

– Translation –



Gulf Energy Development Public Company Limited

MANAGEMENT DISCUSSION AND ANALYSIS OF THE COMPANY'S PERFORMANCE

For the First Quarter Ended March 31, 2020

The Management Discussion and Analysis of the Company's Performance (the "MD&A") is intended to present and analyze the Company's results of operations and financial position at the end of the accounting period. Such information may change in the future. The MD&A is primarily prepared in Thai. In cases where the content in the translation contains any conflict or is interpreted differently from the Thai version, the Thai version shall prevail.

For questions or queries, please contact our Investor Relations Department: Tel: +66 (0) 2080-4488 or Email: ir@gulf.co.th

EXECUTIVE SUMMARY

KEY EVENTS IN Q1'20

Gulf Chana Green Biomass Project achieved commercial operation

1 March 2020: Gulf Chana Green Company Limited, a subsidiary in which the Company holds 100% equity stake and the operator of **Gulf Chana Green Biomass Project (“GCG”)**, with an installed power generation capacity of 25.0 megawatts, located in Songkhla province, has commenced its commercial operation.

Acquisition of 2 new power projects with total contracted capacity of 1,940 MW

Hin Kong Power Project

3 January 2020: The Company has acquired 49% ordinary shares of Hin Kong Power Holding Company Limited from RATCH Group Public Company Limited with total share purchase value of THB 1,960,000 to develop and operate **Hin Kong Power Project** with contracted capacity of **1,400 megawatts** (700 megawatts per unit), located in Ratchaburi province. The project is expected to commence commercial operation in 2024 and 2025, respectively.

Burapa Power Project

17 January 2020: The Company has acquired 35% ordinary shares of Burapa Power Holding Company Limited from National Power Supply Public Company Limited with total share purchase value of THB 120,750,000 to develop and operate **Burapa Power Project** with contracted capacity of **540 megawatts**, located in Chachoengsao province. The project is expected to commence commercial operation in 2027.

Agreements signing for One Bangkok Project

Signing of Shareholders' Agreements

06 January 2020: **Bangkok Smart Energy Company Limited (“BSE”)**, the Company’s joint venture, entered into a shareholders’ agreement with One Power Services Company Limited to operate the power distribution system for One Bangkok Project through 40% shareholding in **Bangkok Smart Power Company Limited (“BSP”)**. BSE also signed a shareholders’ agreement with One DCS Services Company Limited to operate the district cooling system for One Bangkok Project through 49% shareholding in **Bangkok Smart DCS Company Limited (“BSD”)**.

Signing of Utility Development Agreements

09 January 2020: **BSP** and **BSD** entered into Utility Development Agreements with One Bangkok Company Limited to sell electricity with installed capacity of approximately **240 megawatts** and chilled water with installed capacity of approximately **36,000 refrigeration tons** to One Bangkok Project for 30 years, with project cost of approximately THB 3,570 million.

Secured loan facility for GTN2

22 January 2020: The Company’s subsidiary, **Gulf Tay Ninh 2 Joint Stock Company (“GTN2”)** (formerly known as TTC Energy Development Investment Joint Stock Company), the operator of GTN2 Solar Power Project (formerly known as TTCIZ-02 Solar Power Project) with an installed power generation capacity of 50.0 megawatts located in Tay Ninh province, Vietnam with an approximate project value of USD 50.0 million, has entered into financing agreements to obtain long-term loan facilities denominated in U.S. dollar with an aggregate amount of approximately **USD 37.8 million** for a term of **15-17 years** with a group of both onshore and offshore financial institutions.

Progress of projects under construction and development

Gas-fired IPP power project, GSRC, with installed capacity of 2,650 MW, began construction on December 3, 2018, with progress at approximately 59.9% as of the end of March 2020. The project has a scheduled commercial operation date between 2021 and 2022.

Gas-fired power project, Duqm Independent Power and Water Project (DIPWP) with installed capacity of 326 MW began construction in August 2018, with progress at approximately 62.7% as of the end of March 2020. The project has a scheduled commercial operation date between 2021 and 2022.

The Mekong Wind Power Project in Vietnam with an installed power generation capacity of up to 310 megawatts, is divided into eight construction phases with progress at the end of March 2020 and scheduled commercial operation dates (“SCOD”) as follows:

- Phase 1 (30 MW): Construction progress at approximately 4.1%, and SCOD in 2021
- Phases 2-3 (98 MW): Expected to sign PPA in July 2020 with approximate SCOD in October 2021
- Phases 4-8 (182 MW): Under master plan approval consideration process by Ministry of Industry and Trade (“MOIT”) to be included in Power Development Plan 8 which is expected to be approved in early 2021

Projects under development as follows are progressing as planned. Progress of the projects at the end of March 2020 are as follows:

- **Gas-fired IPP power project, GPD**, with installed capacity of 2,650 MW, has entered into financing agreements to obtain long-term loan facilities. The project is under preparation for construction, with construction expected to commence in Q3’20. The project has a scheduled commercial operation date between 2023 and 2024.
- **Hin Kong power project**, with contracted capacity of 1,400 MW, is under EIA report preparation and expected to get EIA approval within 2020. The project is scheduled to start construction in 2021.
- **Burapa power project**, with contracted capacity of 540 MW, is under EIA report preparation and expected to get EIA approval within 2021. The project is scheduled to start construction in 2024.
- **Map Ta Phut Industrial Port Development Phase 3** is under EPC negotiation and expected to start construction in Q3’20, with land reclamation work scheduled to be completed in 2023.
- **Laem Chabang Port Development Phase 3** is under PPP contract negotiation with the Port Authority of Thailand.
- **M6 & M81 Intercity Motorways** is under preparation for PPP contract signing which is expected to be signed in early June 2020.
- **One Bangkok project** is under EPC contract bidding and is expected to sign the EPC contract between Q2’20 and Q3’20.

IMPACTS FROM COVID-19 OUTBREAK

Regarding the COVID-19 outbreak which has led to widespread economic slowdown, the Company anticipated the impacts of the situation on the Group’s performance and progress of projects under construction as follows:

- Electricity sales volume is expected to have no significant impact, as 89% of the Company’s total power production capacity is sold under power purchase agreements with Electricity Generating Authority of Thailand (“EGAT”), which has a contractual minimum offtake amount for SPPs and Available Payment for IPPs that can maintain its availability to dispatch electricity. Moreover, the Company’s industrial users are from diverse sectors and there was a continuous expansion of customer base as well.
- Progress of projects under construction in Thailand is still advancing as planned. Nonetheless, Mekong Wind Power Project in Vietnam Phase 1’s construction work is delayed from the effect of COVID-19 outbreak, resulting in a postponement of its scheduled commercial operation date to be in May 2021. However, for other phases of Mekong Wind Power Project, the Company is trying to accelerate their development in order to commence the operation in 2021 according to plan.

SIGNIFICANT IMPACTS FROM ANNOUNCEMENT OF NEW ACCOUNTING STANDARDS

From 1 January 2020, the Company has adopted Thai Financial Reporting Standards (TFRS) 9 Financial Instruments and TFRS 16 Leases for its financial statement reporting for the first time.

- Under TFRS 9, the Company is required to measure fair value of interest rate swap derivatives in the financial statements (while it is required to measure fair value only of foreign exchange rate derivatives in the prior periods). The Company adopted cash flow hedging method, resulting in the unrealized gain/loss from effective hedging contracts to be booked in other comprehensive income, and will be gradually realized in gain or loss when the hedged item affects profit or loss.
- Under TFRS 16, the Company is required to record lease contract which has outstanding period of more than 12 months in the financial statements. The affected lease contracts which the Company has are office lease contract, car lease contracts and right-of-way lease contracts. The Company will record interest occurred from the lease liabilities and record amortization from the right to use assets, instead of record lease expense.

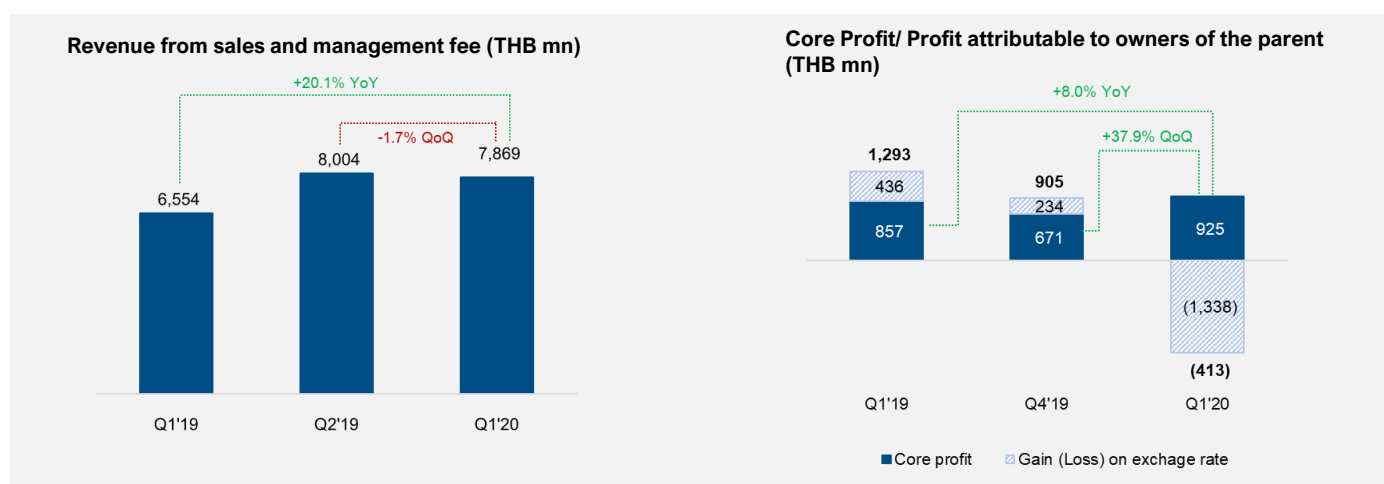
The Company has assessed the effect from the adoption of the aforementioned financial reporting standard which has no significant effect to operating performance, as shown in the table below:

	Impacts from new accounting standards in Q1'20		
	TFRS 9	TFRS 16	Total
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>
Assets	(120)	738	(618)
Liabilities	17,060	796	17,856
Shareholders' Equity	(17,180)	(58)	(17,238)

SUMMARY OF PERFORMANCE FOR Q1'20

Key financial information	Q1'19	Q4'19	Q1'20	Change	
	THB mn	THB mn	THB mn	% QoQ	% YoY
Revenue from sales and management fee	6,554	8,004	7,869	-1.7%	20.1%
Share of profit from an associate and joint ventures	895	617	(267)	-143.2%	-129.8%
Profit attributable to owners of the parent	1,293	905	(413)	-145.7%	-132.0%
Less: gain (loss) on exchange rate attributable to owners of the parent	436	234	(1,338)	-671.6%	-407.0%
Core profit	857	671	925	37.9%	8.0%
<i>Share of profit (loss) from an associate – GJP exclude gain (loss) on exchange rate</i>	655	470	619	31.7%	-5.5%
Basic earnings per share (THB)	0.12	0.08	(0.04)	-145.7%	-132.0%

* Core profit = profit attributable to owners of the parent before gain on exchange rate



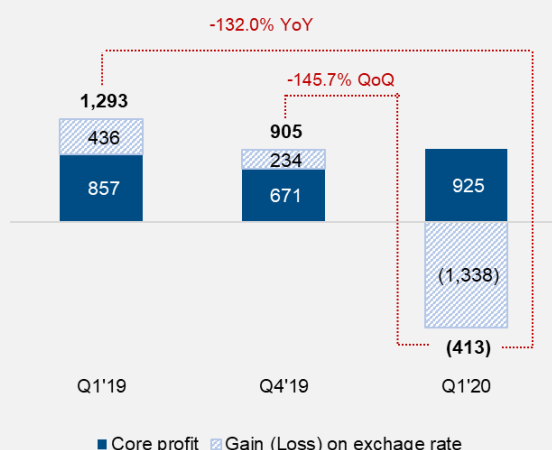
- **Revenue from sales and management fee increased 20.1% YoY from THB 6,554 million to THB 7,869 million** from the full quarter revenue recognition of 12SPPs under GMP group and 2 Solar Power Projects in Vietnam compared to 10 SPPs in the same period of last year. Also, GCG Biomass Power Project commenced its commercial operation on March 1, 2020.

The growth in revenue has already included the effect of planned maintenance shutdown (B-inspection) of GVTP power project for 18 days, and EGAT's 500kV transmission system maintenance for 10 days in March 2020 in Rayong province, which resulted in the lower revenue from electricity sales for 6 SPPs of GMP group located in Rayong province. However, the 6 SPPs still received full Capacity Payment (CP) for 90 megawatts according to the agreement and EGAT will make up the shortage for the remainder of 2020.

- **When compared to Q4'19, revenue from sales and management fee in Q1'20 softened 1.7% QoQ**, a result of the lower revenue from SPPs under GMP group located in Rayong province, from EGAT's 500kV transmission system maintenance, and the maintenance shutdown of GVTP power project as mentioned, although there was an additional revenue in Q1'20 from GCG Biomass Power Project which commenced its commercial operation in March 2020, and SPPs were able to sell higher volume of electricity to industrial users by 4.3% QoQ.

- **Core profit increased 8.0% YoY from THB 857 million to THB 925 million** from:
 - 1) Realized higher profit from 12SPPs due to the higher electricity sales to EGAT and industrial users compared to Q1'19. The higher sales were to both existing customer base and new customers of the 2SPPs which commenced commercial operation in May 2019 and July 2019. Moreover, there were profit recognition from GTN1 and GTN2 Solar Power Projects which have commenced commercial operation in entirety in 2019.
 - 2) Fuel cost decreased from average price of natural gas which declined from 282.02 THB/mmbtu in Q1'19 to 267.38 THB/mmbtu in Q1'20, while Ft rate remained the same at (0.1160) THB/kilowatt-hour.
- **Core profit rose 37.9% QoQ from THB 671 million to THB 925 million** mainly from share of profit from GJP exclude gain (loss) on exchange rate which grew 31.7% QoQ from THB 470 million to THB 619 million, as 2 IPPs (GNS and GUT) received higher Availability Payment despite GUT's B-inspection maintenance. The higher profit was also from the major overhaul of only 1 power project in Q1'20 compared to the major overhaul of 3 power projects in Q4'19. Moreover, 7 SPPs under GJP group also recorded a higher volume of electricity, steam and chilled water sold to industrial users.
- **In Q1'20 the Company recorded net loss attributable to owners of the parent at THB 413 million** due to the recognition of loss on exchange rate which occurred from the depreciation of the Thai Baht by 2.50 THB/USD, compared to the gain on exchange rate in Q1'19 from the appreciation of Thai Baht by 0.64 THB/USD. The recording of such profit is an accounting transaction which has no impact on the cash flow and performance of the Group at all.

Profit attributable to owners of the parent (THB mn)



FX Rate at End of Period (Thai Baht / USD)	
Q4'19	32.6148
Q1'19	31.9785
Q3'19	30.7661
Q4'19	30.3313
Q1'20	32.8298

Q1'20 OPERATING RESULTS

REVENUE STRUCTURE

Revenue structure	Q1'19	Q4'19	Q1'20	Change	
	THB mn	THB mn	THB mn	% QoQ	% YoY
Revenue from sales	6,477	7,920	7,782	-1.7%	20.2%
<i>Revenue from electricity sold to EGAT and PEA</i>	4,969	6,050	5,793	-4.2%	16.6%
<i>Revenue from electricity sold to EVN</i>	-	110	133	21.7%	n.a.
<i>Revenue from electricity sold to industrial users</i>	1,346	1,621	1,721	6.1%	27.9%
<i>Revenue from steam sold to industrial users</i>	161	139	134	-3.2%	-16.8%
Revenue from management fee	77	84	87	3.1%	11.8%
Share of profit from an associate and JVs	895	617	(267)	-143.2%	-129.8%
Dividend income	-	-	-	n.a.	n.a.
Interest income	45	43	31	-27.7%	-31.5%
Other income	2	6	7	7.7%	225.6%
Total revenues	7,496	8,670	7,639	-11.9%	1.9%

Revenue from sales

In Q1'20, the Company recorded revenue from sales at THB 7,782 million, an increase of 20.2% YoY from the full quarter revenue recognition of the entire 12 SPPs under GMP group, after the 11th - 12th power plants with a total installed power generation capacity of 256.4 megawatts gradually commenced commercial operations in May 2019 and July 2019, compared to 10 SPPs in operation in Q1'19. Moreover, there was the commercial operation commencement of GCG Biomass Power Plant, with installed capacity of 25 megawatts in March 2020. The growth in capacity allowed the Company to expand its electricity sales to EGAT as well as industrial users. However, revenue from steam sales declined in accordance to average steam price per ton which decreased in line with Fuel oil price in Singapore market.

For power projects in Vietnam, GTN1 and GTN2 Solar Power Plant (installed power generation capacity of 68.8 and 50.0 megawatts, respectively) commenced commercial operation in March 2019 and April 2019, and their revenue has been consolidated to the Company's consolidated financial statements after the Company increased its shareholding in GTN2 and GTN1 from 49.0% to 90.0% in January 2019 and November 2019, respectively.

When compared with Q4'19, revenue from sales slightly decreased by 1.7% QoQ from EGAT's modification of 500kV transmission system in Rayong zone in March 2020 for 10 days, resulting in lower offtake from EGAT from 6 SPPs under GMP group (GVTP, GTS1, GTS2, GTS3, GTS4 and GNLL2) from 90 megawatts to 43 megawatts. However, the 6 SPPs still received full Capacity Payment (CP) according to the PPA, and EGAT will make up the shortage for the remainder of 2020. Moreover, in Q1'20 there was a planned maintenance shutdown (B-inspection) of GVTP power project for 18 days, resulting in an absent of revenue from electricity sales to EGAT during the period. Nonetheless, SPPs under GMP group were able to increase its electricity sales to industrial users due to the higher electricity demand of the customers, while steam sales volume slightly reduced from the softened demand.

Nevertheless, Solar Power Project in Vietnam recorded a higher revenue compared to the previous quarter, from the increase in shareholding in GTN1 project as mentioned, resulted in a consolidation of the project's revenue to the Company's consolidated financial statements for the entire quarter, oppose to Q4'19 which has started consolidated the revenue from November 2019. However, electricity sales volume from GTN1 and GTN2 slightly softened from road construction near by the power plants, creating dust and therefore weakened the power generating performance.

Volume of electricity and steam sold by SPPs under GMP

Volume of electricity and steam sold	Q1'19	Q4'19	Q1'20	Change	
				% QoQ	% YoY
Power projects under GMP					
Volume of electricity sold to EGAT (gigawatt-hour)	1,518.7	1,932.9	1,797.7	-7.0%	18.4%
Volume of electricity sold to industrial users (gigawatt-hour)	419.3	496.9	518.4	4.3%	23.6%
Volume of steam sold (thousand tons)	174,567	179,931	177,305	-1.5%	1.6%

Volume of electricity sold by biomass power project GCG

Volume of electricity sold (gigawatt-hour)	Q1'19	Q4'19	Q1'20	Change	
				% QoQ	% YoY
GCG power project	-	-	9.2	n.a.	n.a.

Volume of electricity sold by solar power projects GTN1 and GTN2 in Vietnam

Volume of electricity sold (megawatt-hour)	Q1'19	Q4'19	Q1'20	Change	
				% QoQ	% YoY
GTN1 (formerly known as TTCIZ-01)	-	27,898	26,473	-5.1%	n.a.
GTN2 (formerly known as TTCIZ-02)	-	20,421	19,199	-6.0%	n.a.

Revenue from management fee

In Q1'20, the Company recorded revenue from management fee in the amount of THB 87 million, an increase of 11.8% YoY, from the revenue received from the provision of management services by the Company to its associate GJP, and received additional service fee from SPP power plant under GEC.

Compared to Q4'19, revenue from management fee increased 3.1% QoQ from service fee received from GJP group which increased according to the service agreement.

Dividend income

There was no dividend income booked in Q1'20.

COST AND EXPENSE STRUCTURE

Cost of sales structure	Q1'19	Q4'19	Q1'20	Change	
	THB mn	THB mn	THB mn	% QoQ	% YoY
Cost of sales	(4,958)	(6,036)	(5,921)	-1.9%	19.4%
Fuel cost	(4,127)	(4,894)	(4,653)	-4.9%	12.8%
Operations and maintenance cost	(143)	(209)	(246)	17.4%	71.7%
Depreciation	(487)	(676)	(690)	2.0%	41.6%
Others	(200)	(256)	(332)	29.5%	65.8%
Cost of service	(33)	(42)	(41)	-3.5%	23.5%
Total cost of sales and service	(4,991)	(6,078)	(5,962)	-1.9%	19.5%
Selling and administrative expenses	(366)	(529)	(394)	-25.4%	7.7%
Total operating costs and administrative expenses	(5,357)	(6,607)	(6,356)	-3.8%	18.7%

Cost of sales

Cost of sales in Q1'20 was THB 5,921 million, an increase of 19.4% YoY, increase both from fuel cost and operations and maintenance cost, as there were additional power plants that achieved commercial operation when compared to the same period of last year, resulting in a growth in cost of sales in accordance with electricity and steam sales growth. However, average price of natural gas decreased from 282.02 THB/mmbtu in Q1'19 to 267.38 THB/mmbtu in Q1'20.

Compared to Q4'19, cost of sales declined 1.9% QoQ mainly from the fuel cost which lowered in tandem with electricity and steam sales volume of SPPs under GMP which softened from the previous quarter, resulting from EGAT's modification of 500kV transmission system in Rayong zone and GVTP's maintenance shutdown. Nevertheless, average price of natural gas remained at the similar level as the previous quarter.

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 Q1'20, cost of service was THB 41 million, an increase of THB 8 million or 23.5% YoY**, primarily due to additional service to GEC which commenced in Q3'19, and the personnel related cost which was allocated to the Company in a higher amount.

Compared to Q4'19, cost of service reduced 3.5% mainly from the Company's ability to manage service cost more efficiently.

Administrative expenses

In Q1'20, administrative expenses were THB 394 million, an increase of 7.0% YoY majorly from 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.

Compared to Q4'19, administrative expenses declined 25.4% QoQ, chiefly from a decrease in personnel related expenses.

FINANCE COSTS

Finance costs	Q1'19	Q4'19	Q1'20	Change	
	THB mn	THB mn	THB mn	% QoQ	% YoY
Interest expense	(573)	(723)	(730)	0.9%	27.4%
Guarantee fee	(15)	(6)	(5)	-18.6%	-65.7%
Commitment fee	(24)	(29)	(39)	33.6%	60.3%
Others	(22)	(28)	(49)	77.2%	122.5%
Total finance costs	(634)	(786)	(823)	4.6%	29.7%

Finance costs in Q1'20 were THB 823 million, an increase of 29.7% YoY and 4.6% QoQ mainly attributable to the recognition of interest expenses after commencing commercial operation of GCG biomass power project, additional SPPs under GMP group from 10 SPPs in Q1'19 to 12 SPPs in Q1'20, interest expense of power plants in Vietnam, and increase in GPD's commitment fee for the financial facilities to invest in the project's construction.

OTHER ITEMS

Share of profit from an associate and JVs	Q1'19	Q4'19	Q1'20	Change	
	THB mn	THB mn	THB mn	% QoQ	% YoY
Share of profit from GJP	895	620	(253)	-140.8%	-128.3%
Share of profit from Gulf WHA MT	(1)	(4)	(1)	-76.8%	-42.7%
Share of profit from BSE	-	(1)	(7)	511.5%	n.a.
Share of profit from HKH	-	-	(3)	n.a.	n.a.
Share of profit from BPH	-	-	-	n.a.	n.a.
Share of profit from projects in Vietnam	7	5	-	-100.0%	-100.0%
Share of profit from a project in Oman	(5)	(4)	(3)	-13.5%	-37.6%
Total share of profit from an associate and JVs	895	617	(267)	-143.2%	-129.8%
Less: Gain (loss) on exchange rate from share of profit from GJP	240	150	(872)	-679.7%	-464.0%
Share of profit from an associate before gain (loss) on exchange rate	655	470	619	31.7%	-5.5%

Share of profit from an associate and joint ventures

The Group recorded a share of loss from an associate and joint ventures in Q1'20 of THB 267 million, an effect of THB 872 million unrealized loss on exchange rate from share of profit from GJP which incurred from translating long-term debts denominated in USD to Thai Baht using the exchange rate at the end of the accounting period. Before effects from exchange rate, the Group's share of profit in Q1'20 was THB 619 million, a decrease of 5.5% YoY, and an increase of 31.7% QoQ.

When compared to Q1'19, share of profit from an associate and JVs before gain (loss) on exchange rate decreased from THB 655 million to THB 619 million (-5.5% YoY), due to the following factors:

- 1) A major overhaul (C-inspection) of CGRN power project, and a planned maintenance (B-inspection) for 18 days of GUT power project in Q1'20, while there was no maintenance shutdown in Q1'19.
- 2) EGAT's modification of 500kV transmission system in Rayong zone in March 2020 for 10 days, resulting in lower offtake from EGAT from GNLL power plant from 90 megawatts to 43 megawatts. However, the power plants still received full Capacity Payment (CP) according to the PPA, and EGAT will make up the shortage for the remainder of 2020.

When compared to Q4'19, share of profit from an associate and JVs before gain (loss) on exchange rate improved from THB 470 million to THB 619 million (+31.7% QoQ), due to the following factors:

- 1) In Q1'20, there was only 1 SPP underwent major overhaul (C-inspection) (GCRN project), as opposed to major overhaul of 3 SPPs (GKP1, GTLC, GNNK) in the previous quarter, resulting in a higher sales volume of electricity, steam and chilled water from SPPs to industrial users.
- 2) IPPs under GJP received a higher Availability Payment despite the maintenance shutdown (B-inspection) of GUT project, compared to the Q4'19 which has not received AP Rate for the entire quarter, as the Contracted Available Hour (CAH) had completed in the middle of December 2019.

Volume of electricity, steam and chilled water sold by power projects under GJP

Volume of electricity, steam and chilled water sold	Q1'19	Q4'19	Q1'20	Change	
				% QoQ	% YoY
2 IPPs					
Volume of electricity sold (gigawatt-hour)	1,833.8	2,920.5	2,423.2	-17.0%	32.1%
7 SPPs					
Volume of electricity sold to EGAT (gigawatt-hour)	1,099.5	1,019.8	1,056.3	3.6%	-3.9%
Volume of electricity sold to industrial users (gigawatt-hour)	288.4	281.6	291.5	3.5%	1.1%
Volume of steam sold (thousand tons)	69,387	66,484	68,799	3.5%	-0.8%
Volume of chilled water sold (million refrigeration tons)	7.5	5.8	7.6	29.3%	0.8%

Gain (loss) 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 Q1'19, Q4'19 and Q1'20 were equal to 31.9785, 30.3313 and 32.8298 THB/USD, respectively (the Thai Baht in Q1'19 appreciated compared to Q4'18, while the Thai Baht depreciated in Q1'20 when compared to Q4'19). As a result, the Group recognized a loss on exchange rate in Q1'20 of THB 1,338 million, a decrease of 407.0% YoY and 671.6% QoQ.

Nonetheless, in this report, the Group separates effects from unrealized exchange rate of the associate (GJP) in Q1'20 of THB 872 million and the Company's subsidiaries (mainly GMP) of THB 466 million, resulting in a total unrealized loss from exchange rate attributable to the owners of the parent of THB 1,338 million. This will explain the Group's performance accurately and appropriately. Details of which are set forth as follows:

Gain (loss) on exchange rate	Q1'19	Q4'19	Q1'20	Change	
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>	<i>% QoQ</i>	<i>% YoY</i>
Gain (loss) on exchange rate	320	170	(976)	-674.5%	-405.1%
Less: Gain (loss) on exchange rate attributable to non-controlling interests	124	86	(510)	-691.5%	-512.8%
Gain (loss) on exchange rate attributable to the owners of the parent	196	84	(466)	-656.9%	-337.4%
Add: Gain (loss) on exchange rate attributable to share of profit from an associate	240	150	(872)	-679.7%	-464.0%
Total gain (loss) from exchange rate attributable to owners of the parent	436	234	(1,338)	-671.6%	-407.0%

PROFIT

Profit for the period	Q1'19	Q4'19	Q1'20	Change	
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>	<i>% QoQ</i>	<i>% YoY</i>
Gross profit	1,563	1,926	1,907	-1.0%	22.0%
<i>Gross profit from sales</i>	<i>1,519</i>	<i>1,884</i>	<i>1,861</i>	<i>-1.2%</i>	<i>22.5%</i>
<i>Gross profit from services</i>	<i>44</i>	<i>42</i>	<i>46</i>	<i>9.7%</i>	<i>3.2%</i>
Profit for the period	1,821	1,454	(503)	-134.6%	-127.6%
Profit attributable to owners of the parent	1,293	905	(413)	-145.7%	-132.0%
Less: Gain (loss) on exchange rate attributable to owners of the parent	436	234	(1,338)	-671.6%	-407.0%
Core profit*	857	671	925	37.9%	8.0%
Gross profit margin (sales)	23.5%	23.8%	23.9%	0.5%	2.0%
Gross profit margin (services)	57.4%	49.7%	52.9%	6.4%	-7.7%

* Core profit = profit attributable to owners of the parent before gain on exchange rate

Gross profit

Gross profit in Q1'20 was THB 1,907 million, an increase 22.0% YoY. The increase was caused primarily by the higher revenue from sales caused by commercial operation commencement of the 2 additional projects under GMP. There were also GCG Biomass Power Project which COD in March 2020, GTN1 and GTN2 Solar Power Project which COD in March 2019 and April 2019. Gross profit margin from sales improved from 23.5% to 23.9% resulted from the lower average natural gas price from 282.02 THB/mmbtu in 2018 to 267.38 THB/mmbtu while Ft rate stayed at the same level from last year. Gross profit from services also increased by 3.2% YoY from the higher revenue from management

fee. However, gross profit margin from services weakened from 57.4% to 52.9% from the cost related to personnel which was allocated to the Company in a higher amount.

Compared to Q4'19, gross profit slightly declined 1.0% QoQ in tandem with the softened revenue following EGAT's modification of 500kV transmission line and GVTP Power Plant under GMP group's maintenance shutdown. Also, steam sales volume to industrial users declined. Nevertheless, gross profit margin from sales stayed at the similar level from the previous quarter, while gross profit from services increased from higher revenue from management fee and the Company's better management in service cost.

Core profit

Core profit increased 8.0% YoY from THB 857 million in Q1'19 to THB 925 million in Q1'20 from the following factors:

- 1) Profit from GMP group increased from the operation of the entire 12 SPPs under GMP group in full quarter, compared to 10 SPPs in Q1'19. Moreover, there was a commercial operation commencement of Biomass Power Project GCG in March 2020, and GTN1 and GTN2 Solar Power Plant in March and April 2019.
- 2) Natural gas cost reduced from 282.02 THB/mmbtu in Q1'19 to 267.38 THB/mmbtu in Q1'20 while Ft rate remained the same at (0.1160) THB/kilowatt-hour.

In Q1'20, the profit increment from additional projects which commenced commercial operation, especially from GMP group was able to offset the softened profit from GJP group as well as the loss from expenses recorded of other projects under construction in entirety.

Core profit increased 37.9% QoQ from THB 671 million in Q1'19 to THB 925 million in Q1'20 due to the following factors:

- 1) Share of profit from GJP exclude gain (loss) on exchange rate which grew 31.7% QoQ from the details as discussed was able to offset the softened profit from GMP group.
- 2) Profit from GMP group marginally declined from the lower electricity sales volume to EGAT, following the the aforementioned modification of 500kV transmission line in Rayong province. However, GMP group was able to increase the electricity sales to industrial users.
- 3) Natural gas cost was at the similar level as the previous quarter, but selling and administrative expenses declined from the personnel related expenses.

Net profit attributable to the owners of the parent

In Q1'20, net loss attributable to the owners of the parent was THB 413 million, although Core Profit improved. The net loss was principally due to the recognition of unrealized loss on exchange rate resulting from the translation of USD-denominated loans to Thai Baht using the exchange rate at the end of the period compared to that of the previous period. In Q1'20, the Group recognized unrealized FX loss of THB 1,338 million, compared to a gain of THB 436 million in Q1'19 and a gain of THB 234 million Q4'19, respectively. The loss in the quarter was from the sharp depreciation of the Thai Baht from 30.3313 THB/USD in Q4'19 to 32.8298 THB/USD at the end of Q1'20 (in Q1'19 Thai Baht appreciated by 0.64 THB/USD from the preceding quarter, but in Q2'20 Thai Baht depreciated by 2.50 THB/USD from the preceding quarter).

FINANCIAL POSITION AS OF MARCH 31, 2020

Financial position	As of December 31, 2019	As of March 31, 2020	Change
	<i>THB mn</i>	<i>THB mn</i>	<i>%</i>
Cash, cash equivalents and short-term investment	14,810	15,479	4.5%
Trade accounts receivable	5,199	5,250	1.0%
Investments in an associate and joint ventures	21,247	17,617	-17.1%
Advance payments for land and power plant construction	3,070	3,986	29.8%
Property, plant and equipment, net	80,961	84,660	4.6%
Other assets	8,991	14,837	65.0%
Total assets	134,278	141,828	5.6%
Accounts payable for power plant construction	2,773	4,093	47.6%
Trade accounts payable	1,689	1,821	7.8%
Interest-bearing debts due in 1 year	3,214	4,158	29.4%
Interest-bearing debts due over 1 year	73,947	79,332	7.3%
Other liabilities	3,615	20,872	477.3%
Total liabilities	85,238	110,276	29.4%
Issued and paid-up capital	10,667	10,667	0.0%
Share premium	20,889	20,889	0.0%
Unappropriated retained earnings	6,084	5,602	-7.9%
Other components of equity	(790)	(13,583)	1,618.7%
Other equity	1,577	1,585	0.5%
Total equity attributable to owners	38,427	25,160	-34.5%
Non-controlling interests	10,613	6,392	-39.8%
Total equity	49,040	31,552	-35.7%
Total equity excluding other components of equity	49,830	45,135	-9.4%

TOTAL ASSETS

Total assets as of March 31, 2020 was THB 141,828 million, an increase of THB 7,550 million or 5.6% from December 31, 2019. The increase was attributable to the following factors:

- Significant increase in assets include:
 - Other assets increased by 65.0% or THB 5,846 million, mainly from:

- Deferred tax assets increased by THB 3,425 million, mostly increased from the interest rate swap derivatives fair value measurement required under TFRS 9 which was recorded under other comprehensive income, and resulted in deferred tax benefit.
- Right to use assets increased by THB 766 million, affected by the TFRS 16 requiring the Company to realize right to use assets and liabilities from the lease contracts. The Company's lease contracts which are affected by the TFRS 16 are office lease contract, car lease contracts, right of way.
- Long term loans to related parties increased by THB 1,348 million, from additional loan to Duqm Power Company L.L.C., to be used for DIPWP project construction in Oman.
- Property, plant and equipment net increased by 4.6% or THB 3,699 million, from the increase in value according to the construction progress of GSRC project. There was also an increase in value of the Biomass Power Project GCG and Mekong Offshore Wind Power Project phase 1.
- Advance payments for land and power plant construction increased 29.8% or THB 916 million, from the construction work progress of GPD power project.

2) Significant decrease in assets include:

- Investment in an associate and joint ventures decreased 17.0% or THB 3,630 million, from the investment in an associate GJP, an effect of TFRS 9 and TFRS 16 resulting in the Company to record additional loss in other comprehensive income.

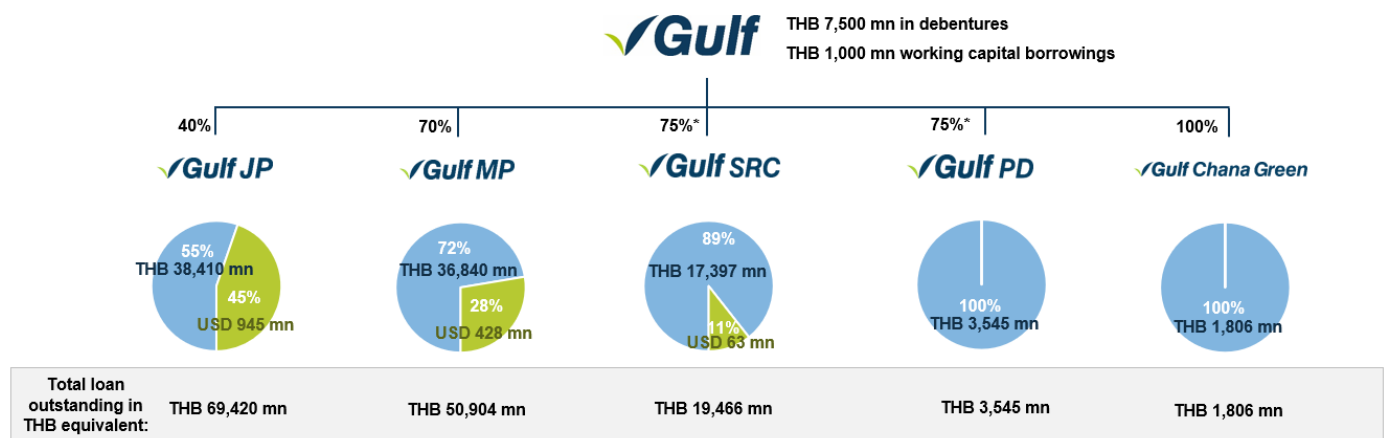
TOTAL LIABILITIES

Total liabilities as of March 31, 2020 was THB 110,276 million, an increase of THB 25,038 million or 29.4% from December 31, 2019. The increase was attributable to the following factors:

1) Significant increase in liabilities include:

- Other liabilities increased by 477.3% or THB 17,257 million, mainly increased from financial derivative liabilities (mostly interest rate swap contracts) which increased by THB 16,972 million, resulted from the adoption of TFRS 9 which required to fair value measurement of financial derivative contracts for the entire contract life on the Company's financial statement.
- Long-term loans from financial institutions increased THB 5,385 million primarily from the drawdowns for the construction of GSRC and GPD power project under IPD group.
- Accounts payable for power plant construction increased 47.6% or THB 1,320 million, mainly from the payment of construction costs per milestone for GSRC power project which was outstanding as of March 2020.

Total debt outstanding of the Company and its subsidiaries as of March 31, 2020



TOTAL EQUITY

Total equity as of March 31, 2020 was THB 31,552 million, a decrease of THB 17,488 million or 35.7% from December 31, 2019 due to two main factors:

- Other components of equity decreased THB 12,793 million, and non-controlling interests decreased THB 4,221 million. Mostly due to the loss from interest rate swap derivatives fair value measurement required under TFRS 9. The loss was from fair value measurement of interest rate swap contracts, majority of which the Company has entered several years ago to hedge its cashflow, when compared to the declining current market interest rate, fair value of the derivative contracts decreased. However, such accounting record does not affect the Company's operating performance.
- Retained earnings reduced from the net loss for the period of THB 413 million.

CAPITAL STRUCTURE

As of March 31, 2020, the Group recorded a **net interest bearing debt to equity ratio of 2.16 times**. However, if consider **net interest bearing debt to equity excluding other components of equity** according to the Company's bond covenant, **the ratio was recorded at 1.51 times**. From the effect of Thai Financial Reporting Standards (TFRS), shareholders' equity value was lower, resulting in a significantly higher debt to equity ratio, although the Company did not draw down a significant amount of debt. 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.

FINANCIAL RATIOS

Financial ratios	Q4'19	Q1'20
Basic earnings per share (THB)	0.08	-0.04
Net profit margin ¹ (%)	19.04%	-6.58%
Core profit margin ^{1,2} (%)	7.74%	12.11%
Return on equity (%)	15.27%	12.36%
Return on assets ³ (%)	5.56%	3.56%
	31 December 2019	31 March 2020
Book value per share (THB)	3.60	2.36
Debt to equity (times)	1.74	3.50
Interest-bearing debt to equity (times)	1.57	2.65
Net interest-bearing debt to equity (times)	1.27	2.16
Debt to equity exclude Other components of equity (times)	1.71	2.44
Interest-bearing debt to equity exclude Other components of equity (times)	1.55	1.85
Net interest-bearing debt to equity exclude Other components of equity (times)	1.25	1.51

¹ Total revenues = revenues from sales and management fee + other income + interest income + dividend income + share of profit from an associate and joint ventures

² Core profit = profit attributable to owners of the parent before gain on exchange rate

³ ROA calculated using Net Profit (annualized) / average Total Assets

PROGRESS OF PROJECTS UNDER CONSTRUCTION AND DEVELOPMENT

POWER GENERATION AND RENEWABLE ENERGY BUSINESS



Gulf SRC (Thailand)

Fuel Type	Gas-fired
Capacity	2,650 MW
SCOD	2021 - 2022
Status	Under construction: 59.9% completed



Gulf PD (Thailand)

Fuel Type	Gas-fired
Capacity	2,650 MW
SCOD	2023 - 2024
Status	<ul style="list-style-type: none"> • Designing work on progress • Expected to start construction in Q3'20



Hin Kong Power (Thailand)

Fuel Type	Gas-fired
Capacity	1,400 MW
SCOD	2024 - 2025
Status	<ul style="list-style-type: none"> • EIA approval expected within 2020 • Start construction by 2021



Burapa Power (Thailand)

Fuel Type	Gas-fired
Capacity	540 MW
SCOD	2027
Status	<ul style="list-style-type: none"> • EIA approval expected within 2021 • Start construction by 2024



DIPWP (Oman)

Fuel Type	Gas-fired
Capacity	Power: approx. 326 MW Water: approx. 1,667 m ³ /hour
SCOD	2021 - 2022
Status	Under construction: 62.7% completed



Mekong Wind Power Project (Vietnam)

Fuel Type	Offshore Wind
Capacity	Phase 1: 30 MW Phase 2-3: 98 MW Phases 4-8: 182 MW
SCOD	Phase 1: expected in May 2021 Phases 2-3: within October 2021 Phases 4-8: within October 2021
Status	Phase 1: Under construction: 4.1% completed Phases 2-3: Expected to sign PPA in July 2020 Phases 4-8: Under MOIT consideration to be included in PDP8

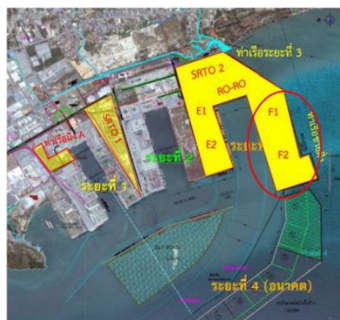


INFRASTRUCTURE & UTILITIES BUSINESS



Map Ta Phut Industrial Port Development Phase 3 (Thailand)

Scope	Infrastructure: Land reclamation Super Structure: LNG terminal
Capacity	Land reclamation: 1,000 rais LNG terminal: up to 10.8 MTPA
Construction Period	Land reclamation: 2020 - 2023 LNG terminal: 2023 – 2027* *subject to LNG demand
Status	Under EPC contract negotiation and is expected to start construction in Q3'20



Laem Chabang Port Development Phase 3 (Thailand)

Scope	Container berths (F1 & F2 terminals)
Capacity	At least 4 million TEU/year (operation period 35 years)
SCOD	F1 = [2024] F2 = [2028]
Status	PPP Contract under negotiation



M6 & M81 Intercity Motorways (Thailand)

Scope	Operation and Maintenance
Capacity	M6: 196 km M81: 96 km
SCOD	[2023]
Status	Prepare for PPP Contract signing and expected to sign PPP in June 2020

ONE BANGKOK



One Bangkok Project (Thailand)

Scope	Electricity Distribution System (Power) District Chilled Water Distribution System (DCS)
Capacity	Power: 240 MW DCS: 40,000 RT
SCOD	Phase 1 – 2022 (Power & DCS) Phase 2 – 2024 (DCS)
Status	EPC contract bidding and expected to sign EPC contract in Q2'20 to Q3'20

DEFINITIONS

Company	Gulf Energy Development Public Company Limited
Group	The Company, its subsidiaries, its associates and its joint ventures
GEC group	Gulf Electric Public Company Limited and its subsidiaries
EGAT	The Electricity Generating Authority of Thailand
PEA	Provincial Electricity Authority
7SPPs	7 SPPs under GJP consisting of GKP1, GKP2, GTLC, GCRN, GNNK, GNLL and GNK2
12SPPs	12 SPPs under GMP consisting of GVTP, GTS1, GTS2, GTS3, GTS4, GNC, GBL, GBP, GNLL2, GNPM, GNRV1 and GNRV2
BPG	Burapa Power Generation Co., Ltd., a power project operator under BPH
BPH	Burapa Power Holding Co., Ltd., a JV in which the Company has a 35.0% stake
EPC	Engineering, procurement and construction
EVN	Vietnam Electricity
GBL	Gulf BL Co., Ltd., a power project operator under the subsidiary of GMP
GBP	Gulf BP Co., Ltd., a power project operator under the subsidiary of GMP
GCRN	Gulf JP CRN Co., Ltd., a power project operator under the associate GJP
GJP	Gulf JP Company Limited, an associate in which the Company has a 40.0% stake
GKP1	Gulf JP KP1 Co., Ltd., a power project operator under the associate GJP
GKP2	Gulf JP KP2 Co., Ltd., a power project operator under the associate GJP
GMP	Gulf MP Company Limited, a subsidiary in which the Company has a 70.0% stake
GNC	Gulf NC Co., Ltd., a power project operator under the subsidiary GMP
GNK2	Gulf JP NK2 Co., Ltd., a power project operator under the associate GJP
GNLL	Gulf NLL Co., Ltd., a power project operator under the associate GJP
GNLL2	Gulf NLL2 Co., Ltd., a power project operator under the subsidiary GMP
GNNK	Gulf JP NNK Co., Ltd., a power project operator under the associate GJP
GNPM	Gulf NPM Co., Ltd., a power project operator under the subsidiary GMP
GNRV1	Gulf NRV1 Co., Ltd., a power project operator under the subsidiary GMP
GNRV2	Gulf NRV2 Co., Ltd., a power project operator under the subsidiary GMP
GNS	Gulf JP NS Co., Ltd., a power project operator under the associate GJP
GPD	Gulf PD Co., Ltd., a power project operator under the subsidiary of IPD
GSRC	Gulf SRC Co., Ltd., a power project operator under the subsidiary of IPD
GTLC	Gulf JP TLC Co., Ltd., a power project operator under the associate GJP
GTN1	Gulf Tay Ninh 1 Joint Stock Company
GTN2	Gulf Tay Ninh 2 Joint Stock Company
GTS1	Gulf TS1 Co., Ltd., a power project operator under the subsidiary GMP
GTS2	Gulf TS2 Co., Ltd., a power project operator under the subsidiary GMP
GTS3	Gulf TS3 Co., Ltd., a power project operator under the subsidiary GMP
GTS4	Gulf TS4 Co., Ltd., a power project operator under the subsidiary GMP
Gulf WHA MT	Gulf WHA MT Natural Gas Distribution Company Limited, a JV in which the Company has a 35.0% stake
GUT	Gulf JP UT Co., Ltd., a power project operator under the associate GJP

GVTP	Gulf VTP Co., Ltd., a power project operator under the subsidiary GMP
HKH	Hin Kong Power Holding Co., Ltd., a JV in which the Company has a 49.0% stake
HKP	Hin Kong Power Co., Ltd., a power project operator under HKH
IPD	Independent Power Development Company Limited, a subsidiary in which the Company has a 70.0% stake
IPP	Independent Power Producer in which capacity sold to EGAT is more than 90 MW
Mekong	Mekong Wind Power Joint Stock Company
PEA	The Provincial Electricity Authority
SPP	Small Power Producer in which capacity sold to EGAT is more than 10 MW but not more than 90 MW
TFRIC 4	Revenue recognition standard applied for the IPPs to record revenue from availability payment as income from financial lease