

– Translation –



**Gulf Energy Development Public Company Limited**

# MANAGEMENT DISCUSSION AND ANALYSIS OF THE COMPANY'S PERFORMANCE

For the Quarter Ended March 31, 2022

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](mailto:ir@gulf.co.th)

# EXECUTIVE SUMMARY

## KEY EVENTS IN Q1'22

### Projects that commenced commercial operation

**Gulf SRC Power Project (“GSRC”) unit 3**, with an installed power generation capacity of 662.5 MW, located in Chonburi province, commenced the commercial operation on March 31, 2022. GSRC is a gas-fired IPP power plant project in which the Company holds 70% equity stake, with total installed power generation capacity of 2,650.0 MW. GSRC units 1-2 have already achieved commercial operation on March 31 and October 1, 2021, respectively, and unit 4 is scheduled to commence commercial operation in October 2022.

### Investment in Thailand

**Investment in the municipal waste-to-energy project CM WTE** which is a Very Small Power Producer (VSPP) located in Chiang Mai province, with installed power generation capacity of not less than 9.5 megawatts to dispose no less than 650 tons of waste per day. The Project will receive revenue from two sources: tipping fee from waste sorting and sanitary backfilling, and revenue from electricity sales to the PEA. The Company has invested in 99.99% equity stakes in the Project on January 24, 2022, and the project plans to start the power plant construction after the Power Purchase Agreement has been signed with the PEA, with an expected construction period of approximately 3 years.

### Contracts and agreements signing

**Execution of the Memorandum of Understanding to establish a digital asset exchange in Thailand** on January 17, 2022, between Gulf Innova Company Limited, a wholly owned subsidiary of the Company, and Binance, to jointly study avenues for the development of digital asset exchange and related business in Thailand.

**Execution of the Tariff Memorandum of Understanding for Pak Lay hydroelectric power project** on January 24, 2022, between the Company, Sinohydro (Hong Kong) Holding Ltd. (“SHK”), and EGAT. Pak Lay is a run-of-the-river hydroelectric power plant located in Pak Lay district, Xayaburi province, Lao PDR, with the installed capacity of 770 megawatts and the Scheduled Commercial Operation Date (SCOD) on January 1, 2032. EGAT will be the off-taker for the Project, with the average tariff rate of 2.6989 Thai Baht / kilowatt-hour.

**Additional import volume of natural gas by Gulf LNG Company Limited.** Gulf LNG has acquired an additional import volume of natural gas from the ERC in the amount of 5.54 million tons per year to supply the LNG to IPP projects under the Company group. As such, Gulf LNG currently has the right to import LNG in the total volume of 6.37 million tons per year.

**Execution of the Joint Development Agreement to establish a data center business in Thailand** on February 2, 2022, between the Company, Singtel and AIS, to jointly establish a data center business in Thailand, to capture Thailand’s rapid growth in digital infrastructure industry of the country.

### Financial Activities

**Allotment of the Company’s unsecured and unsubordinated debentures valued THB 24,000 million** offered to institutional investors and high net worth investors on February 24, 2022. The Company was assigned the company rating ‘A’ and the debentures were assigned rating ‘A-’ by TRIS Rating Company Limited. The debentures’ allotment was in series of 4 tranches starting from 3, 5, 7, and 10 years with an average interest rate of 2.74% per annum and an average tenor of 5.3 years.

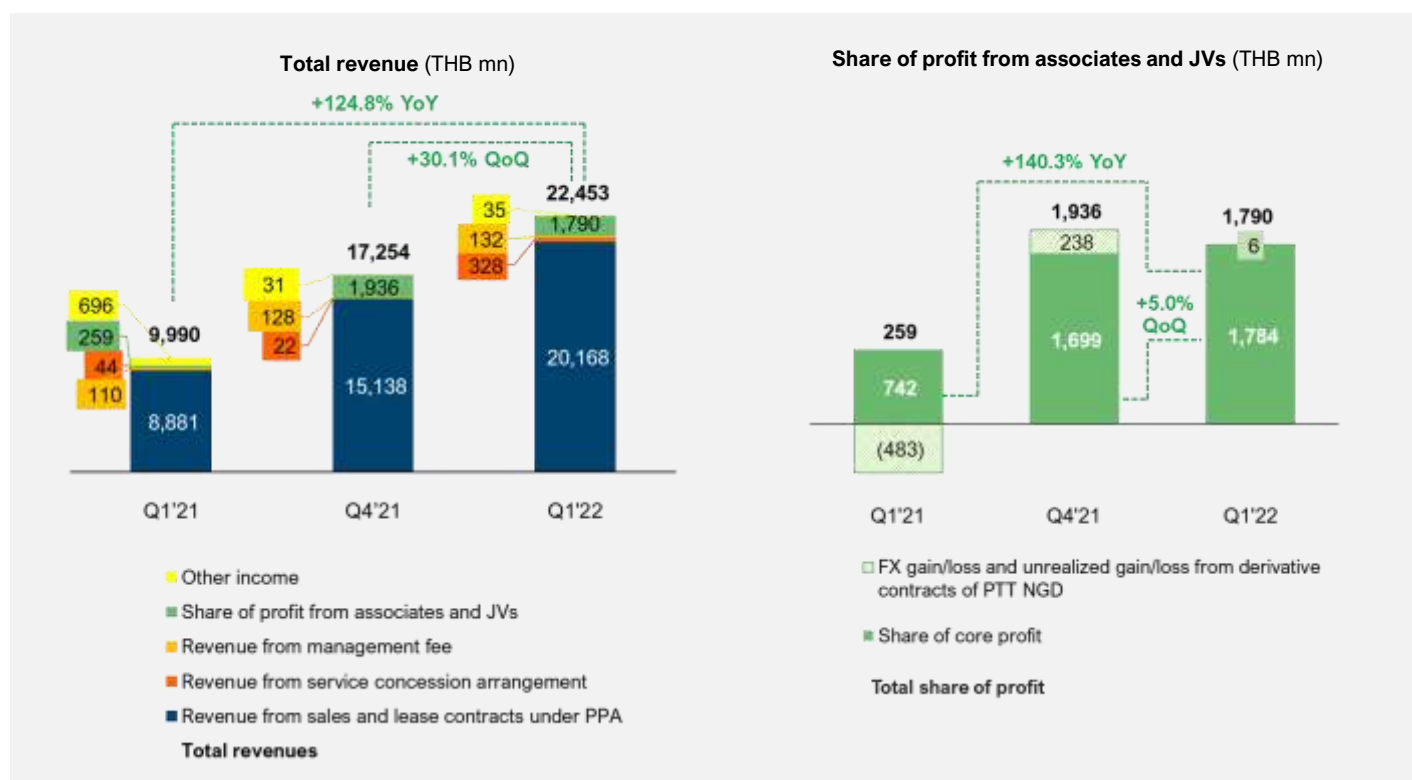
## FINANCIAL PERFORMANCE OVERVIEW

	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Revenue from sales, lease contracts under power purchase agreement, management fee, and service concession arrangement	9,035	15,287	20,628	34.9%	128.3%
Share of profit (loss) from associates and JVs	259	1,936	1,790	-7.5%	591.4%
Other income	696	31	35	13.4%	-95.0%
<b>Total revenues</b>	<b>9,990</b>	<b>17,254</b>	<b>22,453</b>	<b>30.1%</b>	<b>124.8%</b>
<b>EBITDA <sup>(1)</sup></b>	<b>5,162</b>	<b>6,706</b>	<b>7,075</b>	<b>5.5%</b>	<b>37.1%</b>
<b>Profit for the period</b>	<b>1,791</b>	<b>3,864</b>	<b>4,095</b>	<b>6.0%</b>	<b>128.7%</b>
<b>Profit attributable to owners of the parent</b>	<b>1,632</b>	<b>3,043</b>	<b>3,395</b>	<b>11.5%</b>	<b>108.0%</b>
Less: gain (loss) on exchange rate attributable to owners of the parent	(704)	242	160	-34.1%	122.7%
Less: unrealized gain (loss) on derivatives of PTT NGD	(53)	73	(22)	-129.5%	59.5%
<b>Core Profit <sup>(2)</sup></b>	<b>2,390</b>	<b>2,728</b>	<b>3,257</b>	<b>19.4%</b>	<b>36.3%</b>
Share of Core Profit from associates and JVs <sup>(3)</sup>	742	1,699	1,784	5.0%	140.3%
<b>Basic earnings per share (THB)</b>	<b>0.14</b>	<b>0.26</b>	<b>0.29</b>	<b>11.5%</b>	<b>106.7%</b>

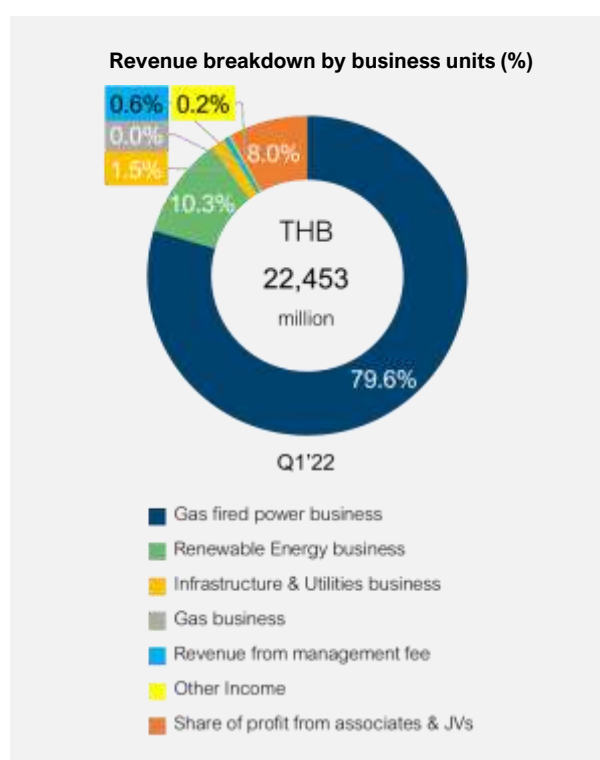
<sup>(1)</sup> EBITDA = Earnings before Interest, Taxes, Depreciation, and Amortization, gain (loss) on exchange rate of the Company and of GJP and INTUCH, and unrealized gain (loss) on derivatives of PTT NGD

<sup>(2)</sup> Core Profit = profit attributable to owners of the parent before gain (loss) on exchange rate and unrealized gain (loss) on derivatives of PTT NGD

<sup>(3)</sup> Share of Core Profit from associates and JVs = share of profit (loss) from associates and JVs before gain (loss) on exchange rate of GJP and INTUCH and unrealized gain (loss) on derivatives of PTT NGD



Revenue breakdown by Business Unit	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Gas fired power business	6,954	12,889	17,863	38.6%	156.9%
Renewable Energy business	1,927	2,248	2,305	2.5%	19.6%
Infrastructure & Utilities business	44	22	328	1403.2%	636.8%
Gas business	0	0	0	n.a.	n.a.
Revenue from management fee	110	128	132	3.2%	20.1%
Other income	696	31	35	13.4%	-95.0%
Share of profit from associates and JVs	259	1,936	1,790	-7.5%	591.4%
<b>Total Revenue</b>	<b>9,990</b>	<b>17,254</b>	<b>22,453</b>	<b>30.1%</b>	<b>124.8%</b>



Total revenue in Q1'22 was recorded at THB 22,453 million, an increase of 124.8% YoY, and 30.1% QoQ, with the main factors as follows:

- 1) Revenue from Gas-Fired Power business was at THB 17,863 million, accounting for 79.6% of total revenues, and increased 156.9% YoY and 38.6% QoQ, mainly from the revenue recognition of GSRC units 1-2 since their commercial operation dates on March 31 and October 1, 2021. Moreover, GMP group recorded higher average electricity selling price per unit which increased in line with higher natural gas price, and recorded higher electricity and steam sales volume to industrial users as well.
- 2) Revenue from Renewable Energy business was THB 2,305 million, accounting for 10.3% of total revenues, and increased 19.6% YoY and 2.5% QoQ, primarily due to the BKR2 offshore wind power project in Germany which recorded superior performance from the higher wind speed in the area, and GTN1 and GTN2 solar projects in Vietnam which experienced less curtailment. Furthermore, GCG biomass project also recorded higher revenue which grew in tandem with the higher Ft price.
- 3) Revenue from Infrastructure & Utilities business was THB 328 million in Q1'22, accounting for 1.5% of total revenues, from service concession arrangement revenue for the land reclamation work of MTP3 industrial port development project, which is scheduled to be completed in 2024.
- 4) Revenue from Management Fee was THB 132 million, accounting for 0.6% of total revenues, and increased 20.1% YoY from the management services provided by the Company to its joint ventures GPC, BGSR 6 and BGSR 81, and from higher management revenue from Hin Kong project. When compared to Q4'21, revenue from management fee increased by 3.2% QoQ, from the services provided to an associate GJP, which increased as stipulated in the service agreement.
- 5) Other income was THB 35 million, reduced by 95.0% YoY, mainly reduced from the absence of dividend income from INTUCH which in Q1'21 was recorded at THB 683 million. However, when compared to Q4'21, other income increased by 13.4% QoQ, a result of the higher interest income from interest income from the service concession arrangement of MTP3 industrial port development project.

- 6) **Share of profit from associates and JVs was THB 1,790 million, increased by 591.4% YoY**, mainly from the share of profit from INTUCH at THB 1,090 million (recognized for the first time in Q4'21). Also, the Company recorded share of FX gain and an unrealized loss on derivatives of associates in Q1'65 at a net gain of THB 6 million, while these items resulted in a net loss of THB 483 million in Q1'21.

However, **when compared with Q4'21, share of profit softened by 7.5% QoQ**, as in Q4'21, there was a share of FX gain and an unrealized gain on derivatives of associates recorded at a total of THB 238 million. Nevertheless, share of profit from INTUCH remains at a similar level as the previous quarter's, and share of Core Profit from GJP improved from the better heat rate margin of the 2 IPPs, following the higher EGAT electricity dispatch.



- **Core Profit in Q1'65 was recorded at THB 3,257 million, increased by 36.3% YoY**, primarily from the performance of GSRC units 1-2 which commenced commercial operation during the year 2021, and the performance of BKR2 offshore wind project which improved due to the higher wind speed. Moreover, the Company also record share of profit from INTUCH for the first time in Q4'21. **When compared to Q4'21, Core Profit increased by 19.4% QoQ**, from the better performance of BKR2 offshore wind project, and the higher share of profit from the IPP power projects as a result of the superior power production efficiency.
- **Net profit attributable to owners of the parent in Q1'22 was recorded at THB 3,395 million, increased by 108.0% YoY and 11.5% QoQ**, increased in the same direction as the Core Profit; however, in Q1'22, the Company recorded FX gain attributable to owners of the parent and unrealized loss on derivatives of associates net of THB 138 million gain, compared to THB 757 million loss from the items in Q1'21, and THB 316 million net gain from the items in Q4'21.

## SUMMARY OF THE COMPANY'S FINANCIAL POSITION ENDED MARCH 31, 2022

- **Total assets as of March 31, 2022 were equal to THB 382,193 million, an increase of 5.4%** from December 31, 2021, mainly attributable to the finance lease receivable under power purchase agreement which increased from the commercial operation of GSRC power plant unit 3 in March 2022, trade accounts receivable which increased in line with the revenue from power plants under the Company's group, construction progress of GPD power plant, and additional investment in INTUCH.
- **Total liabilities as of March 31, 2022 were equal to THB 265,645 million, an increase of 4.1%** from December 31, 2021, mainly from the issuance of the Company's 1/2022 debentures which was used as working capital for business expansion, and the higher value of trade account payable which grew in tandem with the Company's higher sales volume and the higher natural gas price. However, short term and long term loans from financial institutions reduced from the Company's loan repayments
- **Total equity as of March 31, 2022 was THB 116,548 million, an increase of 8.4%** from December 31, 2021, from the Company's operating performance, and fair value of interest rate swap derivatives, which was measured as required under TFRS 9 and recorded within other components of shareholders' equity and non-controlling interests.
- **As of March 31, 2022, the Group recorded a net interest-bearing debt (including lease liabilities) to equity ratio at 1.79 times**, which is lower than the Company's bond covenant of 3.50 times.

# OPERATING RESULTS BY BUSINESS UNITS

## Gas-Fired Power Business Performance

Gas-Fired Power Business	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Revenue from electricity sold to EGAT	5,021	10,078	14,783	46.7%	194.4%
Revenue from electricity sold to industrial users	1,788	1,921	2,109	9.8%	17.9%
Revenue from steam sold to industrial users	141	196	229	16.6%	62.3%
Revenue from lease contracts under power purchase agreement	4	694	742	6.9%	n.a.
<b>Total Revenue from Gas-Fired Power Business</b>	<b>6,954</b>	<b>12,889</b>	<b>17,863</b>	<b>38.6%</b>	<b>156.9%</b>

### Revenue from Sales (Gas-Fired Power business)

In Q1'22, Gas-Fired Power Generation business recorded revenue from sales and lease contracts under power purchase agreement at THB 17,863 million, an increase of 156.9% YoY when compared to Q1'21 mainly due to the recognition of revenue from electricity sales to EGAT and revenue from lease contracts under power purchase agreement according to TFRS 16 from GSRC unit 1-2 projects, after their commercial operation commencement on March 31 and October 1, 2021. In addition, 12SPPs under GMP group recorded a higher revenue from the electricity price which increased in tandem with the higher natural gas price (gas cost for SPP power plants rose from 220.17 THB/mmbtu in Q1'21 to 441.56 THB/mmbtu in Q1'22 (+100.6% YoY), and the higher electricity and steam sales volume to EGAT and industrial users, and a result of the 12 SPPs' new customer expansion.

Compared to Q4'21, Gas-Fired Power Generation business recorded 38.6% QoQ higher revenue from sales and lease contracts under power purchase agreement, partly due to the higher electricity sales volume of GSRC group which grew in line with the country's electricity demand. Moreover, the revenue from electricity and steam sales from Gas-Fired Power Generation business also increased in tandem with the higher natural gas price (the cost of natural gas of SPPs increased from 336.74 THB/mmbtu in Q4'21 to 441.56 THB/mmbtu in Q1'22 (+31.1% QoQ)), resulting in the higher Energy Payment revenue as well.

### Revenue drivers for Gas-Fired Power Generation business

Electricity and steam sales volume	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
<b>Power projects under GMP</b>					
Electricity sold to EGAT (GWh)	1,783	1,848	1,812	-1.9%	1.6%
Electricity sold to IUs (GWh)	537	592	607	2.5%	13.0%
Steam sold (tons)	176,980	183,044	194,804	6.4%	10.1%
<b>Power projects under IPD</b>					
Electricity sold to EGAT (GWh)	4	857	1,747	104.00%	n.a.
<b>Average selling price per unit</b>	<b>Q1'21</b>	<b>Q4'21</b>	<b>Q1'22</b>	<b>Change</b>	
				%QoQ	%YoY
<b>Power projects under GMP</b>					
Electricity sold to EGAT (THB/kWh)	2.81	3.75	4.61	22.8%	63.9%
Electricity sold to IUs (THB/kWh)	3.18	3.26	3.35	2.8%	5.1%
Steam sold (THB/ton)	782.9	1,050.1	1,148.9	9.4%	46.7%
<b>Power projects under IPD</b>					
Electricity sold to EGAT (THB/kWh)	3.39	4.58	4.19	-8.4%	23.6%

## Renewable Energy Business Performance

Renewable Energy Business	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Revenue from electricity sold to EGAT and PEA	179	172	186	8.1%	4.3%
Revenue from electricity sold to IUs	-	0.6	1.5	160.0%	n.a.
Revenue from electricity sold to EVN	119	120	142	18.2%	19.1%
Revenue from electricity sold to Ørsted Energy	1,629	1,947	1,970	1.2%	21.0%
Revenue from others	-	8	5	-40.8%	n.a.
<b>Total Revenue from Renewable Energy Business</b>	<b>1,927</b>	<b>2,248</b>	<b>2,305</b>	<b>2.5%</b>	<b>19.6%</b>

### Revenue from Sales (Renewable Energy business)

**In Q1'22, the Renewable Energy business recorded revenue from sales at THB 2,305 million, an increase of 19.6% YoY compared to Q1'21.** The revenue of BKR2 offshore wind power project in Germany increased from the higher wind speed around the project area (wind speed in Q1'22 was recorded at 11.0 meters/second, compared to 9.8 meters/second in Q1'21). Nevertheless, the curtailment of BKR2 project which increased from the grid congestion problem did not have any effect on the Company's revenue, as BKR2 project received full compensation for the total amount of electricity that was affected as if there were no curtailment.

For GTN1 & GTN2 solar power projects in Vietnam, revenue from electricity sold to EVN increased by 19.1% YoY from the alleviation of the curtailment situation, resulted in the higher electricity sales volume.

Revenue contribution of GCG biomass power project in Thailand grew 4.3% YoY, as the Energy Payment Revenue increased following the wholesale Ft price that increased from -0.3626 THB/kWh in Q1'21 to -0.1440 THB/kWh in Q1'22.

Furthermore, the Company started to recognize revenue contribution from solar rooftop projects under the Company's subsidiary, GULF1, both from the electricity sales from the projects that started commercial operation, and the Revenue from Solar Rooftop construction for industrial users, as well as the revenue from waste management of CM WTE project.

**Compared to Q4'21, revenue from sales of Renewable Energy business increased by 2.5% QoQ** mainly due to the performance of BKR2 offshore wind project in Germany which grew from the higher wind speed in the project's area (wind speed in Q1'22 was recorded at 11.0 meters/second, compared to 9.8 meters/second in Q4'21).

Electricity sales revenue of the GTN1 & GTN2 solar power plant projects in Vietnam increased by 18.2% QoQ with lower impacts from the curtailment compared to the previous quarter, coupled with the project entering high season which resulted in the clearer sky in the projects' areas.

GCG biomass project recorded 8.1% QoQ higher revenue from electricity sales which was in line with the Ft price which increased from -0.3391 THB/ kWh in Q4'21 to -0.1440 THB/ kWh in Q1'22.

### Revenue drivers for Renewable Energy business

Electricity sales volume	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
<b>GCG biomass power project</b>					
Electricity sold to EGAT (GWh)	45	42	44	4.3%	-0.8%
<b>GTN1 &amp; GTN2 solar power projects in Vietnam</b>					
Electricity sold to EVN (GWh)	42	35	44	25.2%	5.8%
<b>BKR2 offshore wind power project</b>					
Electricity sold (GWh)	407	483	404	-16.4%	-0.6%
Compensation (GWh)	79	73	173	136.1%	119.8%

Average selling price per unit	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
<b>GCG biomass power project</b>					
Electricity sold to EGAT (THB/kWh)	3.99	4.04	4.25	5.2%	6.5%
<b>GTN1 &amp; GTN2 solar power projects in Vietnam</b>					
Electricity sold to EVN (THB/kWh)	2.85	3.17	3.14	-0.8%	10.1%
<b>BKR2 offshore wind power project</b>					
Electricity sold (THB/kWh)	6.71	7.04	6.83	-3.0%	1.7%

## Infrastructures & Utilities Business Performance

Infrastructures & Utilities Business	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>		
Revenue from service concession arrangement	44	22	328	1403.2%	636.8%

In Q1'22, the Infrastructures & Utilities Business recorded revenue from service concession arrangement of THB 328 million, a revenue from service concession arrangement for the land reclamation work of MTP3 industrial port development project, which is scheduled to be completed in 2024, and recorded in accordance with the Thai Financial Reporting Standards (TFRIC) 12. The increment in revenue was in line with the project's development progress.

## REVENUE FROM MANAGEMENT FEE

Revenue from Management Fee	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>		
Revenue from Management Fee	110	128	132	3.2%	20.1%

Revenue from Management Fee was THB 132 million, increased by 20.1% YoY from the management services provided by the Company to its joint ventures GPC, BGSR 6 and BGSR 81, and from higher management revenue from services provided to Hin Kong project. When compared to Q4'21, revenue from management fee increased by 3.2% QoQ, from the services provided to an associate GJP, as stipulated in the service agreement.

## OTHER INCOME

Other Income	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>		
Dividend income	683	-	-	n.a.	n.a.
Interest income	12	27	29	7.6%	152.4%
Other income	1	3	5	60.5%	343.5%
<b>Total Other Income</b>	<b>696</b>	<b>31</b>	<b>35</b>	<b>13.4%</b>	<b>-95.0%</b>

In Q1'22, other income was recorded at THB 35 million, a decrease of 95.0% YoY, primarily from the absence of dividend income from INTUCH at THB 683 million which was recorded in Q1'21, while there is no dividend income recorded in Q1'22. However, when compared to Q4'21, other income increased by 13.4% QoQ, primarily from interest income from the service concession arrangement of MTP3 industrial port development project.



## COST AND EXPENSE STRUCTURE

Cost of sales structure	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
<b>Cost of sales</b>	<b>5,940</b>	<b>10,815</b>	<b>15,716</b>	<b>45.3%</b>	<b>164.6%</b>
<i>Fuel cost</i>	3,957	8,669	13,577	56.6%	243.1%
<i>Operations and maintenance cost</i>	492	485	521	7.3%	5.8%
<i>Depreciation</i>	1,164	1,229	1,204	-2.1%	3.5%
<i>Others</i>	327	431	414	-4.0%	26.6%
<b>Cost of service concession arrangement</b>	<b>41</b>	<b>20</b>	<b>291</b>	<b>1340.6%</b>	<b>606.1%</b>
<b>Cost of service</b>	<b>48</b>	<b>55</b>	<b>59</b>	<b>7.1%</b>	<b>22.8%</b>
<b>Total cost of sales and service</b>	<b>6,029</b>	<b>10,890</b>	<b>16,065</b>	<b>47.5%</b>	<b>166.5%</b>
Selling and administrative expenses	484	692	551	-20.4%	14.0%
<b>Total operating costs and administrative expenses</b>	<b>6,512</b>	<b>11,582</b>	<b>16,617</b>	<b>43.5%</b>	<b>155.2%</b>

### Cost of sales

**Cost of sales in Q1'22 was THB 15,716 million, an increase from the same period of last year by 164.6% YoY**, mainly increased in the fuel cost, due to the higher fuel consumption volume and the higher fuel cost per unit, as the average cost of natural gas for SPP power plants rose 100.6% YoY. At the same time, the commercial operation commencement of GSRC unit 1-2 projects on March 31 and October 1, 2021 also resulted in the higher fuel cost, operations and maintenance cost, and depreciation cost recognized into the Company's consolidated financial statement. Moreover, the fuel cost was higher from the power plants under GSRC group which partially used diesel oil for its operation for some period in the quarter, and the power plants under GMP group which recorded higher fuel consumption in tandem with the higher sales volume.

**Compared to Q4'21, cost of sales increased by 45.3% QoQ.** The fuel cost escalated from the higher fuel consumption which grew together with the higher electricity sales volume of the Company's group, coupled with the higher natural gas cost (average cost of natural gas per unit for SPP power plants increased 31.1% QoQ). Moreover, the usage of diesel oil as a source of fuel for GSRC group for some period also contributed to the higher fuel cost for the Company's group as well.

### Cost drivers

Consumption and average cost per unit	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
<b>Natural gas (SPP under GMP)</b>					
Consumption (thousand mmbtu)	17,545	18,255	18,163	-0.5%	3.5%
Average cost per unit (THB/mmbtu)	220.17	336.74	441.56	31.1%	100.6%
<b>Natural gas (IPP under GSRC)</b>					
Natural gas consumption (thousand mmbtu)	27	4,468	9,870	120.9%	n.a.
Natural gas average cost per unit (THB/mmbtu)	n.a.	327.41	432.23	32.0%	n.a.
<b>Biomass (Wood)</b>					
Consumption (ton)	73,061	83,041	77,827	-6.3%	6.5%
Average cost per unit (THB/ton)	1,174	1,047	1,118	6.8%	-4.7%

## Cost of construction fee under concession arrangement

**Cost of construction fee under service concession arrangement** is a cost incurred from MTP3 industrial port development project for the infrastructure part which is recorded in accordance with TFRIC 12 standard, and was recorded at **THB 291 million in Q1'22**, increased in tandem with the progress of project development.

## Cost of service

Cost of service is a cost incurred from the Company providing management services to its associate GJP, to HKP, SPPs under GEC Group, joint ventures GPC, BGSR 6 and BGSR 81. **In Q1'22, cost of service was THB 59 million, an increase of 22.8% YoY and 7.1% QoQ**, mainly from a higher personnel related cost, and realized the costs from services provided to GPC for the first time in Q1'22.

## Administrative expenses

**In Q1'22, administrative expenses were THB 551 million, an increase of 14.0% YoY** from the recognition of administrative expenses which increased in line with the growing number of power plants under the Group. However, **when compared to Q4'21, administrative expenses decreased by 20.4% QoQ**, as there was an imbalance cost for BKR2 project occurred in Q4'21 due to the power plant not able to dispatch electricity to the grid as planned during curtailment periods. Nevertheless, BKR2 project has already received a compensation revenue for the item in its entirety.

## FINANCE COSTS

Finance costs	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Interest expense	959	1,618	1,586	-2.0%	65.4%
Guarantee fee	9	9	9	3.2%	0.5%
Arrangement fee	13	32	31	-3.2%	138.1%
Commitment fee	28	22	18	-18.6%	-36.4%
Other costs	(77)	57	(171)	-399.6%	-122.7%
<b>Total finance costs</b>	<b>932</b>	<b>1,737</b>	<b>1,473</b>	<b>-15.2%</b>	<b>58.1%</b>

**Finance costs in Q1'22 were THB 1,473 million, an increase of 58.1% YoY**, from the higher interest expense and fees related to the long-term loans from financial institutions which were used for the Company's additional investment in INTUCH. Furthermore, there were interest expenses added from the Company's recent debenture issuance, and the finance cost of the GSRC unit 1-2 projects which were booked after the projects' commercial operation commencement.

**When compared to Q4'21, finance costs reduced by 15.2% QoQ**, mainly from the adjustment of provisions for decommissioning cost of BKR2 offshore wind project in Germany, which reduced. The reduction of such provision for decommissioning resulted in the reduction in other costs item, and thus the decrease in finance costs as well.

## SHARE OF PROFIT FROM ASSOCIATES & JOINT VENTURES

Share of profit from associates and JVs	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Share of profit from INTUCH	-	1,105	1,090	-1.4%	n.a.
Share of profit from GJP	219	676	658	-2.7%	200.8%
Share of profit from PTTNGD	(2)	105	(26)	-124.7%	-1374.7%
Share of profit from companies under GULF1	-	0	(1)	n.a.	n.a.
Share of profit from a project in Oman	2	18	50	177.1%	2132.6%
Share of profit from other associates and JVs	40	33	19	-41.0%	-51.2%
<b>Total share of profit from associates and JVs</b>	<b>259</b>	<b>1,936</b>	<b>1,790</b>	<b>-7.5%</b>	<b>591.4%</b>
<u>Less:</u> Gain (loss) on FX from INTUCH's share of profit	-	12	(10)	-185.5%	n.a.
<b>INTUCH's share of Core Profit</b>	<b>-</b>	<b>1,093</b>	<b>1,100</b>	<b>0.6%</b>	<b>n.a.</b>
<u>Less:</u> Gain (loss) on FX from GJP's share of profit	(430)	152	38	-74.9%	108.9%
<b>GJP's share of Core Profit</b>	<b>648</b>	<b>523</b>	<b>619</b>	<b>18.4%</b>	<b>-4.5%</b>
<u>Less:</u> Unrealized gain (loss) on derivatives of PTT NGD	(53)	73	(22)	-129.5%	59.5%
<b>PTT NGD's share of Core Profit</b>	<b>52</b>	<b>32</b>	<b>(4)</b>	<b>-113.5%</b>	<b>-108.3%</b>
<b>Total share of Core Profit from associates and JVs</b>	<b>742</b>	<b>1,699</b>	<b>1,784</b>	<b>5.0%</b>	<b>140.3%</b>

### Share of profit from an associate GJP

**Share of profit from an associate GJP before gain (loss) on exchange rate in Q1'21 was THB 619 million (-4.5% YoY)**, from the 7SPPs under GJP group which recorded a softened performance affected by the natural gas price which increased at a higher rate than the electricity selling price, as the natural gas cost rose by 100.6% YoY, while the average electricity selling price to EGAT and industrial users increased by 64.8% and 5.1%, respectively. However, the higher gross profit from 2 IPPs under GJP group was able to compensate for the softened performance affected by the higher gas price. Nevertheless, the volume of electricity sold to EGAT from GJP group softened from Q1'21 due to the lower power dispatched during the new year holiday, while the electricity and steam sold to industrial users were at a similar level as in the same period of last year.

**Compared to Q4'21, share of Core Profit from an associate GJP grew 18.4% QoQ**, mainly from the performance of the 2IPPes which recorded a higher electricity sales volume to EGAT, and recorded a higher gross profit which resulted from the change of fuel from natural gas to diesel in some period according to EGAT's orders during the situation where gas price significantly rose. The higher performance of the 2IPPes was able to entirely offset the softened gross profit of the 7SPPs which was pressured by the higher natural gas price. Nonetheless, the volume of electricity and steam sold from the 7SPPs remained stable from the previous quarter.

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

Volume of electricity, steam and chilled water sold	Q1'21	Q4'21	Q1'22	Change	
				%QoQ	%YoY
<b>2 IPPs</b>					
Electricity sold to EGAT (GWh)	2,014	570	1,175	106.2%	-41.7%
<b>7 SPPs</b>					
Electricity sold to EGAT (GWh)	1,058	1,085	1,039	-4.2%	-1.7%
Electricity sold to industrial users (GWh)	292.332	287	293	2.3%	0.4%
Steam sold (tons)	85,258	82,595	92,363	11.8%	8.3%
Chilled water sold (million refrigeration tons)	7	6	5	-13.8%	-18.1%

## Share of profit from an associate PTT NGD

**Share of Core Profit from an associate PTT NGD was recorded at a loss of THB 4 million in Q1'22**, a result of the lower gross margin per unit which reduced by 64.6% YoY and reduced by 48.8% QoQ due to the cost which increased at a higher rate than the selling price. Nevertheless, the sales volume in Q1'22 was at 8.1 million mmbtu (+2.5% YoY but -2.4% QoQ). In Q1'22, PTT NGD recorded THB 22 million unrealized loss on derivative contracts which was entered to hedge against fluctuations of the selling price, resulting from the fuel oil price that increased to a higher level than the contracted rate.

## Share of profit from an associate INTUCH

**Share of Core Profit from an associate INTUCH in Q1'22 was recorded at THB 1,100 million**, a level similar to the previous quarter, which was according to the Company's shareholding.

## GAIN / LOSS FROM EXCHANGE RATE

At the end of Q1'22, Thai Baht appreciated against USD by 0.1376 THB/USD, and appreciated against EUR by 0.6899 THB/EUR compared to Q4'21, resulting in the Group to record unrealized gain on exchange rate on USD denominated loan and unrealized loss on EUR denominated loan that the Company granted to GIH and on the fair value of Cross Currency Swap (CCS) contracts. Nonetheless, USD appreciated against EUR by 0.0152 USD/EUR compared to Q4'21, resulting in GIH to record a net unrealized gain on the exchange rate difference between EUR denominated debtors and loan payable, resulting in the Group to record a net gain on exchange rate in Q1'22 of THB 180 million, and **a total unrealized gain on exchange rate attributable to the owners of the parent was recorded at THB 160 million**, comprised of THB 28 million gain on exchange rate from the associate GJP and INTUCH, and THB 132 million gain on exchange rate from the Company and its subsidiaries.

Gain (loss) on exchange rate	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Gain (loss) on exchange rate	(614)	237	180	-24.3%	129.3%
<b>Less:</b> Gain (loss) on exchange rate attributable to non-controlling interests	(340)	159	48	-69.8%	114.2%
Gain (loss) on exchange rate attributable to the owners of the parent	(274)	78	132	68.9%	148.0%
<b>Add:</b> Gain (loss) on exchange rate attributable to share of profit from an associate	(430)	164	28	-82.9%	106.5%
<b>Total gain (loss) from exchange rate attributable to owners of the parent</b>	<b>(704)</b>	<b>242</b>	<b>160</b>	<b>-34.1%</b>	<b>122.7%</b>

### FX Rate at End of Period

	(THB / USD)	(THB / EUR)	(USD / EUR)*
Q4'20	30.2068	36.4949	1.2290
Q1'21	31.5052	36.3346	1.1706
Q2'21	32.2219	37.7588	1.1902
Q3'21	34.0908	38.9765	1.1604
Q4'21	33.5929	37.5083	1.1315
Q1'22	33.4553	36.8184	1.1163

\*Based on the exchange rate in Singapore.

## PROFIT

Profit for the period	Q1'21	Q4'21	Q1'22	Change	
	THB mn	THB mn	THB mn	%QoQ	%YoY
Gross profit	3,006	4,397	4,562	3.8%	51.8%
<i>Gross profit from sales and lease contracts under PPA</i>	2,941	4,323	4,453	3.0%	51.4%
<i>Gross profit from service from concession arrangement</i>	3	2	37	2186.6%	1022.0%
<i>Gross profit from management services</i>	62	73	73	0.2%	18.1%
<b>EBITDA<sup>(1)</sup></b>	<b>5,162</b>	<b>6,706</b>	<b>7,075</b>	<b>5.5%</b>	<b>37.1%</b>
Profit for the period	1,791	3,864	4,095	6.0%	128.7%
<b>Profit attributable to owners of the parent</b>	<b>1,632</b>	<b>3,043</b>	<b>3,395</b>	<b>11.5%</b>	<b>108.0%</b>
Less: Gain (loss) on FX attributable to owners of the parent	(704)	242	160	-34.1%	-122.7%
Less: unrealized gain (loss) on derivatives of PTT NGD	(53)	73	(22)	-129.5%	59.5%
<b>Core Profit<sup>(2)</sup></b>	<b>2,390</b>	<b>2,728</b>	<b>3,257</b>	<b>19.4%</b>	<b>36.3%</b>
<i>Gross profit margin (sales)</i>	33.1%	28.6%	22.1%	-6.5%	-11.0%
<i>Gross profit margin (services)</i>	56.3%	56.9%	55.3%	-1.6%	-1.0%
<i>EBITDA margin</i>	51.7%	38.9%	31.5%	-7.4%	-20.2%
<i>Net profit margin<sup>(3)</sup></i>	16.3%	17.6%	15.1%	-2.5%	-1.2%
<i>Net profit for the period / Total revenue (excl. share of profit from associates and JVs)</i>	18.4%	25.2%	19.8%	-5.4%	1.4%
<i>Core Profit margin</i>	23.9%	15.8%	14.5%	-1.3%	-9.4%

<sup>(1)</sup> EBITDA = Earnings before Interest, Taxes, Depreciation, and Amortization, gain (loss) on exchange rate of the Company and of GJP and INTUCH, and unrealized gain (loss) on derivatives of PTT NGD

<sup>(2)</sup> Core Profit = profit attributable to owners of the parent before gain (loss) on exchange rate and unrealized gain (loss) on derivatives of PTT NGD

<sup>(3)</sup> Net profit margin = profit attributable to owners of the parent / Total Revenue

### Gross profit

**Gross profit in Q1'21 was THB 4,562 million, an increase of 51.8% YoY** compared to Q1'21, mainly increased from the gross profit from sales and lease contracts under power purchase agreement, from the profit recognition of GSRC unit 1-2 projects after its commercial operation date on March 31 and October 1, 2021, and the gross profit from the BKR2 offshore wind project which improved from the higher wind speed in the project's area.

However, gross profit margin from sales decreased from 33.1% in Q1'21 to 22.1% in Q1'22, a result of the higher proportion of gross profit contribution from IPP gas-fired power projects which naturally has a lower gross profit margin than the BKR2 offshore wind power project, coupled by the natural gas cost which increased at a higher rate than the electricity selling price (in Q1'22, natural gas cost for SPP power plants rose by 100.6% YoY, while the average electricity selling price per unit to EGAT and industrial users increased 63.9% YoY and 5.1% YoY, respectively). Nonetheless, as 87% of the Company's electricity is sold to EGAT with the natural gas cost being entirely passed through in the selling price to EGAT, and only 13% of the electricity is being sold to industrial users, the impact of the higher natural gas price to the Company's performance is limited.

Nonetheless, gross profit from service from concession arrangement grew from the project's construction progress, while gross profit from management services increased by 18.1% YoY from the guarantee fee received from a subsidiary GMTP, which is a one-time item in Q1'22.

**Compared to Q4'21, gross profit grew by 3.8% QoQ.** Gross profit from sales and lease contracts increased from the performance of BKR2 offshore wind project which grew from the higher wind speed, combined with the gas-fired power projects which recorded a higher total sales volume. Moreover, gross profit of the power projects under GSRC group also increased from the better heat rate, following the higher dispatch from EGAT.

Gross profit margin from sales reduced as a result of the higher proportion of gross profit contribution from the gas-fired IPP power projects as mentioned earlier, combined with the effect of the natural gas cost which increased at a higher rate

than the electricity selling price. (Natural gas cost per unit of the SPP power projects under GMP group increased by 31.1% QoQ, while the electricity selling price to EGAT and industrial users increased by 22.8% QoQ and 2.8% QoQ, respectively).

Nevertheless, gross profit from concession arrangement grew from the project's construction progress, while the gross profit from management services remained at a similar level as the previous quarter.

## EBITDA

**EBITDA in Q1'21 was THB 7,075 million, increased by 37.1% YoY and 5.5% QoQ**, which moved in tandem with Core Profit.

## Core Profit

**Core Profit was recorded at THB 3,257 million in Q1'22, an increase of 36.3% YoY from Q1'21**, mainly from:

- 1) Profit contribution from GSRC power plant units 1-2 which commenced commercial operation on March 31 and October 1, 2021.
- 2) Higher performance contribution from BKR2 offshore wind project following the higher wind speed.
- 3) Recognized share of profit from INTUCH of THB 1,100 million (realized for the first time in Q4'21).

**When compared with Q4'21, Core Profit increased by 19.4% QoQ**, mainly from:

- 1) Performance from BKR2 offshore wind project improved from the higher wind speed.
- 2) The Company's IPP gas-fired power projects recorded a higher gross profit from the better heat rate margin following the higher electricity dispatch from EGAT.
- 3) GTN1 and GTN2 solar power project in Vietnam also entered high season in Q1'22, resulting in a superior performance.

## Net profit attributable to the owners of the parent

**Net profit attributable to the owners of the parent in Q1'22 was THB 3,395 million, an increase of 108.0% YoY**, mainly grew from the commercial operation commencement of GSRC unit 1-2 projects, better performance contribution from BKR2 offshore wind project, and received share of profit from INTUCH. However, net profit attributable to the owners of the parent grew at a higher rate than the Core Profit, as there was a gain on exchange rate attributable to the owners of the parent and unrealized loss on derivatives of associates totaling at a net gain of THB 138 million in Q1'22, compared to Q1'21 which record a net loss from the items at THB 757 million.

**When compared to Q4'21, net profit attributable to the owners of the parent increased by 11.5% QoQ**, primarily from the improved performance of BKR2 offshore wind project, and higher profit of the IPP gas-fired power projects under the Company group. Nevertheless, net profit attributable to the owners of the parent grew at a lower rate than the Core Profit, as the Company recorded a gain from exchange rate attributable to the owners of the parent and loss on derivatives of associates in Q1'22 which totaled at a lower net gain when compared to Q4'21.

# FINANCIAL POSITION AS OF March 31, 2022

Financial position	As of December 31, 2021	As of March 31, 2022	Change
	<i>THB mn</i>	<i>THB mn</i>	<i>%</i>
Cash, cash equivalents, short-term deposits at financial institutions used as collateral	23,953	23,175	-3.3%
Trade accounts receivable	9,569	14,561	52.2%
Investments in associates and joint ventures	135,573	139,760	3.1%
Advance payments for land and power plant construction	3,017	6,457	114.0%
Property, plant and equipment, net	130,128	124,610	-4.2%
Non-current assets	3,340	5,945	78.0%
Finance lease receivable under power purchase agreement	20,931	30,167	44.1%
Other assets	36,162	37,518	3.7%
<b>Total assets</b>	<b>362,674</b>	<b>382,193</b>	<b>5.4%</b>
Short-term loans from financial institutions	9,927	3,000	-69.8%
Accounts payable for power plant construction	8,155	7,281	-10.7%
Trade accounts payable	3,080	6,368	106.7%
Long-term loans from financial institutions	141,765	139,338	-1.7%
Debentures	71,058	91,178	28.3%
Other liabilities	21,178	18,480	-12.7%
<b>Total liabilities</b>	<b>255,165</b>	<b>265,645</b>	<b>4.1%</b>
Issued and paid-up capital	11,733	11,733	0.0%
Share premium	51,822	51,822	0.0%
Unappropriated retained earnings	35,980	39,263	9.1%
Other components of equity	(5,064)	(1,457)	-71.2%
Other equity	2,125	2,236	5.2%
<b>Total equity attributable to owners</b>	<b>96,596</b>	<b>103,598</b>	<b>7.2%</b>
Non-controlling interests	10,913	12,950	18.7%
<b>Total equity</b>	<b>107,509</b>	<b>116,548</b>	<b>8.4%</b>
<b>Total equity excluding other components of equity</b>	<b>112,573</b>	<b>118,005</b>	<b>4.8%</b>

## TOTAL ASSETS

Total assets as of March 31, 2022 was THB 382,193 million, an increase of THB 19,519 million (+5.4%) from December 31, 2021. The increase was attributable to the following factors:

- 1) Finance lease receivable under power purchase agreement increased by 44.1% or THB 9,236 million, but property, plant and equipment net decreased by 4.2% or THB 5,518 million, a result of the commercial operation of GSRC power plant unit 3 which was booked in accordance with the TFRS 16 accounting standards.
- 2) Trade accounts receivable increased by 52.2% or THB 4,992 million, in line with the increase in revenue from power plants under the Company's group.
- 3) Investment in associates increased by 3.1% or THB 4,187 million from the performance contribution from GJP and INTUCH, and from additional investment in INTUCH.

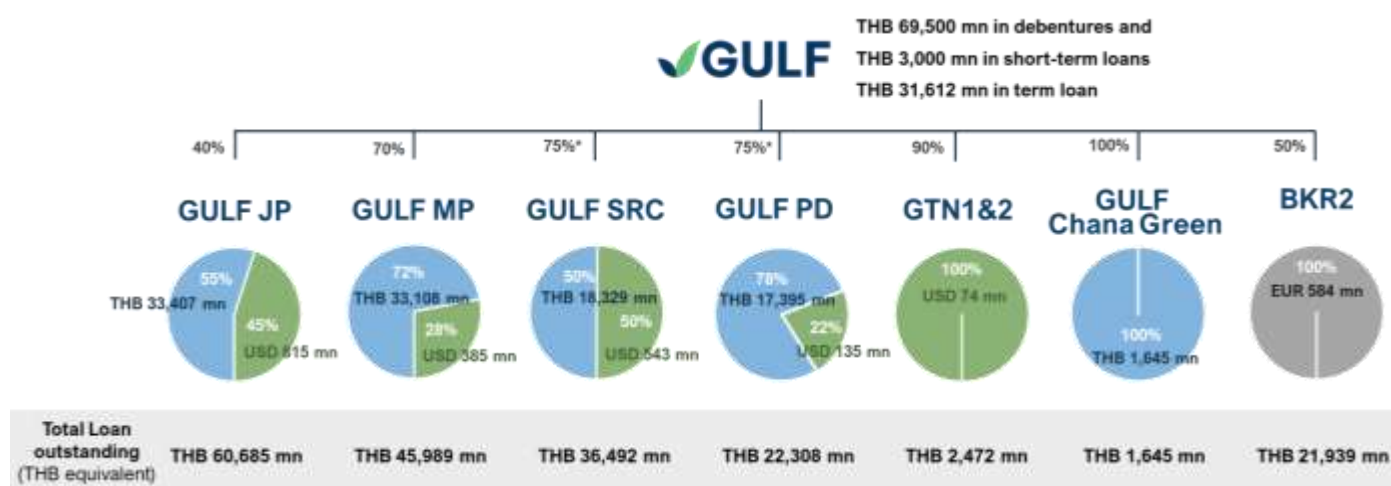
- 4) Other non-current financial assets increased by 78% or THB 2,604 million, from the increase in fair value of interest rate swap derivative contracts which was measured as required under TFRS 9, and investment in Series Seed Preferred Stock of Binance.US.

## TOTAL LIABILITIES

**Total liabilities as of March 31, 2022 was THB 265,645 million, an increase of THB 10,480 million (+4.1%)** from December 31, 2021. The increase was attributable to the following factors:

- 1) Debentures increased by 28.3% or THB 20,119 million, mainly increased from the issuance of the Company's 1/2022 debentures, value of THB 24,000 million, which was used for the Company's working capital for future investments.
- 2) Short-term debts decreased by 69.8% or THB 6,927 million from the repayment of the Company's short-term loan from financial institutions.
- 3) Trade accounts payable increased by 106.7% or THB 3,288 million from the cost of sales which increased in line with the higher natural gas cost.
- 4) Long-term loans from financial institutions decreased by 1.7% or THB 2,427 million, primarily from the Company's partial loan repayment.

### Total debt outstanding of the Company and its subsidiaries as of March 31, 2022



## TOTAL EQUITY

**Total equity as of March 31, 2022 was THB 116,548 million, an increase of THB 9,039 million (+8.4%)** from December 31, 2021 due to following factors:

- 1) Other components of equity increased by THB 3,607 million, and non-controlling interests increased by THB 2,037 million, due to the Company's performance, and the increase in fair value of interest rate swap derivative contracts which was measured as required under TFRS 9. However, such accounting record does not affect the Company's operating performance.
- 2) Unappropriated retained earnings increased by THB 3,284 million from net profit attributable to the parent company of THB 3,395 million, reserve according to legal requirement THB 111 million.

## CAPITAL STRUCTURE

**As of March 31, 2022, the Group recorded a debt to equity ratio of 2.28 times.** However, when consider the covenant of the Company's debenture, **net interest-bearing debt (including lease liabilities) to equity was recorded at 1.79 times.**



# STATEMENT OF CASH FLOWS

Statement of cash flows	For the period ended March 31, 2022
	<i>THB mn</i>
Net cash generated from (used in) operating activities	3,587
Net cash used in investing activities	(14,240)
Net cash generated from (used in) financing activities	9,230
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(1,424)</b>
Gain (loss) adjustment from foreign exchange translation of cash and cash equivalents	1
Cash and cash equivalents as of January 1, 2022	19,847
<b>Cash and cash equivalents as of March 31, 2022</b>	<b>18,425</b>

**As of March 31, 2022, the Company and its subsidiaries recorded cash and cash equivalents of THB 18,425 million** attributable to the following factors:

**Net cash received from operating activities of THB 3,587 million** mainly from:

- Cash from operating profit of THB 5,295 million
- Net cash paid for operating assets and liabilities THB 1,708 million

**Net cash used in investing activities of THB 14,240 million** mainly from:

- Payments for property, plant and equipment of THB 5,453 million, primarily for projects under GSRC and GPD
- Payments for investment in associates and JVs of THB 3,966 million, primarily from the Company's additional investment in INTUCH.
- Payments for advance payments for land and power plant construction of THB 3,892 million, primarily from Map Ta Phut Industrial Port Development Phase 3 project, and land purchased for future projects.

**Net cash received from financing activities of THB 9,230 million** mainly from:

- Net cash received from debentures of THB 20,552 million
- Net cash payment for short-term and long-term loans of THB 9,297 million
- Payments for interest expense and finance costs of THB 1,967 million

# KEY FINANCIAL RATIOS

Financial ratios	Q1'21	Q4'21	Q1'22
Basic earnings per share (THB)	0.14	0.26	0.29
Gross profit margin from sales (%)	33.1%	28.6%	22.1%
EBITDA margin	51.7%	38.9%	31.5%
Net profit margin <sup>1</sup> (%)	16.3%	17.6%	15.1%
Core Profit margin <sup>1,2</sup> (%)	23.9%	15.8%	14.5%
Net profit for the period / Total revenue (excl. share of profit from associates and JVs)	18.4%	25.2%	19.8%
Return on equity (%)	15.1%	10.2%	11.7%
Return on assets <sup>3</sup> (%)	4.2%	3.0%	3.6%

	Mar 31, 2021	Dec 31, 2021	Mar 31, 2022
Book value per share (THB)	5.99	8.23	8.83
Current ratio (times)	0.88	1.11	1.08
Quick ratio (times)	0.76	0.92	0.87
Debt to equity (times)	2.21	2.37	2.28
Net interest-bearing debt (including lease liabilities) to equity <sup>4</sup> (times)	1.60	1.77	1.79

<sup>1</sup> Total revenues = revenues from sales and management fee + other income + interest income + dividend income + share of profit from associates and joint ventures

<sup>2</sup> Core Profit = profit attributable to owners of the parent before gain (loss) on exchange rate and unrealized gain (loss) on derivatives of PTT NGD

<sup>3</sup> ROA calculated using net profit (annualized) / average total assets

<sup>4</sup> Net debt to equity ratio that must be maintained in accordance with the terms and conditions (times) = Net debt to equity ratio that must be maintained in accordance with the terms and conditions is calculated by finding the difference of (a) total interest-bearing debt, (b) cash and cash equivalents and (c) deposits at financial institutions used as collateral, and divided by the issuer's equity which excludes other components of equity as shown in the consolidated financial statements audited by the issuer's auditor

# PROGRESS OF PROJECTS UNDER CONSTRUCTION AND DEVELOPMENT

## POWER GENERATION AND RENEWABLE ENERGY BUSINESS



### Gulf SRC (Thailand)

<b>Fuel Type</b>	Gas-fired	
<b>Capacity</b>	2,650 MW (4 units, 662.5 MW each)	
<b>SCOD</b>	Unit 1: 31 March 2021 Unit 2: 1 October 2021	Unit 3: 31 March 2022 Unit 4: 1 October 2022
<b>Status</b>	Unit 1-3: Achieved commercial operation Unit 4: Under commissioning: 98.5% completed	



### Gulf PD (Thailand)

<b>Fuel Type</b>	Gas-fired	
<b>Capacity</b>	2,650 MW (4 units, 662.5 MW each)	
<b>SCOD</b>	Unit 1: 31 March 2023 Unit 2: 1 October 2023	Unit 3: 31 March 2024 Unit 4: 1 October 2024
<b>Status</b>	Under construction with the progress as follows: Unit 1: 87.9% Unit 2: 63.8% Unit 3: 45.0% Unit 4: 32.9%	



### Hin Kong Power (Thailand)

<b>Fuel Type</b>	Gas-fired	
<b>Capacity</b>	1,540 MW (2 units, 770 MW each)	
<b>SCOD</b>	Unit 1: March 2024 Unit 2: January 2025	
<b>Status</b>	Under construction: 32.0% completed	



### Burapa Power (Thailand)

<b>Fuel Type</b>	Gas-fired	
<b>Capacity</b>	600 MW	
<b>SCOD</b>	November 2027	
<b>Status</b>	<ul style="list-style-type: none"> <li>EIA approval obtained</li> <li>Expected to start construction by 2025</li> </ul>	



### DIPWP (Oman)

<b>Fuel Type</b>	Gas-fired
<b>Capacity</b>	Power: approx. 326 MW Water: approx. 1,667 m <sup>3</sup> /hour
<b>SCOD</b>	Phase 1 (40 MW): 2021 Phase 2 (286 MW): 2023
<b>Status</b>	Phase 1: Achieved commercial operation (electricity) Phase 2: Under construction: 95.2% completed



### Mekong Wind Power Project (Vietnam)

<b>Fuel Type</b>	Offshore Wind
<b>Capacity</b>	128 MW
<b>SCOD</b>	within Q3'22
<b>Status</b>	Phase 1: Achieved commercial operation partially (4.2 megawatts) with the rest under construction: 99.99% completed

## INFRASTRUCTURE & UTILITIES BUSINESS



### Map Ta Phut Industrial Port Development Phase 3 (Thailand)

<b>Scope</b>	Infrastructure: Land reclamation Superstructure: LNG terminal
<b>Capacity</b>	Land reclamation: 1,000 rais LNG terminal: up to 10.8 MTPA
<b>Construction Period</b>	Land reclamation: 2021 - 2024 LNG terminal: 2024 - 2026* *subject to LNG demand
<b>Status</b>	Under construction: 4.1% completed



### Laem Chabang Port Development Phase 3 (Thailand)

<b>Scope</b>	Container berths (F1 & F2 terminals)
<b>Capacity</b>	At least 4 million TEU/year (operation period 35 years)
<b>SCOD</b>	F1 = [2025] F2 = [2029]
<b>Status</b>	Signed PPP Contract within November 2021 Expected to start construction within 2023



### M6 & M81 Intercity Motorways (Thailand)

<b>Scope</b>	Operation and Maintenance of toll collection system, traffic management and control system, and other infrastructures
<b>Capacity</b>	M6: 196 km M81: 96 km
<b>SCOD</b>	[2024]
<b>Status</b>	Under construction: 2.63 – 2.91% completed

### ONE BANGKOK



### One Bangkok Project (Thailand)

<b>Scope</b>	Electricity Distribution System (Power) District Chilled Water Distribution System (DCS)
<b>Capacity</b>	Power: 240 MW DCS: 36,000 RT
<b>SCOD</b>	Phase 1 – 2022 (Power) Phase 1 – 4 2023 – 2026 (Power and DCS)
<b>Status</b>	<ul style="list-style-type: none"> <li>Electricity Distribution System (Power) - Under development: 34.5% completed</li> <li>District Chilled Water Distribution System (DCS) - Under development: 51.0% completed</li> </ul>

# DEFINITIONS

<b>Company</b>	<b>Gulf Energy Development Public Company Limited</b>
<b>Group</b>	<b>The Company, its subsidiaries, its associates and its joint ventures</b>
<b>ADVANC</b>	Advanced Info Service Plc.
<b>GEC group</b>	Gulf Electric Public Company Limited and its subsidiaries
<b>EGAT</b>	The Electricity Generating Authority of Thailand
<b>PEA</b>	Provincial Electricity Authority
<b>7SPPs</b>	7 SPPs under GJP consisting of GKP1, GKP2, GTLC, GCRN, GNNK, GNLL and GNK2
<b>12SPPs</b>	12 SPPs under GMP consisting of GVTP, GTS1, GTS2, GTS3, GTS4, GNC, GBL, GBP, GNLL2, GNPM, GNRV1 and GNRV2
<b>BGSR 6</b>	BGSR 6 Co., Ltd., a JV in which the Company has a 40% stake
<b>BGSR 81</b>	BGSR 81 Co., Ltd., a JV in which the Company has a 40% stake
<b>Binance.US</b>	BAM Trading Services Inc., the operator of a regulated digital asset exchange in the United States of America under the name Binance.US.
<b>BKR2</b>	Borkum Riffgrund 2 Offshore Wind Farm GmbH & Co. oHG, an offshore wind farm operator in Germany
<b>BPG</b>	Burapa Power Generation Co., Ltd., a power project operator under BPH
<b>BSE</b>	Bangkok Smart Energy Co., Ltd., a JV in which the Company has a 33.3% stake
<b>BPH</b>	Burapa Power Holding Co., Ltd., a JV in which the Company has a 35.0% stake
<b>DIPWP</b>	Duqm Integrated Power and Water Project, a power project operator in Oman
<b>EPC</b>	Engineering, procurement and construction
<b>EVN</b>	Vietnam Electricity
<b>GBL</b>	Gulf BL Co., Ltd., a power project operator under the subsidiary of GMP
<b>GBP</b>	Gulf BP Co., Ltd., a power project operator under the subsidiary of GMP
<b>GCG</b>	Gulf Chana Green Co., Ltd., a biomass project operator in which the Company has a 100% stake
<b>GCRN</b>	Gulf JP CRN Co., Ltd., a power project operator under the associate GJP
<b>GJP</b>	Gulf JP Company Limited, an associate in which the Company has a 40.0% stake
<b>GJP1</b>	Gulf JP1 Company Limited, an operator of solar rooftop projects under a subsidiary GULF1
<b>GKP1</b>	Gulf JP KP1 Co., Ltd., a power project operator under the associate GJP
<b>GKP2</b>	Gulf JP KP2 Co., Ltd., a power project operator under the associate GJP
<b>GMP</b>	Gulf MP Co., Ltd., a subsidiary in which the Company has a 70.0% stake
<b>GMP</b>	Gulf MTP LNG Terminal Co., Ltd., a subsidiary in which the Company has a 70% stake
<b>GNC</b>	Gulf NC Co., Ltd., a power project operator under the subsidiary GMP
<b>GNK2</b>	Gulf JP NK2 Co., Ltd., a power project operator under the associate GJP
<b>GNLL</b>	Gulf NLL Co., Ltd., a power project operator under the associate GJP
<b>GNLL2</b>	Gulf NLL2 Co., Ltd., a power project operator under the subsidiary GMP
<b>GNNK</b>	Gulf JP NNN Co., Ltd., a power project operator under the associate GJP
<b>GNPM</b>	Gulf NPM Co., Ltd., a power project operator under the subsidiary GMP
<b>GNRV1</b>	Gulf NRV1 Co., Ltd., a power project operator under the subsidiary GMP
<b>GNRV2</b>	Gulf NRV2 Co., Ltd., a power project operator under the subsidiary GMP
<b>GNS</b>	Gulf JP NS Co., Ltd., a power project operator under the associate GJP
<b>GPC</b>	GPC International Terminal Co., Ltd., a JV in which the Company has a 40% stake
<b>GPD</b>	Gulf PD Co., Ltd., a power project operator under the subsidiary of IPD

<b>GSRC</b>	Gulf SRC Co., Ltd., a power project operator under the subsidiary of IPD
<b>GTLC</b>	Gulf JP TLC Co., Ltd., a power project operator under the associate GJP
<b>GTN1</b>	Gulf Tay Ninh 1 Joint Stock Company, a solar farm operator in Vietnam
<b>GTN2</b>	Gulf Tay Ninh 2 Joint Stock Company, a solar farm operator in Vietnam
<b>GTS1</b>	Gulf TS1 Co., Ltd., a power project operator under the subsidiary GMP
<b>GTS2</b>	Gulf TS2 Co., Ltd., a power project operator under the subsidiary GMP
<b>GTS3</b>	Gulf TS3 Co., Ltd., a power project operator under the subsidiary GMP
<b>GTS4</b>	Gulf TS4 Co., Ltd., a power project operator under the subsidiary GMP
<b>Gulf WHA MT</b>	Gulf WHA MT Natural Gas Distribution Company Limited, a JV in which the Company has a 35.0% stake
<b>GULF1</b>	Gulf1 Company Limited, a subsidiary in which the Company has a 100.0% stake
<b>GUT</b>	Gulf JP UT Co., Ltd., a power project operator under the associate GJP
<b>GVTP</b>	Gulf VTP Co., Ltd., a power project operator under the subsidiary GMP
<b>HKH</b>	Hin Kong Power Holding Co., Ltd., a JV in which the Company has a 49.0% stake
<b>HKP</b>	Hin Kong Power Co., Ltd., a power project operator under HKH
<b>INTUCH</b>	Intouch Holdings Plc.
<b>IPD</b>	Independent Power Development Company Limited, a subsidiary in which the Company has a 70.0% stake
<b>IPP</b>	Independent Power Producer in which capacity sold to EGAT is more than 90 MW
<b>Marafiq</b>	Centralised Utilities Company L.L.C., a JV in which the Company has a 49% stake
<b>Mekong</b>	Mekong Wind Power Joint Stock Company
<b>MTP3</b>	Map Ta Phut Industrial Port Development Phase 3
<b>PEA</b>	The Provincial Electricity Authority
<b>PTT NGD</b>	PTT Natural Gas Distribution Company Limited
<b>Singtel</b>	Singapore Telecommunications Limited
<b>SPP</b>	Small Power Producer in which capacity sold to EGAT is more than 10 MW but not more than 90 MW
<b>TFRIC 4</b>	Revenue recognition standard applied for the IPPs to record revenue from availability payment as income from financial lease
<b>TFRIC 12</b>	Thai Financial Reporting Standard applied for Service Concession Arrangements
<b>TFRS 9</b>	Thai Financial Reporting Standard applied for Financial Instruments
<b>TFRS 16</b>	Thai Financial Reporting Standard applied for Leases
<b>THCOM</b>	Thaicom Plc.