after accumulated deficit brought forward (if any) until the reserve is not less than 10% of the registered capital. The legal reserve is non-distributable.

21 Dividend paid

On 24 April 2019, at the Annual General Shareholders' Meeting, the Shareholders approved the payment of dividends in respect of the operating results of the Company for the year ended 31 December 2018 at Baht 1.20 per share, totaling Baht 2,559.89 million. These dividends were paid to shareholders on 21 May 2019.

22 Non-controlling interests

Movements of non-controlling interests for the year ended 31 December are as follows:

	finar	Consolidated icial statements
For the year ended 31 December	2019 Baht	2018 Baht
Opening balance Increase in shares capital and additional paid-up shares of subsidiaries Increase from business combinations achieved in stage (Note 29) Changes in proportion of investment in subsidiaries Dividend payment from subsidiaries Share of net profit from subsidiaries	8,251,304,992 1,153,451,115 204,008,344 - (1,115,151,848) 2,119,226,776	4,783,436,398 2,712,172,920 - (57,328,478) (336,721,599) 1,149,745,751
Closing balance	10,612,839,379	8,251,304,992

Increase in shares capital and additional paid-up shares of subsidiaries

The proportion of non-controlling interest of Group's subsidiaries which held by WHA Energy Company Limited, Thai Industrial Estate Corporation Limited, Mit-Power Capitals (Thailand) Company Limited, WHA Solar Company Limited, PTT Tank Terminal Company Limited, and Individual shareholders, are at 47%, 47%, 30%, 47%, 30% and 5% respectively.

On 21 November 2019, WHA Energy Company Limited transferred all of its ordinary shares in Gulf Solar Company Limited to WHA Solar Company Limited.

Gulf NLL2 Company Limited increased its shares capital by issuing 14.70 million new ordinary shares of Baht 147 million. WHA Energy Company Limited paid for its contribution of Baht 36.76 million.

Gulf BL Company Limited and Gulf BP Company Limited increased their shares capital by issuing 26.40 million new ordinary shares of Baht 264 million. Thai Industrial Estate Corporation Limited paid for its contribution of Baht 66 million.

Gulf MP Company Limited increased its shares capital of Baht 2,600.71 million by issuing 200.07 million new ordinary shares of Baht 920.71 million and additional paid-up capital of Baht 1,680 million. Mit-Power Capitals (Thailand) Company Limited paid for its contribution of Baht 780.21 million.

Gulf Solar Company Limited increased its shares capital by issuing 2.08 million new ordinary shares of Baht 20.81 million. WHA Energy Company Limited paid for its contribution of Baht 5.20 million.

The Company and PTT Tank Terminal Company Limited establish Gulf MTP LNG Terminal Company Limited with registered share capital of 350 million ordinary shares. The ordinary shares were partially paid-up at Baht 2.50 each, amounting to Baht 875 million. PTT Tank Terminal Company Limited paid for its contribution of Baht 262.50 million.

Mekong Wind Power Joint Stock Company increased its shares capital by issuing 4.20 million new ordinary shares of VND 41,963.62 million, equivalent to Baht 55.35 million. Individual shareholders paid for its contribution of Baht 2.77 million.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

23 Other components of equity

Movement of other components of equity for the year ended 31 December 2019 are as follows:

Currency Actuarial translation losses differences	. (6,322,535)	e (expense)	osses)	e (expense)	n property, plant and equipment and	re (expense)	. (ast	(96,460,199)	(11,306,493)	11 306 103
	Opening balance as at 1 January 2019, net of tax	Tax charged to other comprehensive income (expense)	Less Reclassification adjustments for gains (losses)	included in profit or loss Tax charged to other comprehensive income (expense)	Less Reclassification adjustments included in property, plant and equipment and	Tax charged to other comprehensive income (expense)	Share of other comprehensive income (expense)	Currency translation differences	Actuarial losses	Transfer actuarial losses

Closing balance as at 31 December 2019, net of tax

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Movement of other components of equity for the year ended 31 December 2018 are as follows:

					Consolidated 1	Consolidated financial statements
						Baht
		Currency	Available-		Share of other comprehensive	Total
	Actuarial	translation	for-sale	Cash flow	expenses from an associate	other components
	5550	50000	Sillolliso	Segre	1011 411 433001410	ं दुवस
Opening balance as at 1 January 2018, net of tax	•	81,428	(83,673,425)	(42,854,282)	(2,270,196)	(128,716,475)
Change in fair value	•	•	(333,536,588)	41,358,120	•	(292,178,468)
Tax charged to other comprehensive income (expense)	•	•	(276,896)	15,686,568	•	15,409,672
Less Reclassification adjustments for gains (losses)			•			
included in profit or loss	•	•	(6,422,093)	•	•	(6,422,093)
Tax charged to other comprehensive income (expense)	•	•	459,386	•	•	459,386
Less Reclassification adjustments included in property, plant and equipment and						
advance payments under service agreements of cash flow hedges		•	•	73,863,705	•	73,863,705
Tax charged to other comprehensive income (expense)	•	•	•	(14,772,740)	•	(14,772,740)
Share of other comprehensive income (expense)		•			(6,327,178)	(6,327,178)
Currency translation differences	•	(6,403,963)	•	•		(6,403,963)
Actuarial losses	(23,648,002)		•	•	•	(23,648,002)
Transfer actuarial losses	23,648,002	1	1	1	1	23,648,002
Closing balance as at 31 December 2018, net of tax	1	(6,322,535)	(423,449,616)	73,281,371	(8,597,374)	(365,088,154)

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Movement of other components of equity for the year ended 31 December 2019 are as follows:

		Separate finan	cial statements
			Baht
	Actuarial losses	Available- for-sale investments	Total other components of equity
Opening balance as at 1 January 2019, net of tax Change in fair value	- -	43,834 61.479	43,834 61.479
Tax charged to other comprehensive income (expense) <u>Less</u> Reclassification adjustments for gains (losses)	-	(12,296)	(12,296)
included in profit or loss Tax charged to other comprehensive income (expense)	- -	-	-
Actuarial losses	15,052,952	-	15,052,952
Transfer actuarial losses	(15,052,952)	-	(15,052,952)
Closing balance as at 31 December 2019, net of tax	-	93,017	93,017

Movement of other components of equity for the year ended 31 December 2018 are as follows:

		Separate finance	cial statements
		•	Baht
	Actuarial losses	Available- for-sale investments	Total other components of equity
Opening balance as at 1 January 2018, net of tax	-	652,030	652,030
Change in fair value	-	671,184	671,183
Tax charged to other comprehensive income (expense) Less Reclassification adjustments for gains (losses)	-	(134,237)	(134,237)
included in profit or loss	-	(1,431,429)	(1,431,428)
Tax charged to other comprehensive income (expense)	-	286,286	286,286
Actuarial losses	17,371,264	_	17,371,264
Transfer actuarial losses	(17,371,264)	-	(17,371,264)
Closing balance as at 31 December 2018, net of tax	<u> </u>	43,834	43,834

24 Expenses by nature

Expenses that are included in calculating net profit can be classified as follows:

	finar	Consolidated ncial statements	finan	Separate cial statements
	2019	2018	2019	2018
	Baht	Baht	Baht	Baht
Cost of sales	18,944,215,403	10,592,670,709	-	-
Repair and maintenance	719,333,969	241,128,359	1,945,610	95,135
Employee benefit expenses	1,310,930,946	1,120,717,861	882,924,333	808,722,765
Consulting fee	165,058,280	103,010,407	85,524,044	60,521,696
Fee	60,304,997	64,485,952	5,838,378	10,931,310
Rental expenses	86,429,480	67,922,072	52,096,960	41,731,464
Depreciation and amortisation	2,433,921,620	1,391,656,087	6,104,154	1,353,960
Power development fund	90,154,092	52,299,875	-	-
Insurance expenses	80,119,503	47,420,546	419,668	453,536
Advertising and public relation expenses	79,929,510	220,788,363	62,973,964	28,988,853
Losses from business combinations	81,961,726	-	-	_
Travelling expense	42,082,710	32,975,625	31,792,752	26,583,847
Expenses for industrial estate	44,537,456	13,420,982	-	-
Others	365,172,018	221,848,920	137,567,863	85,269,057

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25 Finance costs				
	finar	Consolidated acial statements	financ	Separate cial statements
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Interest expense Guarantee fee Commitment fee Others	2,681,588,801 38,870,711 94,538,213 80,737,773	1,719,819,943 103,265,068 54,915,886 60,328,484	242,581,205 9,816,412 - 8,204,662	115,085,794 80,446,190 - 14,697,273
Total	2,895,735,498	1,938,329,381	260,602,279	210,229,257

26 Corporate income tax (benefits) expenses				
		Consolidated al statements	finan	Separate cial statements
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Current income tax: Current income tax on profits for the year	(11,801,920)	(197,550)	-	<u> </u>
Total current income tax	(11,801,920)	(197,550)	-	
Deferred income tax: Increase (decrease) in deferred tax assets (Note 15) Increase in deferred tax liabilities	104,495,123	75,502,819	6,969,561	(735,889)
(Note 15)	(79,016,574)	(54,675,076)	-	
Total deferred income tax	25,478,549	20,827,743	6,969,561	(735,889)
Total corporate income tax benefits (expenses)	13,676,629	20,630,193	6,969,561	(735,889)

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic weighted average tax rate applicable to profit of the home country of the Company as follows:

	finan	Consolidated cial statements	finar	Separate ncial statements
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Profit before corporate income tax	7,152,395,557	4,120,557,968	3,093,031,348	3,245,907,938
Tax calculated at a tax rate of 20% Tax effect of:	1,430,479,111	824,111,593	618,606,270	649,181,588
Income not subject to tax Income subject to tax under the	(938,990,687)	(536,855,292)	(703,839,732)	(696,134,400)
Revenue Code	44,935	98,494	38,740	98,494
Expenses not deductible for tax purpose	193,465,020	106,959,639	25,649,347	13,916,155
Expenses deductible at a greater amount Share of profits from an associate	(28,632,339)	(65,966,781)	(8,428,304)	918,380
and joint ventures Utilisation of previously unrecognised	(641,088,601)	(523,092,459)	-	-
tax losses Tax losses for which no deferred	(27,370,747)	(10,330,048)	-	-
income tax asset was recognised	132,016,931	139,097,372	61,004,118	32,755,672
Unrealised loss on exchange rate Tax effect from different tax rates of	(117,886,798)	36,324,915	-	- -
foreign entities Tax losses for which deferred	217,437	(1,090,664)	-	-
income tax asset was recognised	-	14,254	-	-
Others	(15,930,891)	10,098,784	_	
Corporate income tax (benefits) expenses	(13,676,629)	(20,630,193)	(6,969,561)	735,889

The weighted average applicable tax rate for the Group was 0.19% (2018: 0.50%).

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The corporate income tax credit (charge) relating to component of other comprehensive income is as follows:

				C	onsolidated finan	cial statements
•			2019			2018
	Before tax Baht	Tax (charge) credit Baht	After tax Baht	Before tax Baht	Tax (charge) credit Baht	After tax Baht
Actuarial gain (losses) Change in value of available-for-sale	(10,107,092)	2,021,418	(8,085,674)	(34,869,548)	6,973,910	(27,895,638)
investments Cash flow hedges	107,923,095 (565,100,710)	14,723 142,821	107,937,818 (564,957,889)	(340,029,991) 155,773,105	196,753 1,359,780	(339,833,238) 157,132,885
Currency translation differences Share of other comprehensive expense of an associate	(96,460,199)	· -	(96,460,199)	(6,403,963)	-	(6,403,963)
accounted for using the equity method	(35,225,709)	-	(35,225,709)	(6,327,178)	-	(6,327,178)
Other comprehensive income						
(expenses) for the year	(598,970,615)	2,178,962	(596,791,653)	(231,857,575)	8,530,443	(223,327,132)

					Separated finance	cial statements
			2019			2018
	Before tax Baht	Tax (charge) credit Baht	After tax Baht	Before tax Baht	Tax (charge) credit Baht	After tax Baht
Э	(18,816,190)	3,763,238	(15,052,952)	(21,714,080)	4,342,816	(17,371,264)
5	61,479	(12,296)	49,183	(760,246)	152,050	(608,196)
	(18,816,190)	3,750,942	(15,003,769)	(22,474,326)	4,494,866	(17,979,460)

Actuarial losses Change in value of available-for-sale investments
Other comprehensive income

Separate cial statements	finan	Consolidated ncial statements	finar	
2018	2019	2018	2019	
Baht	Baht	Baht	Baht	
(735,889)	-	(197,550)	(11,801,920)	
	6,969,561	20,827,743	25,478,549	
(735,889)	6,969,561	20,630,193	13,676,629	

Total corporate income tax benefits (expenses)

Current tax on profits for the year Deferred income taxes (Note 15)

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27 Basic earnings per share

Basic earnings per share for the owners of the parent is calculated by dividing the profit attributable to the owners of the parent by the weighted average number of ordinary shares held by shareholders during the year.

	finar	Consolidated ncial statements	finar	Separate ncial statements
For the year ended 31 December	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Basic earnings per share Profit attributable to the owners of the parent (Baht)	4,886,563,655	3,028,134,959	3,100,000,909	3,245,172,049
Weighted average number of ordinary shares outstanding (shares)	2,133,300,000	2,133,300,000	2,133,300,000	2,133,300,000
Basic earnings per share for the owners of the parent (Baht per share)	2.29	1.42	1.45	1.52

The Company does not have any potential dilutive ordinary shares in issue for the years ended 31 December 2019 and 2018, so no diluted earnings per share is presented.

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28 Financial instruments

(a) Financial assets and liabilities

As at 31 December the Company and subsidiaries have balance of financial assets and liabilities of currency as follows:

			(Unit : Baht/for	eign currency)
				Exchange rate
	Financial	Financial	As at 31 D	ecember 2019
Currency	assets	liabilities	Buying rate	Selling rate
USD	84,314,866	499,028,821	29.98 - 30.15	30.33
JPY	-	53,163,774	-	0.28
EUR	-	2,254,993	-	34.08
SEK	-	73,198,496	-	3.27
Laotian Kip	26,251,331,080	-	0.003	-
VND	646,993,856,148	965,844,685,094	0.001	0.001

			(Unit : Baht/ for	eign currency)
		_		Exchange rate
	Financial	Financial	As at 31 D	ecember 2018
Currency	assets	liabilities	Buying rate	Selling rate
USD	2,767,289	509,050,262	32.28 - 32.45	32.61
JPY	-	49,173,097	-	0.30
EUR	-	1,965,479	-	37.49
Singapore Dollar	11,561	=	23.42	-
SEK	=	79,040,515	-	3.64
Laotian Kip	30,678,330,700	=	0.003	-
VND	327,496,498	69,243,891,729	0.001	0.001

(b) Risk of exchange rate

As at 31 December, the Group had forward foreign exchange contracts. The settlement dates on open forward contracts ranged between 1 month and 60 months. Amounts in foreign currencies to be settled and contractual exchange rates of the outstanding contracts were:

	Consolidated financial statements	
As at 31 December	2019	2018
	Baht	Baht
JPY:		
- Average exchange rate (JPY/ THB)	0.31	0.30
- Foreign currency (JPY)	11,750,180,000	109,342,776
- Underlying currency (THB)	3,605,347,754	32,408,197
JPY:		
- Average exchange rate (JPY/ USD)	0.01	0.01
- Foreign currency (JPY)	43,192,650,000	22,820,437,500
- Underlying currency (USD)	407,168,678	213,439,627
SEK:		
- Average exchange rate (SEK/ THB)	3.60	3.77
- Foreign currency (SEK)	422,268,575	269,289,946
- Underlying currency (THB)	1,519,377,609	1,011,636,510
USD:		
- Average exchange rate (USD/ THB)	30.34	33.12
 Foreign currency (USD) Underlying currency (THB) 	79,305,000 2,406,011,473	3,696,078 122,420,160
	2,400,011,473	122,420,100
EUR:	20.20	40.50
 Average exchange rate (EUR/ THB) Foreign currency (EUR) 	39.39 3,030,000	40.52 533,171
- Underlying currency (THB)	119,356,245	21,603,939
EUR:	0,000,210	_ :,000,000
- Average exchange rate (EUR/ USD)	1.21	1.21
- Foreign currency (EUR)	15,150,000	15,150,000
- Underlying currency (USD)	18,323,789	18,323,789

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(c) Net fair value

The fair value is disclosed in Note 3.3.

29 Business combinations achieved in stage

TTC Energy Development Investment Joint Stock Company (TTCIZ-02)

On 14 May 2018, the Group acquired 49% interest of the total registered shares of TTCIZ-02, which invests in a solar power project in Vietnam, amounting to Vietnam Dong (VND) 275,184 million, equivalent to Baht 395.22 million. Subsequently, on 16 January 2019, the Group acquired an additional 41% of the total registered shares of TTCIZ-02 by purchasing 12.79 million ordinary shares at a par value of VND 10,000 per share. The purchase price was VND 255,712 million, equivalent to Baht 355.82 million, resulting in an increase in its shareholding portion in TTCIZ-02 to 90% of total registered shares. Therefore, the Group's management considered that the Group had a control over TTCIZ-02 and reclassified an investment in TTCIZ-02 from an investment in a joint venture to an investment in a subsidiary on that date. The reclassification of an investment in TTCIZ-02 from an investment in a joint venture to an investment in a subsidiary is considered to be a business combination achieved in stage, in accordance with TFRS No. 3, Business Combination. Therefore, the Group remeasured previously held equity interest in TTCIZ-02 to fair value at the acquisition date, and recognised any gains or losses arising from such remeasurement in profit or loss as details below:

	Consolidated financial statements
	At the date of business combination achieved in stage
	Baht
Fair value of equity interest in TTCIZ-02 held before the business combination achieved in stage (proportion of 49%) Book value of equity interest in TTCIZ-02 held before	356,322,852
the business combination achieved in stage (proportion of 49%)	383,850,170
Accounting loss on a business combination achieved in stage	(27,527,318)

The consideration paid at the acquisition date achieved in stage is as follows:

	Dunt
Fair value of consideration paid Fair value of equity interest in TTCIZ-02	355,824,958
held before the business combination achieved in stage	356,322,852
	712,147,810

Details of the fair value of net assets acquired at the date on which the Group obtained control, as well as the non-controlling interest in TTCIZ-02 at the same date are as follows:

	Baht
Recognised fair value amount of identifiable assets acquired and liabilities assumed (proportion of 100%)	
Cash and cash equivalents	151,365,277
Other accounts receivable	4,671,951
Value added tax	10,356,451
Other current assets	6,843
Advance payments for land and power plant construction	49,023,615
Property, plant and equipment, net	553,516,689
Intangible asset, net	369,106,122
Trade accounts payable	(2,497,896)
Other accounts payable	(1,083,842)
Accrued expenses	(333,454,491)
Deferred tax liability	(73,821,224)
Fair value of net assets acquired	727,189,495
Fair value of net assets acquired (proportion of 90%)	654,470,546
Non-controlling interests (proportion of 10%)	72,718,949

Baht

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Goodwill

The consideration paid at the acquisition date achieved in stage
Fair value of net assets acquired (proportion of 90%)

Goodwill

57,677,264

Goodwill is not amortised but will be tested for impairment annually.

The process of determining fair value of the acquired net assets, interest in TTCIZ-02 held before the business combination achieved in stage, including goodwill and reviewing purchase price allocation (PPA) of TTCIZ-02 has been finalised in the second guarter of 2019.

The non-controlling interests in TTCIZ-02 were recognised by using the non-controlling interests' proportionate share of the TTCIZ-02's fair value of net assets.

Intangible asset represents the assessed fair value from the rights in Power Purchase Agreement acquired as part of the acquisition, which is amortised over the contract term of Power Purchase Agreement.

Mekong Wind Power Joint Stock Company (Mekong Wind)

On 10 August 2018, the Group acquired 49% interest of the total registered shares of Mekong Wind, which invests in wind and solar power project in Vietnam, amounting to VND 308,700 million, equivalent to Baht 436.34 million. (As at 31 December 2019, the investment changed to VND 274,400 million, equivalent to Baht 387.87 million in comply with the conditions as specified in the Share Purchase Agreement.) Subsequently, on 10 June 2019, the Group acquired an additional 46% of the total registered shares of Mekong Wind by purchasing 16.10 million ordinary shares at a par value of VND 10,000 per share. The purchase price was VND 161,000 million, equivalent to Baht 219.04 million, resulting in an increase in its shareholding portion in Mekong Wind to 95% of total registered shares. Therefore, the Group's management considered that the Group had a control over Mekong Wind and reclassified an investment in Mekong Wind from an investment in a joint venture to an investment in a subsidiary on that date. The reclassification of an investment in Mekong Wind from an investment in a joint venture to an investment in a subsidiary is considered to be a business combination achieved in stage, in accordance with TFRS No. 3, Business Combination. Therefore, the Group remeasured previously held equity interest in Mekong Wind to fair value at the acquisition date, and recognised any gains or losses arising from such remeasurement in profit or loss as details below:

	Consolidated financial statements At the date of business
	combination achieved in stage
	Baht
Fair value of equity interest in Mekong Wind held before the business combination achieved in stage (proportion of 49%)	274,126,118
Book value of equity interest in Mekong Wind held before the business combination achieved in stage (proportion of 49%)	373,192,224
Accounting loss on a business combination achieved in stage	(99,066,106)

The consideration paid at the acquisition date achieved in stage is as follows:

	Baht
Fair value of consideration paid Fair value of equity interest in Mekong Wind	219,040,500
held before the business combination achieved in stage	274,126,118
	493,166,618

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Details of the fair value of net assets acquired at the date on which the Group obtained control, as well as the non-controlling interest in Mekong Wind at the same date are as follows:

	Baht
Recognised fair value amount of identifiable assets acquired and liabilities assumed (proportion of 100%)	
Cash and cash equivalents	426,887,888
Prepaid expenses	39,114
Spare parts	323,282
Value added tax	1,765,872
Other current assets	37,249,250
Property, plant and equipment, net	25,260,202
Intangible asset, net	81,761,286
Advance payments for land and power plant construction	2,556,544
Other accounts payable	(63,508)
Deferred tax liability	(16,338,874)
Fair value of net assets acquired	559,441,056
Fair value of net assets acquired (proportion of 95%)	531,469,003
Non-controlling interests (proportion of 5%)	27,972,053
Gain on bargain purchase	
	Baht
The consideration paid at the acquisition date achieved in stage	493,166,618
Fair value of net assets acquired (proportion of 95%)	(531,469,003)
Gain on bargain purchase	(38,302,385)

The process of determining fair value of the acquired net assets, interest in Mekong held before the business combination achieved in stage, including goodwill and reviewing purchase price allocation (PPA) of Mekong has been finalised in the fourth quarter of 2019.

The non-controlling interests in Mekong Wind were recognised by using the non-controlling interests' proportionate share of the Mekong Wind's fair value of net assets.

Intangible asset represents the assessed fair value from the rights in Power Purchase Agreement acquired as part of the acquisition, which is amortised over the contract term of Power Purchase Agreement.

TTC Green Energy Joint Stock Company (TTCIZ-01)

On 3 April 2018, the Group acquired 49% interest of the total registered shares of TTCIZ-01, which invests in a solar power project in Vietnam, amounting to VND 362,502 million, equivalent to Baht 519.47 million. Subsequently, on 19 November 2019, the Group acquired an additional 41% of the total registered shares of TTCIZ-01 by purchasing 16.85 million ordinary shares at a par value of VND 10,000 per share. The purchase price was VND 370,722 million, equivalent to Baht 491.80 million, resulting in an increase in its shareholding portion in TTCIZ-01 to 90% of total registered shares. Therefore, the Group's management considered that the Group had a control over TTCIZ-01 and reclassified an investment in TTCIZ-01 from an investment in a joint venture to an investment in a subsidiary on that date. The reclassification of an investment in TTCIZ-01 from an investment in a joint venture to an investment in a subsidiary is considered to be a business combination achieved in stage, in accordance with TFRS No. 3, Business Combination. Therefore, the Group remeasured previously held equity interest in TTCIZ-01 to fair value at the acquisition date, and recognised any gains or losses arising from such remeasurement in profit or loss as details below:

	Consolidated financial statements
	At the date of business combination achieved in stage
	Baht
Fair value of equity interest in TTCIZ-01 held before the business combination achieved in stage (proportion of 49%) Book value of equity interest in TTCIZ-01 held before	506,254,977
the business combination achieved in stage (proportion of 49%)	499,925,664
Accounting gain on a business combination achieved in stage	6,329,313

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The consideration paid at the acquisition date achieved in stage is as follows:

Fair value of consideration paid Fair value of equity interest in TTCIZ-01	491,799,805
held before the business combination achieved in stage	506,254,977
	998,054,782

Baht

Details of the fair value of net assets acquired at the date on which the Group obtained control, as well as the non-controlling interest in TTCIZ-01 at the same date are as follows:

	Baht
Recognised fair value amount of identifiable assets acquired and liabilities assumed (proportion of 100%) Cash and cash equivalents Trade accounts receivable Prepaid expenses Value added tax Other current assets Property, plant and equipment, net Intangible asset, net Other non-current assets	43,920,383 52,671,562 1,054,223 78,423,077 3,824,206 1,657,678,611 543,600,630 16,752,810
Other accounts payable Accounts payable for power plant construction Interest payable Accrued expenses Current portion of long-term loans from financial institutions, net Corporate income tax payable Long-term loans from financial institutions, net Deferred tax liability	(648,922) (1,628,965) (10,430,608) (1,506,355) (90,358,800) (13,372) (1,151,689,948) (108,475,107)
Fair value of net assets acquired	1,033,173,425
Fair value of net assets acquired (proportion of 90%) Non-controlling interests (proportion of 10%)	929,856,083 103,317,342
Goodwill	
	Baht
The consideration paid at the acquisition date achieved in stage Fair value of net assets acquired (proportion of 90%)	998,054,782 (929,856,083)
Goodwill	68,198,699

Goodwill is not amortised but will be tested for impairment annually.

The process of determining fair value of the acquired net assets, interest in TTCIZ-01 held before the business combination achieved in stage, including goodwill and reviewing purchase price allocation (PPA) of TTCIZ-01 has been finalised in the fourth quarter of 2019.

The non-controlling interests in TTCIZ-01 were recognised by using the non-controlling interests' proportionate share of the TTCIZ-01's fair value of net assets.

Intangible asset represents the assessed fair value from the rights in Power Purchase Agreement acquired as part of the acquisition, which is amortised over the contract term of Power Purchase Agreement.

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30 Related party transactions

Individuals and entities that directly or indirectly control or are controlled by or are under common control with the Company, including investment entities, associates, joint venture and individuals or entities having significant influence over the Company, key management personnel, including directors and officers of the Company and close members of the family of these individuals and entities associated with these individuals also constitute related parties.

In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

Mr. Sarath Ratanavadi who is the Chief Executive Officer of the Company has the ultimate controlling in the Company.

Percentage of direct shareholding

Mr. Sarath Ratanavadi

35.44

Individual or other companies that are related to the Group and the Company by shareholders or joint shareholders or common directors, including investment in subsidiaries, an associate and joint ventures are disclosed in Note 11. As at 31 December 2019 and 31 December 2018, individual or other related companies are as follows:

Relationship

Mr. Sarath Ratanavadi Group of Pomodoro Group Company Limited Mitsui & Co., Ltd. Holding 35.44% of ordinary shares and Chief Executive Officer Having a common shareholder Indirectly holding ordinary shares in subsidiaries of the Group

Nature of transactions Pricing policy

Sales goods Services Interest income Other income Loans Dividend income

Key management compensation

Prices as agreed in the contracts
Prices as agreed in the contracts
Interest rates as agreed in the contracts
Prices as agreed in the contracts
Credit facilities and interest rates as agreed in the contracts
From approval of shareholders of subsidiaries and an associate

From approval of shareholders and directors

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The following are material transactions that were carried out with subsidiaries, an associate, joint ventures and related parties in a normal course of business and in accordance with specific terms and conditions of the contracts.

	Consolidated financial statements		Separate financial statements	
For the year ended 31 December	2019	2018	2019	2018
	Baht	Baht	Baht	Baht
Revenue from management fee Subsidiaries	-		629,320,522	486,014,648
An associate	309,900,000	300,000,000	309,900,000	300,000,000
	309,900,000	300,000,000	939,220,522	786,014,648
Interest income from loans to related parties Subsidiaries	-	-	147,140,752	99,218,545
A joint venture	-	369,715	-	369,715
	_	369,715	147,140,752	99,588,260
Interest income from advance to related parties				
Subsidiaries	-	-	2,209,380	6,125,285
	-	-	2,209,380	6,125,285
Dividend income Subsidiaries An associate	-	- -	1,282,678,659 2,236,520,000	362,699,999 3,117,972,000
	-	-	3,519,198,659	3,480,671,999
Other income Subsidiaries		_	13,125,000	34,017,545
	_	_	13,125,000	34,017,545
Administrative expenses An associate	16 005 365	12 775 170		
Related parties - common shareholder	16,825,365 5,851,165	13,775,170 5,182,585	5,785,528	5,025,334
	22,676,530	18,957,755	5,785,528	5,025,334
	22,070,030	10,801,100	5,705,520	0,020,004
Key management compensation Short-term employee benefits Post-employee benefits	108,002,000 29,551,521	127,437,409 3,766,266	108,002,000 29,551,521	127,437,409 3,766,266
	137,553,521	131,203,675	137,553,521	131,203,675

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	Consolidated		Separate	
A		cial statements		cial statements
As at 31 December	2019	2018	2019	2018 Baht
	Baht	Baht	Baht	Baht
Accrued service income from related parties				
Subsidiaries	-	-	151,831,034	129,300,000
	_	-	151,831,034	129,300,000
Amounts due from related parties				
Subsidiaries - due within one year - due more than one year	-	-	5,099,199 68,621,686	227,375 55,107,470
	-	-	73,720,885	55,334,845
Advance payments to related parties				
Subsidiaries - due within one year - due more than one year	- -	-	79,014,301	605,560 79,610,923
		-	79,014,301	80,216,483
Loans to related parties				
Subsidiaries - short-term loans	-	_	2,628,613,924	178,046,290
- current-portion of long-term loans	_	_	758,100,000	
- long-term loans	-	-	2,381,455,462	2,744,324,531
A joint venture - long-term loans	2,324,077,623	-	-	<u>-</u>
	0.004.077.000		5 700 400 000	0.000.070.004
	2,324,077,623	-	5,768,169,386	2,922,370,821
Interest receivable from related parties				
Subsidiaries - due within one year	-	-	57,144,852	74,186
- due more than one year	-	-	77,233,754	116,606,396
	-	-	134,378,606	116,680,582
Amount due to voleted neutice				
Amount due to related parties An associate	300,000	300,000	300,000	300,000
Related parties - common shareholder	1,398,764	1,054,509	1,374,178	1,005,075
related parties common endremend.				
	1,698,764	1,354,509	1,674,178	1,305,075
Short-term loan from a related party A related party - indirect common shareholder	324,900,000	324,900,000	_	-
· ·	324,900,000	324,900,000	-	-

Gulf Energy Development Public Company Limited

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Short-term loans to subsidiaries

Movements of short-term loans to subsidiaries can be analysed as follows:

	Consolidated financial	Separate financial
	statements	statements
For the year ended 31 December 2019	Baht	Baht
Opening balance Payments for short-term loans to subsidiaries	-	178,046,290 4,983,119,286
Proceeds from short-term loans to subsidiaries	-	(2,446,531,308)
Loss from exchange rate	-	(86,020,344)
Closing balance	<u>-</u>	2,628,613,924

As at 31 December 2019, the Company had an outstanding short-term loan to Gulf International Holding Pte. Ltd., and Gulf Energy International Company Limited, amounting to Baht 968.57 million and Baht 1,660.04 million, respectively. The interest rate is fixed per annum (31 December 2018: the Company had an outstanding short-term loan to Gulf International Holding Pte. Ltd., amounting to Baht 178.05 million. The interest rate is fixed per annum).

Long-term loans to subsidiaries

Movements of long-term loans to subsidiaries can be analysed as follows:

	Consolidated financial	Separate financial
	statements	statements
For the year ended 31 December 2019	Baht	Baht
Opening balance	+	2,744,324,531
Payments for loans to a subsidiary	-	395,230,931
Closing balance	-	3,139,555,462

As at 31 December 2019, the Company had an outstanding long-term loan to Gulf International Investment (Hong Kong) Limited and Independent Power Development Company Limited, which are subsidiaries, amounting to Baht 2,381.45 million and Baht 758.10 million, respectively. The interest rate is fixed per annum. (As at 31 December 2018, the Company had an outstanding long-term loan to Gulf International Investment (Hong Kong) Limited and Independent Power Development Company Limited, which are subsidiaries, amounting to Baht 1,986.22 million and Baht 758.10 million, respectively. The interest rate is fixed per annum).

Long-term loans to a joint venture

Movements of long-term loans to a joint venture can be analysed as follows:

	Consolidated financial statements	Separate financial statements
For the year ended 31 December 2019	Baht	Baht
Opening balance Proceeds from loan to a joint venture Currency translation differences	2,403,271,481 (79,193,858)	- - -
Closing balance	2,324,077,623	_

As at 31 December 2019, the Group had an outstanding long-term loan to Duqm Power Company L.L.C. amounting to Baht 2,324.08 million (31 December 2018: Nil).

Short-term loan from a related party

As at 31 December 2019 and 2018, the Group had an outstanding short-term loan from Mitsui & Co., Ltd., amounting to Baht 324.90 million. The interest rate is fixed per annum.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

31 Litigation

During 2014, the Monitoring and Auditing Committee of Fiscal Expenditures (MACFE) resolved to appoint the Energy Regulatory Commission (ERC) to initiate an investigation on the bidding process of the 2012 Independent Power Producer (IPP) Bidding Solicitation, which was alleged to be non-compliance with Thailand's Power Development Plan and the relevant ERC regulations. The ERC then established a sub-committee to conduct an investigation and reported its findings to the MACFE. The MACFE, later, assigned the Ministry of Energy (MOE) to further investigate the IPP Bidding Solicitation in which the MOE appointed an Ad Hoc Committee from the MOE to further investigate the IPP Bidding Solicitation. Subsequently, the MOE submitted letters to the Group requesting to negotiate with the Group to cancel one of the IPP projects, of which the Power Purchase Agreement (PPA) with Electricity Generating Authority of Thailand (EGAT) was signed. In addition, the MOE sent a letter requesting the Board of Investment of Thailand (BOI) to delay approval process of both IPP projects of the Group.

However, on 23 July 2015, Independent Power Development Company (IPD), Gulf SRC Company Limited (GSRC), and Gulf PD Company Limited (GPD) (collectively Plaintiffs) filed an administrative lawsuit to the Central Administrative Court of Thailand (the Administrative Court) against (i) ERC, (ii) the Office of the ERC, (iii) MOE and (iv) the Ad Hoc Committee (collectively, the Defendants) that the investigation was not performed in accordance with the applicable laws, some of the Defendants who had authority for the investigation had conflicts of interest, information determined by the Defendants during the investigation was distorted and the Plaintiffs were obstructed to develop the IPP projects by the action of the Defendants. The Plaintiffs requested the Administrative Court to issue an order to prohibit the Defendants from conducting any further unlawful investigation on the IPPs Bidding Solicitation, or to stop using the result of such unlawful investigation whether internally or externally with other government authorities.

On 8 December 2016, the Administrative Court judged that the investigation conducted by the Defendants was lawful, however, the investigate, use or reference of the result of investigation or any action were prohibited such action will cause damages to the Plaintiffs. The Central Administrative Court also ordered the MOE to revoke its letter requesting the BOI to delay approval process of the IPP projects. Subsequently, on 24 March 2017, GSRC and GPD finally obtained BOI approval.

On 4 January 2017, the MOE submitted an appeal to the Supreme Court and the Plaintiffs had to submit a petition of appeal to the Supreme Administrative Court by 5 June 2017.

On 5 June 2017, the Plaintiffs submitted a request for an extension of a petition to appeal for 15 days, which was dued on 20 June 2017. On 20 June 2017, the Plaintiffs already submitted a petition to appeal to the Supreme Administrative Court.

As at 31 December 2019, there was no provision related to this litigation has been accrued in the Group's consolidated financial statements, because the Group's management believes that there will be no significant liability from the result of the above lawsuit cases.

32 Promotional privileges

The Group has been granted promotional privileges by the Office of the Board of Investment under promotion certificates in respect of electricity generating. These subsidiaries have been granted exemption from certain taxes and duties including exemption from corporate income tax for a period of eight years from the date of first revenue. As promoted entities, these subsidiaries are required to comply with the terms and conditions specified in the promotion certificates.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

Commitments and significant agreements made during the year

Commitments

The Company entered into lease agreements in respect of space rental for office and vehicle rental. As at 31 December, rental commitments under these agreements in the subsequent years are as follows:

Due

Within one year Later than one year but not later than five years

	Unit: Baht
2019	2018
45,665,760	30,422,240
33,092,280	43,026,910
78,758,040	73,449,150

As at 31 December 2019, the Company had outstanding bank guarantees issued by financial institutions amounting to Baht 400 million (31 December 2018: Baht 6,064 million). The subsidiaries had outstanding bank guarantees issued by financial institutions as a guarantee for their Power Purchase Agreements with EGAT, in respect of electricity use in the projects, and in respect of Public-Private Partnership Contract (PPP Contract) with Industrial Estate Authority of Thailand as follows:

		Unit: Baht million
Name of subsidiaries	2019	2018
Gulf SRC Company Limited	1,250	2,500
Gulf PD Company Limited	2,500	1,250
Gulf VTP Company Limited	229	235
Gulf TS1 Company Limited	241	231
Gulf TS2 Company Limited	239	231
Gulf TS3 Company Limited	229	233
Gulf TS4 Company Limited	228	233
Gulf NC Company Limited	238	237
Gulf BL Company Limited	234	233
Gulf BP Company Limited	234	726
Gulf NLL2 Company Limited	234	734
Gulf NPM Company Limited	234	501
Gulf NRV1 Company Limited	230	501
Gulf NRV2 Company Limited	230	501
Gulf Chana Green Company Limited	7	4
Gulf MTP LNG Terminal Company Limited	2,400	-

Significant agreements

Management Service Agreements with subsidiaries (a)

On 30 September 2019, the Company entered into Management Services Agreement with Independent Power Development Company Limited, a subsidiary of the Company to provide business advice, coordination, supervision and management services. The service fee will be charged monthly at the rate and conditions as specified in the agreement. The agreement shall become effective and continue until either party in agreement gives a written notice of termination to another party in advance in the event of the defaulting party commits a material breach of the agreement.

(b) **Development Service Agreements**

On 1 August 2019, the Company and Mitsui & Co., Ltd., entered into Development Services Agreements with Gulf SRC Company Limited, a subsidiary of Independent Power Development Company Limited, which operates as an independence power producer, to assist in the project development phase and advice on significant agreements and raise capital for the project. The agreement charges a success fee totaling Baht 500 million. The agreement would be terminated when either party in each agreement gives a written notice of termination to another party in advance in the event of the defaulting party commits a material breach of the agreement.

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

(c) Service Agreements

On 2 May 2019, Independent Power Development Company Limited, a subsidiary of the company entered into Service Agreement with Mit-Power Capitals (Thailand) Limited for business advisory services, information services, and engineering and technical services. The service fee will be charged monthly at the rate and conditions as specified in the agreement.

(d) Power Purchase Agreement

Subsidiaries of Gulf MP Company Limited

The subsidiaries of Gulf MP Company Limited entered into the Power Purchase Agreements with EGAT to generate capacity charge and deliver energy charge at the level specified in the agreements. The term of the Power Purchase Agreements is 25 years.

The subsidiaries have Commercial Operation Date as follows:

Name of subsidiaries	Commercial Operation Date	_
Gulf VTP Company Limited	16 May 2017	
Gulf TS1 Company Limited	8 July 2017	
Gulf TS2 Company Limited	1 September 2017	
Gulf TS3 Company Limited	1 November 2017	
Gulf TS4 Company Limited	1 January 2018	
Gulf NC Company Limited	1 March 2018	
Gulf BL Company Limited	1 September 2018	
Gulf BP Company Limited	1 November 2018	
Gulf NLL2 Company Limited	1 January 2019	
Gulf NPM Company Limited	1 March 2019	
Gulf NRV1 Company Limited	1 May 2019	
Gulf NRV2 Company Limited	1 July 2019	

Subsidiaries of Independent Power Development Company Limited

The subsidiaries of Independent Power Development Company Limited entered into the Power Purchase Agreements with EGAT to generate capacity charge and deliver energy charge at the level specified in the agreements. The term of the Power Purchase Agreements is 25 years. Under the Power Purchase Agreements, the exchange rate risk is partly compensated by capacity payment charged to EGAT in each month.

The subsidiaries have Scheduled Commercial Operation Date as follows:

Name of subsidiaries	Scheduled Commercial Operation Date
Gulf SRC Company Limited	31 March 2021 (the 1st generating)
	1 October 2021 (the 2 nd generating) 31 March 2022 (the 3 rd generating)
Gulf PD Company Limited	1 October 2022 (the 4 th generating) 31 March 2023 (the 1 st generating)
	1 October 2023 (the 2 nd generating) 31 March 2024 (the 3 rd generating) 1 October 2024 (the 4 th generating)
	. Satisfaction of the sati

Gulf Chana Green Company Limited

Gulf Chana Green Company Limited, a subsidiary, entered into the Power Purchase Agreement with EGAT to generate capacity charge and deliver energy charge at the level as specified in the agreement. The term of the Power Purchase Agreement is 5 years effective from the date both parties signed the agreement and can be renewed every 5 years after given the written notice not less than 30 days in advance to another party. This subsidiary has the Schedule Commercial Operation Date on 1 March 2020.

Gulf Energy Development Public Company Limited

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Subsidiaries of Gulf Solar Company Limited

The subsidiaries of Gulf Solar Company Limited entered into the Power Purchase Agreements with Provincial Electricity Authority (PEA) to sell the electricity generated from the solar photovoltaic installation on the rooftop. The term of the Power Purchase Agreements is 25 years effective from the Scheduled Commercial Operation Date and they have to comply with the conditions as stipulated in the agreements.

The subsidiaries have Commercial Operation Date as follows:

Name of subsidiariesCommercial Operation DateGulf Solar BV Company Limited23 June 2014Gulf Solar KKS Company Limited26 December 2014Gulf Solar TS1 Company Limited27 August 2014Gulf Solar TS2 Company Limited8 January 2015

Subsidiaries of Gulf International Holding Pte. Ltd.

The subsidiaries of Gulf International Holding Pte. Ltd. entered into the Power Purchase Agreements with Vietnam Electricity (EVN) to generate and deliver energy charge at the level as specified in the agreement. The term of the Power Purchase Agreements is 20 years effective from the Scheduled Commercial Operation Date and they have to comply with the conditions as stipulated in the agreements.

The subsidiaries have Scheduled Commercial Operation Date as follows:

Scheduled Commercial Operation Date
6 March 2019
19 April 2019 31 December 2020

(e) Supply Agreements, Construction Agreements and Electricity Transmission Lines

Subsidiaries of Independent Power Development Company Limited

The subsidiaries of Independent Power Development Company Limited entered into engineering services agreements, supply agreements and construction agreements. The contract value totaling to USD 424.30 million, JPY 83,317.90 million, EUR 40.40 million and Baht 27,834.82 million.

As at 31 December 2019, these subsidiaries had outstanding commitment from engineering services agreements, supply agreements and construction agreements amounting to USD 402.75 million, JPY 78,969.95 million, EUR 38.38 million and Baht 15,582 million (31 December 2018: these subsidiaries had outstanding commitment from engineering services agreements, supply agreements and construction agreements amounting to USD 402.75 million, JPY 78,969.95 million, EUR 38.38 million and Baht 20,896.05 million).

Gulf Chana Green Company Limited

Gulf Chana Green Company Limited entered into engineering services agreement, supply agreement and construction agreement. The contract value totaling to Baht 1,500 million.

As at 31 December 2019, this subsidiary had outstanding commitment from engineering services agreement, supply agreement and construction agreement amounting to Baht 60 million (31 December 2018: Baht 630 million).

A Subsidiary of Gulf International Holding Pte. Ltd.

A Subsidiary of Gulf International Holding Pte. Ltd. entered into engineering services agreement, supply agreement and construction agreement for wind power project and electricity transmission lines facilities. The contract value totaling to USD 518.22 million and VND 99,300 million, respectively.

As at 31 December 2019, this subsidiary had outstanding commitment from engineering services agreement, supply agreement and construction agreement for wind power project and electricity transmission lines facilities amounting to USD 518.22 million and VND 72,116 million, respectively (31 December 2018: Nil).

Gulf Energy Development Public Company Limited

For the year ended 31 December 2019

(f) Foreign currency forward contracts

As at 31 December 2019, the Group's subsidiaries entered into foreign currency forward contracts with local financial institutions in order to manage exposure of fluctuations in SEK, EUR, USD and JPY. The details of foreign currency forward contracts are as follows:

Exchange rates		ge rates		Fixed exchange rates
	Currency	Currency	Amount	As in contracts
	Baht	SEK	SEK 422.25 million	3.44 - 3.74 Baht per SEK
	Baht	USD	USD 79.31 million	29.56 - 31.41 Baht per USD
	Baht	JPY	JPY 11,750.18 million	0.30 - 0.32 Baht per JPY
	Baht	EUR	EUR 3.03 million	39.22 - 39.56 Baht per EUR
	USD	JPY	JPY 43,192.65 million	0.01 USD per JPY
	USD	EUR	EUR 15.15 million	1.18 - 1.24 USD per EUR

As at 31 December 2018, the Group's subsidiaries entered into foreign currency forward contracts with local financial institutions in order to manage exposure of fluctuations in SEK, EUR, USD and JPY. The details of foreign currency forward contracts are as follows:

Exchange rates		Fixed exchange rates		
Currency	Currency	Amount	As in contracts	
Baht	SEK	SEK 269.29 million	3.65 - 4.26 Baht per SEK	
Baht	USD	USD 3.70 million	32.68 - 33.39 Baht per USD	
Baht	JPY	JPY 109.34 million	0.29 - 0.33 Baht per JPY	
Baht	EUR	EUR 0.54 million	39.30 - 40.65 Baht per EUR	
USD	JPY	JPY 22,820.44 million	0.01 USD per JPY	
USD	EUR	EUR 15.15 million	1.18 - 1.24 USD per EUR	

(g) Long-term Service Agreement

The Group's subsidiaries entered into Long-term Service Agreements for the maintenance of machinery and equipment associated with its gas turbines and wind turbines used for the power plant operation. The service includes the replacement of the main machinery as specified in the agreement. For the agreement of gas turbines, the agreement is effective from the agreement date until the expiration of the operation of gas turbine under the Power Purchase Agreement. For the agreement of wind turbines, the term of agreement is 10 years, and can be extended to 20 years. The contract value can be adjusted annually based on conditions as stipulated in the agreement.

(h) Public Private Partnership (PPP) Contract in Map Ta Phut Industrial Port Development Phase 3 Project

During the year 2019, the Company and PTT Tank Terminal Company Limited registered to establish a new subsidiary under the name of Gulf MTP LNG Terminal Company Limited with a registered capital of Baht 3,500 million, in which the Company has shareholding of 70%. Gulf MTP LNG Terminal was established to enter into a PPP contract for Map Ta Phut Industrial Port Development Phase 3 Project with contract terms of 30 years. The total project value is approximately Baht 40,900 million, comprised of design and construction of the infrastructure and the right to construct the port and LNG terminal (Superstructure) to facilitate shipment of LNG volume. The LNG terminal phase 1 is expected to be operated by approximately in 2025.

(i) Decommissioning Management Service Agreement

On 1 November 2019, the Company entered into the Decommissioning Management Service Agreement with Gulf Cogeneration Company Limited, Samutprakarn Cogeneration Company Limited and Nong Khae Cogeneration Company Limited, subsidiaries of Gulf Electric Public Company Limited's Group, in order to provide decommissioning management service after the expiration of their Power Purchase Agreements. The scope of services and price are specified in the agreements. The agreements are effective for periods of 28 months after the expiration of the Power Purchase Agreement of each company.

Gulf Energy Development Public Company Limited

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34 Events after the reporting period

On 13 May 2019, at the Board of Directors' Meeting of the Company, the Board of Directors approved Bangkok Smart Energy Company Limited, a joint venture of the Company, to jointly establish Bangkok Smart DCS Company Limited and Bangkok Smart Power Company Limited. These new companies sell electricity and operate the district cooling system. Bangkok Smart DCS Company Limited has an authorised share capital of 100,000 ordinary shares at a par value of Baht 10 each and Bangkok Smart Power Company Limited has an authorised share capital of 100,000 ordinary shares at a par value of Baht 10 each. The Company paid the share subscription according to its shareholding portion of 49% and 40%, respectively, amounting to Baht 890,000 on 3 January 2020.

On 27 May 2019, at the Board of Directors' Meeting of the Company, the Board of Directors approved the purchase of 196,000 ordinary shares at a par value of Baht 10 each, representing 49% shareholding interests of Hin Kong Power Holding Company Limited from Ratch Group Public Company Limited. The Company fully paid the share subscription amounting to Baht 1.96 million on 3 January 2020. Hin Kong Power Holding Company Limited invests in Hin Kong Power Company Limited, for developing and operating the 1,400 MW Hin Kong Power Plant Project.

On 27 May 2019, at the Board of Directors' Meeting of the Company, the Board of Directors approved to purchase 12.08 million ordinary shares at a par value of Baht 10 each, representing 35% shareholding interests of Burapa Power Holding Company Limited from National Power Supply Public Company Limited. The Company fully paid the share subscription amounting to Baht 120.75 million on 17 January 2020. Burapa Power Holding Company Limited invests in Burapa Power Generation Company Limited, for developing and operating the 540 MW Burapa Power Plant Project.

On 21 February 2020, at the Board of Directors' Meeting of the Company, the Board of Directors approved a proposal to Annual General Shareholders' Meeting for the year 2020 to consider the payment of dividends at Baht 1.30 per share to the shareholders who are entitled to receive the dividend. The Company will propose the payment of dividend at the next Annual General Shareholders' Meeting of the Company.

Loan facility agreement from financial institutions

On 22 January 2020, TTC Energy Development Investment Joint Stock Company, an indirect subsidiary of the Company, entered into loan facilities agreement with onshore and offshore financial institutions in USD amounting to USD 37.80 million with the term between 15 and 17 years.

Increase in the authorised share capital of subsidiaries

On 7 February 2020, at the Extraordinary Shareholders' Meeting of Gulf Energy International Company Limited, the shareholders passed a resolution to approve an increase in the authorised share capital from Baht 3,562 million to Baht 3,957.50 million by issuing 39.55 million new ordinary shares at a par value of Baht 10 each. The ordinary shares were called for additional paid-up capital of 80.70 million ordinary shares at Baht 0.82 each, amounting to Baht 65.80 million and 39.55 million ordinary shares at Baht 8.34 each, amounting to Baht 329.70 million. The total additional paid-up capital was Baht 395.50 million. The Company paid the share subscription of Baht 395.50 million according to its shareholding portion of 99.99% on 11 February 2020.

Increase in the authorised share capital of indirect subsidiaries

On 18 February 2020, at the Extraordinary Shareholders' Meeting of Gulf SRC Company Limited, the shareholders passed a resolution to approve an increase in the authorised share capital from Baht 1,740 million to Baht 3,740 million by issuing 200 million new ordinary shares at a par value of Baht 10 each. The ordinary shares were called for additional paid-up capital at Baht 2.50 each, amounting to Baht 500 million. The Company paid the share subscription of Baht 500 million according to its shareholding portion of 99.99% on 21 February 2020.

On 7 February 2020, at the Extraordinary Shareholders' Meeting of Mekong Wind Power Joint Stock Company, the shareholders passed a resolution to approve an increase in the authorised share capital from VND 391,963.62 million to VND 700,170.94 million by issuing 30.82 million new ordinary shares at a par value of VND 10,000 each. The ordinary shares were called for additional fully paid-up capital, amounting to VND 308,207.32 million. The Company paid the share subscription of VND 308,207.32 million on 12 February 2020.

On 18 December 2019, at the Extraordinary Shareholders' Meeting of Gulf International Holding Pte. Ltd, the shareholders passed a resolution to approve an increase in the authorised share capital from USD 84.95 million to USD 97.71 million by issuing 12.76 million new ordinary shares at a par value of USD 1 each. The ordinary shares were called for additional fully paid-up capital, amounting to USD 12.76 million. The Company paid the share subscription of USD 12.76 million according to its shareholding portion of 99.99% on 11 February 2020.

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Call for additional paid-up capital of subsidiaries

On 23 December 2019, at the Board of Directors' Meeting of the Gulf Chana Green Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 51.90 million ordinary shares at Baht 3.01 each, amounting to Baht 156.25 million and 6.50 million ordinary shares at Baht 7.50 each, amounting to Baht 48.75 million. The total additional paid-up capital was Baht 205 million. The Company paid the share subscription of Baht 205 million according to its shareholding portion of 99.99% on 2 January 2020.

On 31 January 2020, at the Board of Directors' Meeting of the Independent Power Development Company Limited, the Board of Directors passed a resolution to approve the call for additional paid-up capital of 254 million ordinary shares at Baht 1.93 each, amounting to Baht 489.80 million and 198.87 million ordinary shares at Baht 1.56 each, amounting to Baht 310.20 million. The total additional paid-up capital was Baht 800 million. The Company paid the share subscription of Baht 560 million according to its shareholding portion of 70% on 20 February 2020.

Increase in the authorised share capital of a joint venture

On 17 January 2020, at the Extraordinary Shareholders' Meeting of the Bangkok Smart Energy Company Limited, the shareholders passed a resolution to approve an increase in the authorised share capital from Baht 3 million to Baht 36 million by issuing 3.30 million new ordinary shares at a par value of Baht 10 each. The ordinary shares were called for additional fully paid-up capital at Baht 10 each, amounting to Baht 33 million. The Company paid the share subscription of Baht 11 million according to its shareholding portion of 33.33% on 24 January 2020.



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