

– Translation –



Gulf Energy Development Public Company Limited

MANAGEMENT DISCUSSION AND ANALYSIS OF THE COMPANY'S PERFORMANCE

For the Year Ended December 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.

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EXECUTIVE SUMMARY

KEY EVENTS IN 2020

Projects that commenced commercial operation

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

Business expansion in Thailand and other countries

Acquisition of ordinary shares in Hin Kong Power Holding Company Limited (“HKH”) at 49% from RATCH Group Public Company Limited on January 3, 2020, to develop and operate Hin Kong Power Project (“HKP”) with total installed capacity of 1,540 megawatts (770 megawatts per unit), located in Ratchaburi province, and expected to commence commercial operation in 2024 and 2025, respectively.

Acquisition of ordinary shares in Burapa Power Holding Company Limited (“BPH”) at 35% from National Power Supply Public Company Limited on January 17, 2020, to develop and operate Burapa Power Project (“BPG”) with installed capacity of 600 megawatts, located in Chachoengsao province, and expected to commence commercial operation in 2027.

Acquisition of an additional stake and infrastructure business expansion in the Sultanate of Oman. On June 11, 2020, the Company has restructure the shareholding for the business in Oman, from prior structure in which a subsidiary of the Company GIH holds 45% and Marafiq holds 55% of shares in DIPWP Project, to have Marafiq hold 100% of shares in DIPWP Project while GIH holds 49% and OQ holds 51% of shares in Marafiq after the restructure, in order to jointly develop utility services projects in Duqm SEZ which Marafiq has the exclusive right to conduct power, water and gas businesses in for a period of 25 years with a 25-year additional term.

Investment in offshore wind power plant BKR2 on September 24, 2020 resulting in the Company holding equal shareholding in BKR2 Project as Ørsted A/S (“Ørsted”) at 50%. The project has installed capacity of 464.8 megawatts that achieved commercial operation in April 2019, and is located in the German North Sea, northwest of Germany.

Acquisition of ordinary shares in PTT Natural Gas Distribution Company Limited (“PTT NGD”) at 40% from International Power S.A on December 23, 2020. PTT NGD operates a natural gas distribution business by investing in distribution pipeline systems in 13 industrial areas in Bangkok Metropolitan Region and in Rayong province.

Contracts and agreements signing & license obtained

Signing of Shareholders’ Agreements for power distribution and district cooling system for One Bangkok on January 6, 2020 between Bangkok Smart Energy Company Limited (“BSE”) and 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 for One Bangkok on January 9, 2020 between BSP and BSD 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.

The Company and HKH acquired LNG shipper licenses from the Energy Regulatory Commission (ERC), in the amount of 300,000 tons per year and 1,400,000 tons per year, respectively, on May 21, 2021. The Company will supply the LNG to 19 SPP power projects under the Group, to produce electricity and steam for industrial customers of the SPPs, while HKH will supply the LNG for the electricity production of Hin Kong Power Project.

Signing of EPC Contract for Map Ta Phut Phase 3 Project (“MTP3”) on July 31, 2020, GMTP has entered into the Engineering, Procurement and Construction (EPC) Contract with CHEC (THAI) Company Limited, a company under China Harbour Engineering Company Limited group, for design and construction work of MTP3 project.

Signing of EPC Contract and Long-Term Program Service Agreement for Hin Kong Power Project. On September 29, 2020, HKP has entered into the Engineering, Procurement and Construction (EPC) Contract with the group of MHI Power Project (Thailand) Company Limited, Sino-Thai Engineering & Construction Public Company Limited and Mitsubishi Power Limited, and the Long-Term Program Service Agreement (LTSA) with the group of MHI Power Project (Thailand) Company Limited for 25 years.

Execution of the Cooperation Agreement to develop a power distribution project in Kabinburi Industrial Zone between GNC power project under GMP group and Kabinburi Industrial Zone Limited (“KIZ”) on December 15, 2020. GNC will invest in the construction of a 22-kilovolt transmission line from the powerplant to connect and distribute electricity to industrial customers in Kabinburi Industrial Zone, with a total contracted capacity of approximately 35 megawatts, and this project is expected to start selling electricity to customers in the Q4’21.

Financial Activities

Signing of financing agreements for solar power project GTN2 on January 22, 2020, 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. GTN2 project has installed power generation capacity of 50 megawatts located in Vietnam with an approximate project value of USD 50 million, and the Company indirectly holds 90% of the project.

Change in the par value of the Company's shares from THB 5 per share to THB 1 per share on April 16, 2020, resulting in the Company's number of shares to increase from 2,133,300,000 shares to 10,666,500,000 shares, while the Company's registered capital and paid-up capital remained the same at THB 10,666,500,000.

Allotment of the Company's unsecured and unsubordinated debentures valued THB 10,000 million offered to institutional investors and high net worth investors on August 19, 2020. 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 2.98% per annum and an average tenure of 5 years.

Offering and allotment of newly issued ordinary shares to existing shareholders in proportion to their respective shareholdings (Rights Offering) at the allocation ratio of 10:1 and at the offering price of THB 30 per share. A total of 1,066,649,998 shares have been subscribed, and the Company received a total capital increase of THB 32,000 million. In this regard, the Company has increased the registered capital from THB 10,666,500,000 to THB 11,733,150,000. The objective of this capital increase is to use the proceeds for investment in projects that are in the Company's pipeline, loans repayment to reduce interest burden, as well as to use as working capital of the Company. The new shares were traded on the Stock Exchange of Thailand on September 28, 2020.

Declaration to join Thailand's Private Sector Collective Action against Corruption (CAC)

On December 3, 2020, the Company has declared its intention to be a member of Thailand's Private Sector Collective Action against Corruption (CAC), to be a part to tackle corruption problem via collective action of Private Sector in Thailand, and the Company is currently proceeding for CAC certification.

ECONOMIC SITUATION

In 2020, Thai economy was affected by the severe outbreak of COVID-19 virus, led to many countries including Thailand to implement strong outbreak control policy which resulted in the economic activities to temporary cease, and both domestic and international demands to contract especially in Q2'20, although private sector demand partially recovered in 2H'20 following the ease of outbreak control and government's stimulation to support household consumption.

For the economy in 2021, the Bank of Thailand forecasted that Thai economic recovery is still uncertain, subject to risk factors such as the recent round of COVID-19 outbreak in Thailand, effectiveness of COVID-19 vaccines, fiscal economic stimulation policy, and the uncertain financial status of the business sector and households after the debtor relief program comes to completion

Electricity demand in Thailand

The Energy Policy and Planning Office (EPPO) reported that Thailand electricity consumption in 2020 declined 3.1% from 2019. The softened demand was from both industrial and business sector, especially the businesses that rely on tourism which was highly affected by the lockdown policy, such as hotels and department stores. However, household electricity consumption significantly grew from the 'work from home' policy during the first few months of 2020. Nevertheless, the aforementioned decrease in electricity demand has limited impact to the Company, as the Company has power purchase agreements with Electricity Generating Authority of Thailand ("EGAT"). Under such agreements, IPP power plants will receive Availability Payment from EGAT even when the power plants are not required to dispatch electricity, while SPP power plants has a contractual minimum offtake amount from EGAT, reducing the Company's risk from the lower electricity demand in the current situation. However, the Company's electricity sales volume to industrial users slightly reduced in 2020 when compared to 2019, as some customers were affected by the COVID-19 pandemic, for instance automotive and textile industry, while food & beverage and packaging industrial customers had a higher electricity demand during the same time. Besides, the Company currently sells 88% of its electricity to EGAT, and only 12% of electricity is sold to industrial customers, restraining the impact of COVID-19.

Thai Baht currency situation

In 2020, the exchange rate between Thai Baht and US Dollar was highly volatile. In Q1'20, Thai Baht depreciated from the concerns on COVID-19 world-wide outbreak, resulting in the capital outflow from risky assets and Emerging Markets to safe assets. Afterwards in Q2'20 – Q3'20, Thai Baht varied pursuant to the risk sentiment regarding the uncertainty of COVID-19 status, domestic political situation, monetary policy direction of the Bank of Thailand (BOT) and the Federal Reserve, and world economy which faced many risks. Nonetheless, Thai Baht appreciated in Q4'20 in tandem with other currencies in the region, following the capital inflow which moved back to Emerging Markets after the result of the United States presidential election was certain, incorporate by the news about effectiveness and deliveries of COVID-19 vaccines. Further into 2021, the BOT forecasted that currency exchange rate has a tendency be volatile from the new round of COVID-19 spreads, economic policy of Developed Market countries, and political situation in Thailand.

However, as the electricity selling price structure for IPP and SPP power plants in Thailand partially correlates with the change in Thai Baht / US Dollar exchange rate, the Company's group designs long-term loan structure for its power plants to be partially in USD, in order for the cash flow received and paid to be in harmonized in terms of currency (natural hedge), as a foreign exchange rate risk hedging method.

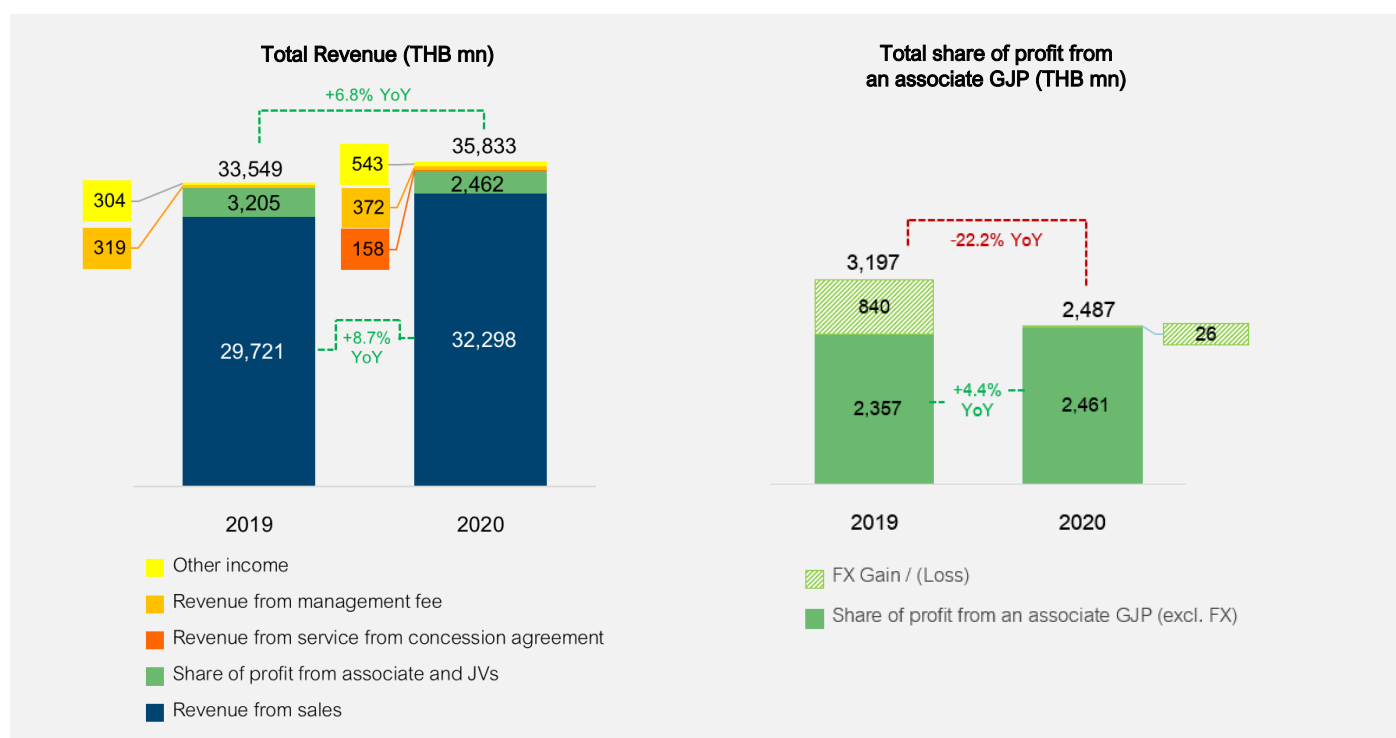
FINANCIAL PERFORMANCE OVERVIEW

	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	THB mn	THB mn	THB mn	% QoQ	% YoY	THB mn	THB mn	% YoY
Revenue from sales, management fee, and service concession arrangement	8,004	7,876	9,309	18.2%	16.3%	30,040	32,827	9.3%
Share of profit from associates and JVs	617	495	979	97.6%	58.6%	3,205	2,462	-23.2%
Other income	49	374	21	-94.4%	-57.3%	304	543	78.9%
Total revenues	8,670	8,746	10,309	17.9%	18.9%	33,549	35,833	6.8%
EBITDA ⁽¹⁾	2,598	3,499	4,165	19.0%	60.3%	10,638	13,455	26.5%
Profit for the period	1,454	1,255	2,736	117.9%	88.1%	7,166	6,144	-14.3%
Profit attributable to owners of the parent	905	970	1,844	90.1%	103.8%	4,887	4,282	-12.4%
Less: gain (loss) on exchange rate attributable to owners of the parent	234	(355)	605	270.4%	158.3%	1,377	(196)	-114.2%
Core profit ⁽²⁾	671	1,325	1,239	-6.5%	84.8%	3,509	4,478	27.6%
GJP's core profit ⁽³⁾	470	753	433	-42.4%	-7.8%	2,357	2,461	4.4%
Basic earnings per share (THB)	0.08	0.09	0.16	77.5%	92.2%	0.46	0.39	-14.8%

(1) EBITDA = Earnings before Interest, Taxes, Depreciation, and Amortization, gain (loss) on exchange rate of the Company and of GJP

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

(3) GJP's core profit = share of profit (loss) from an associate (GJP) before gain (loss) on exchange rate

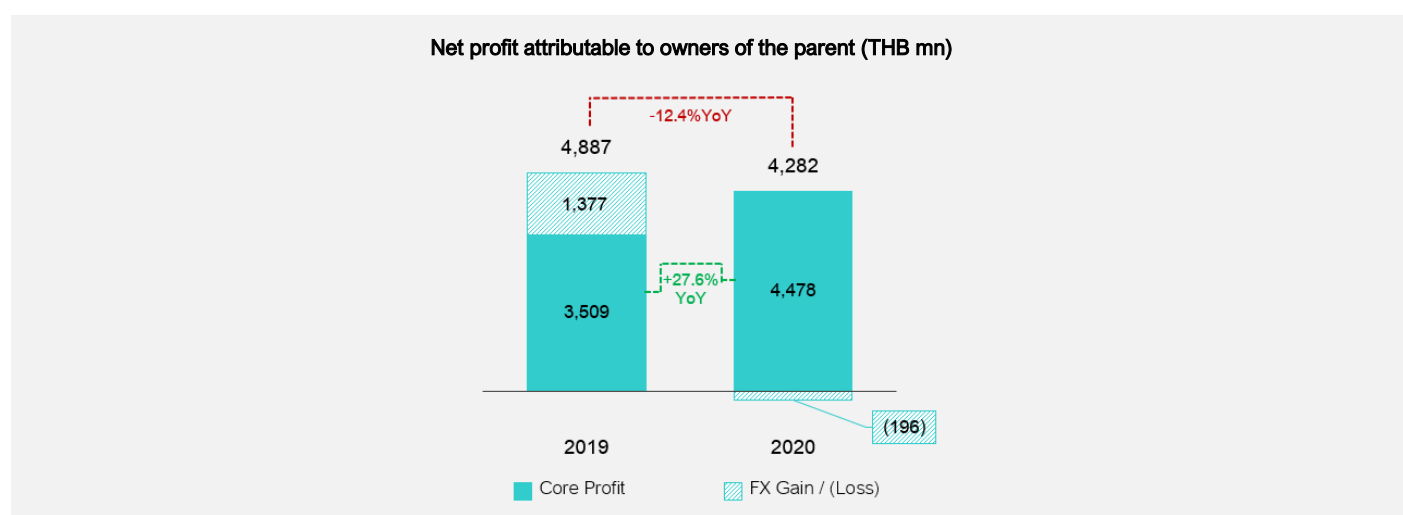


Total revenue in 2020 was recorded at THB 35,833 million, an increment of 6.8% YoY, with the main factors as follows:

- 1) Revenue from sales in 2020 was at THB 32,827 million, an increase of 9.3% YoY, mainly due to revenue recognition from BKR2 project in Germany with installed capacity of 464.8 MW in Q4'20, commercial operation commencement of GCG biomass project with installed capacity of 25 MW in March 2020, full year revenue from 12 SPPs under GMP group. Moreover, there was a full year revenue recognition of solar power projects in Vietnam on to consolidated

financial statement, after the Company increased in shareholding in GTN2 and GTN1 project from 49.0% to 90.0% in January and November 2019, respectively.

- 2) **Revenue from service concession arrangement in 2020 was recorded at THB 158 million**, from the MTP3 industrial port development project for the infrastructure part which is expected to be completed in 2024.
- 3) **Revenue from management fee in 2020 was THB 372 million, increased by 16.6% YoY** from the provision of management services by the Company to its associate GJP which increased as stipulated in the service agreement, revenue from service agreement with HKP, and service fee from power plants under GEC group.
- 4) **Dividend income in 2020 was THB 440 million**, consisting of THB 295 million from INTUCH, THB142 million from SPCG and THB 3 million from EDL Gen, which increased from THB 101 million in 2019.
- 5) **Share of profit from an associate GJP in 2020 was THB 2,487 million, softened by 22.2% YoY** from the effect of a lower gain on exchange rate when compared to last year (FX gain in 2020 was THB 26 million, compared to THB 840 million FX gain in 2019). **However, Core profit from an associate GJP before gain (loss) on exchange rate improved 4.4% YoY** from the higher electricity sold to EGAT from 7SPPs, as the number of power plants underwent Major Overhaul was less than those of 2019. Additionally, there was a lower depreciation expense from the redetermination of machinery and equipment lifetime of the 2 IPPs.



- **Core profit in 2020 was recorded at THB 4,478 million, 27.6% higher YoY**, primarily from the BKR2 project's performance recognized in Q4'20, a full year performance of 12SPPs under GMP group, and GCG biomass project which started commercial operation in March 2020, combined with the natural gas cost which dropped significantly, while the Ft rate reduced at a slower pace, and other costs including total expenses which increased at a lower rate than the growth of revenue. In addition, dividend income in 2020 increased by THB 339 million, most of which was received from shareholding in INTUCH. Lastly, share of core profit from an associate GJP in 2020 was higher from the aforementioned factor.
- **The Company recorded net profit attributable to owners of the parent at THB 4,282 million for the year 2020, a decrease of 12.4% YoY.** Although core profit improved significantly, net profit declined due to unrealized FX loss of THB 196 million recorded in this year compared to a gain on exchange rate of THB 1,377 million in 2019. Nonetheless, the recording of such gain (loss) on exchange rate is an accounting transaction which has no impact on the cash flow and performance of the Group at all.

SUMMARY OF THE COMPANY'S FINANCIAL POSITION ENDED DECEMBER 31, 2020

- **Total assets as of December 31, 2020 were equal to THB 245,581 million, an increase of THB 111,303 million or 82.9%** from December 31, 2019, mainly attributable to the recognition of assets of BKR2 project, construction progress of GSRC, GPD, and Mekong Wind Phase 1-3, the Company's investment in ordinary shares of Intouch Holdings Public Company Limited, and an increase in cash received from the issuance of newly issued ordinary shares and the Company's debentures.
- **Total liabilities as of December 31, 2020 were equal to THB 173,501 million, an increase of THB 88,263 million or 103.5%** from December 31, 2019, mainly from the issuance of the Company's debentures and BKR2 project's debenture, an increase in long-term loans from financial institutions for the construction of GSRC and GPD power plant projects, the Company's short-term loan to be used as working capital, and other non-current liabilities which increased from the effect of TFRS 9 accounting standard.
- **Total equity as of December 31, 2020 was THB 72,080 million, an increase of THB 23,040 million or 47.0%** from December 31, 2019, primarily due to the allotment of newly issued ordinary shares, and the increase in net profit for the period, but decrease from dividend paid, loss from interest rate swap derivatives fair value measurement required under TFRS 9 which is recorded within other components of shareholders' equity.
- **As of December 31, 2020, the Group recorded a net interest-bearing debt (including lease liabilities) to equity ratio (according to covenant of bonds issued in 2019) at 1.47 times, and net interest-bearing debt (excluding lease liabilities) to equity ratio (according to covenant of bonds issued in 2020) at 1.40 times** which is lower than the Company's bond covenant of 3.50 times.

OPERATING RESULTS

REVENUE STRUCTURE

Revenue structure	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	THB mn	THB mn	THB mn	% QoQ	% YoY	THB mn	THB mn	% YoY
Revenue from sales	7,920	7,649	9,184	20.1%	16.0%	29,721	32,298	8.7%
<i>Revenue from electricity sold to EGAT and PEA</i>	6,050	5,783	5,283	-8.6%	-12.7%	22,578	23,068	2.2%
<i>Revenue from electricity sold to industrial users</i>	1,621	1,607	1,729	7.6%	6.6%	6,291	6,318	0.4%
<i>Revenue from steam sold to industrial users</i>	139	120	129	8.0%	-6.9%	642	460	-28.4%
<i>Revenue from electricity sold to EVN</i>	110	140	117	-16.3%	6.6%	210	526	150.6%
<i>Revenue from electricity sold to Ørsted Energy</i>	-	-	1,926	<i>n.a.</i>	<i>n.a.</i>	-	1,926	<i>n.a.</i>
Revenue from service concession arrangement	-	130	27	-79.0%	<i>n.a.</i>	-	158	<i>n.a.</i>
Revenue from management fee	84	97	98	1.0%	16.4%	319	372	16.6%
Share of profit from associates and JVs	617	495	979	97.6%	58.6%	3,205	2,462	-23.2%
Interest income	43	11	19	79.1%	-54.7%	189	83	-55.9%
Dividend income	-	360	-	<i>n.a.</i>	<i>n.a.</i>	101	440	337.9%
Other income	6	3	2	-54.0%	-75.1%	14	20	39.1%
Total revenues	8,670	8,746	10,309	17.9%	18.9%	33,549	35,833	6.8%

Revenue from sales

In Q4'20, the Company recorded revenue from sales of THB 9,184 million, an increase of 16.0% YoY when compared to Q4'19, primarily from the THB 1,926 million revenue contribution from BKR2 offshore wind project which was recognized in Q4'20 for the first time following the Company's investment in the project at 50% shareholding. In Q4'20 however, there was a curtailment affecting BKR2 project's electricity sales volume in the amount of 39 gigawatt-hour, but the event did not have any effect on the Company's revenue, as BKR2 project received a full compensation for the total amount of electricity that was affected as if there was no curtailment occurred. Apart from this, the Company's revenue increased from the commercial operation commencement of GCG biomass project with installed capacity of 25 megawatts in March 2020, and the higher revenue from electricity sold to industrial users from the customer base expansion of the 12SPPs. Moreover, electricity sold to EVN slightly improved from the full quarter recognition of GTN1's revenue to the Company's consolidated financial statements after the Company increased its shareholding in the project from 49.0% to 90.0% in November 2019. The factors mentioned above were able to entirely offset the price per unit of electricity sold to EGAT which was lower in the same direction with natural gas cost, and the revenue from steam sold to industrial users which softened from the effect of COVID-19.

For the year 2020, revenue from sales was recorded at THB 32,298 million, increased by 8.7% YoY. The growth in revenue was mainly due to the contribution of revenue from BKR2 project in Germany and full year revenue recognition of solar power projects in Vietnam to the Company's consolidated financial statements after the Company increased its shareholding in GTN2 and GTN1 project from 49.0% to 90.0% in January and November 2019, respectively. Further, there was a higher revenue from electricity sold to EGAT from the commercial operation of GCG biomass project in March 2020, and the full year performance recognition from SPP power plants under GMP group, despite the electricity selling price per unit that declined in accordance with natural gas cost. However, revenue from steam sold to industrial users softened from the prior year, as the group of customers was affected from the COVID-19 virus outbreak during the middle of the year. Nevertheless, electricity and steam demand from industrial users has already recovered to normal level in the final months of 2020.

Revenue drivers

Electricity and steam sales volume	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
				% QoQ	% YoY			% YoY
Power projects under GMP								
Electricity sold to EGAT (GWh)	1,933	1,943	1,854	-4.6%	-4.1%	7,072	7,541	6.6%
Electricity sold to IUs (GWh)	497	494	519	4.9%	4.4%	1,923	1,914	-0.5%
Steam sold (thousand tons)	179,931	174,809	180,262	3.1%	0.2%	728,975	649,497	-10.9%
GCG biomass power project								
Electricity sold to EGAT (GWh)	-	44	44	-0.4%	n.a.	-	138	n.a.
GTN1 & GTN2 solar power projects in Vietnam								
Electricity sold to EVN (GWh)	48	48	41	-14.2%	-15.3%	108	180	66.9%
BKR2 offshore wind power project								
Electricity sold (GWh)	-	-	541	n.a.	n.a.	-	541	n.a.
Compensation (GWh)	-	-	39	n.a.	n.a.	-	39	n.a.

Average selling price per unit	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
				% QoQ	% YoY			% YoY
Power projects under GMP								
Electricity sold to EGAT (THB/kWh)	3.13	2.88	2.74	-4.9%	-12.5%	3.20	2.98	-6.9%
Electricity sold to IUs (THB/kWh)	3.24	3.24	3.21	-0.9%	-0.8%	3.21	3.26	1.5%
Steam sold (THB/ton)	812.47	688.08	640.56	-6.9%	-21.2%	895.68	701.03	-21.7%
GCG biomass power project								
Electricity sold to EGAT (THB/kWh)	-	4.08	3.98	-2.5%	n.a.	-	4.08	n.a.
GTN1 & GTN2 solar power projects in Vietnam								
Electricity sold to EVN (THB/kWh)	2.83	2.93	2.86	-1.1%	3%	2.88	2.92	1.8%
BKR2 offshore wind power project								
Electricity sold (THB/kWh)	-	-	6.64	n.a.	n.a.	-	6.64	n.a.

Revenue from service concession arrangement

Revenue from service concession arrangement in Q4'20 was recorded at THB 27 million, and in 2020 was THB 158 million, from the MTP3 industrial port development project for the infrastructure part which is expected to be completed in 2024 and recorded under TRFIC 12 accounting standard.

Revenue from management fee

Revenue from management fee in Q4'20 was THB 98 million, an increase of 16.4% YoY, and revenue from management fee in 2020 was THB 372 million, an increase of 16.6% YoY, from the revenue received from the provision of management services by the Company to its associate GJP which increased as stipulated in the service agreement, revenue from service agreement with HKP, and received service fee from power plants under GEC.

Dividend income

There was no dividend income recorded in Q4'20, but for the year 2020, dividend income was at THB 440 million, consisting of THB 295 million from INTUCH, THB 142 million from SPCG and THB 3 million from EDL Gen, an increase from THB 101 million in 2019 where there was no dividend income from INTUCH.

COST AND EXPENSE STRUCTURE

Cost of sales structure	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	THB mn	THB mn	THB mn	% QoQ	% YoY	THB mn	THB mn	% YoY
Cost of sales	6,036	5,672	5,870	3.5%	-2.8%	22,631	23,369	3.3%
<i>Fuel cost</i>	4,894	4,369	3,936	-9.9%	-19.6%	18,544	17,631	-4.9%
<i>Operations and maintenance cost</i>	209	281	436	55.2%	108.3%	711	1,202	69.0%
<i>Depreciation</i>	676	710	1,177	65.9%	74.2%	2,401	3,281	36.6%
<i>Others</i>	256	312	321	2.7%	25.0%	975	1,255	28.7%
Cost of service concession arrangement	-	121	25	-79.0%	n.a.	-	146	n.a.
Cost of service	42	47	48	1.3%	12.6%	160	187	17.1%
Total cost of sales and service	6,078	5,839	5,943	1.8%	-2.2%	22,791	23,702	4.0%
Selling and administrative expenses	529	428	878	105.3%	66.2%	1,713	2,080	21.4%
Total operating costs and administrative expenses	6,607	6,267	6,821	8.8%	3.2%	24,504	25,782	5.2%

Cost of sales

Cost of sales in Q4'20 was THB 5,870 million, a decrease of 2.8% YoY. The significant reduction in fuel cost was resulted from a drop in average price of natural gas from 266.4 THB/mmbtu in Q4'19 to 214.0 THB/mmbtu in Q4'20. However, operations and maintenance cost, depreciation, and other costs increased in tandem with the higher number of power plants in operation when compared to the same period of last year.

For the year 2020, cost of sales was THB 23,369 million, increased by 3.3% YoY mainly from the higher operations and maintenance cost, depreciation, and other costs which increased from the higher number of power plants in operation compared to the prior year, especially the depreciation expense of BKR2 and GCG project, and operations and maintenance cost for power plants under GMP group which was recorded in full year. Other costs were also higher from insurance cost and from Energy Development Fund. On the contrary, average price of natural gas reduced from 272.9 THB/mmbtu in 2019 to 244.5 THB/mmbtu in 2020.

Cost drivers

Consumption and average cost per unit	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
				% QoQ	% YoY			% YoY
Natural gas								
Consumption (thousand mmbtu)	18,369	18,244	17,959	-1.6%	-2.2%	68,097	71,104	4.4%
Average cost per unit (THB/mmbtu)	266.36	253.22	214.03	-15.5%	-19.6%	272.9	244.5	-10.4%
Biomass (Wood)								
Consumption (ton)	-	72,020	81,877	13.7%	n.a.	-	239,364	n.a.
Average cost per unit (THB/ton)	-	1,062	1,202	13.2%	n.a.	-	1,113	n.a.

Cost of construction fee under concession arrangement

Cost of service concession arrangement is a cost incurred from MTP3 industrial port development project for the infrastructure part which is scheduled for completion in 2024 and started to record revenue since Q3'20 according to TFRIC 12 accounting standard.

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 Q4'20, cost of service was THB 48 million, an increase of 12.6% YoY compared to Q4'19. In 2020, cost of service was THB 187 million, an increase of 17.1% YoY compared to 2019** mainly from services provided to GEC group since Q3'19 and higher allocated personnel related cost than the previous year.

Administrative expenses

In Q4'20, administrative expenses were THB 878 million, an increase of 66.2% YoY compared to Q4'19 and in 2020, administrative expenses were THB 2,080 million, an increase of 21.4% YoY compared to 2019, mainly due to expenses from employee benefits, consultation fees for acquisitions of projects, expenses recognized by the increased numbers of new power plants under the Group, as well as the commissioning preparation of GSRC power project.

FINANCE COSTS

Finance costs	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>	<i>% QoQ</i>	<i>% YoY</i>	<i>THB mn</i>	<i>THB mn</i>	<i>% YoY</i>
Interest expense	723	893	970	8.5%	34.1%	2,663	3,358	26.1%
Guarantee fee	6	4	9	137.1%	35.9%	39	22	-43.7%
Commitment fee	29	42	36	-14.1%	24.7%	95	160	69.4%
Others	28	27	25	-4.7%	-8.1%	99	125	26.2%
Total finance costs	786	966	1,040	7.7%	32.3%	2,896	3,665	26.6%

Finance costs in Q4'20 were THB 1,040 million, an increase of 32.3% YoY compared to Q4'19, mainly attributable to the consolidation of finance cost of BKR2 project into the Company's financial statements for the first quarter in Q4'20.

Finance costs in 2020 were THB 3,665 million, an increase of 26.6% YoY compared to 2019, mainly due to the issuance of debentures to be used as funding for future projects, and drawdowns of short-term borrowings to be used as the Company's working capital, the consolidation of finance cost of BKR2 project as mentioned above, and recognition of interest expenses after commencing commercial operation of GCG.

OTHER ITEMS

Share of profit from associates and JVs	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	<i>THB mn</i>	<i>THB mn</i>	<i>THB mn</i>	<i>% QoQ</i>	<i>% YoY</i>	<i>THB mn</i>	<i>THB mn</i>	<i>% YoY</i>
Share of profit from GJP	620	503	977	94.2%	57.5%	3,197	2,487	-22.2%
Share of profit from PTT NGD	-	-	3	<i>n.a.</i>	<i>n.a.</i>	-	3	<i>n.a.</i>
Share of profit from Gulf WHA MT	(4)	(2)	1	195.3%	140.5%	(6)	(1)	82.2%
Share of profit from BSE	(1)	(0)	(0)	40.0%	97.3%	(1)	(7)	-527.4%
Share of profit from HKH	-	(1)	(2)	-32.8%	<i>n.a.</i>	-	(8)	<i>n.a.</i>
Share of profit from BPH	-	0	0	5.9%	<i>n.a.</i>	-	1	<i>n.a.</i>
Share of profit from BGSR 6	-	-	0	<i>n.a.</i>	<i>n.a.</i>	-	0	<i>n.a.</i>
Share of profit from BGSR 81	-	-	0	<i>n.a.</i>	<i>n.a.</i>	-	0	<i>n.a.</i>
Share of profit from projects in Vietnam	5	-	-	<i>n.a.</i>	<i>n.a.</i>	34	-	<i>n.a.</i>
Share of profit from a project in Oman	(4)	(5)	(1)	71.5%	61.6%	(18)	(13)	24.1%
Total share of profit from associate and JVs	617	495	979	97.6%	58.6%	3,205	2,462	-23.2%
Less: Gain (loss) on exchange rate from share of profit from GJP	150	(250)	544	317.9%	261.5%	840	26	-96.8%
GJP's core profit	470	753	433	-42.4%	-7.8%	2,357	2,461	4.4%

Share of profit from associates and joint ventures

The Group recorded a share of profit from associates and joint ventures of GJP at THB 979 million in Q4'20, and THB 2,462 million in 2020, an effect of GJP's unrealized gain on exchange rate at THB 544 million in Q4'20 and THB 26 million in 2020, 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 share of profit from GJP in Q4'20 was THB 433 million which decreased by 7.8% YoY from Q4'19, and in 2020 was at THB 2,461 million which increased by 4.4% YoY from 2019.

Share of profit from an associate GJP before gain (loss) on exchange rate in Q4'20 was recorded at THB 433 million, declined from THB 470 million in Q4'19 (-7.8% YoY), mainly due to the 2 IPPs under GJP group which completed yearly Contracted Available Hours (CAH) at the beginning of December, compared to Q4'19 where the CAH was completed in the middle of December, resulting in the Availability Payment received to be lower in Q4'20, as it was collected more rapidly in Q1'20 – Q3'20. However, the 7SPPs under GJP group recorded a higher volume of electricity sold to EGAT, and a higher steam and chilled water sold to industrial customers, as there was no SPPs under GJP group that underwent Major Overhaul in Q4'20 while GKP1, GTLC, and GNNK underwent Major Overhaul (C-Inspection) during the same period of last year.

Share of profit from an associate GJP before gain (loss) on exchange rate in 2020 was recorded at THB 2,461 million, increased from THB 2,357 million in 2019 (+4.4% YoY) due primarily to the higher volume of electricity sold to EGAT from 7SPPs under GJP group, as there were fewer maintenance schedule of power plants under GJP group when compared to last year, (1 SPP underwent Major Overhaul in 2020 compared to 6 SPPs that underwent Major Overhaul in 2019). Moreover, 2IPP power plants under GJP group recorded lower depreciation expenses from the redetermination of machinery and equipment lifetime, resulting in an improved profit for GJP group, despite being affected by lower volume of electricity sold to EGAT from 2IPPs which was partly caused by GUT power plant's 18-day maintenance in Q1'20, and lower volume of electricity and chilled water sold to industrial users due to soften demand caused by COVID-19 during Q2'20-Q3'20. Nonetheless, electricity and chilled water demand from the industrial customers has already recovered to the normal level in the final months of 2020.

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

Volume of electricity, steam and chilled water sold	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
				% QoQ	% YoY			
2 IPPs								
Electricity sold (GWh)	2,921	1,367	673	-50.8%	-77.0%	10,213	5,476	-46.4%
7 SPPs								
Electricity sold to EGAT (GWh)	1,020	1,146	1,093	-4.6%	7.2%	4,245	4,427	4.3%
Electricity sold to industrial users (GWh)	282	281	281	0.0%	-0.2%	1,154	1,105	-4.3%
Steam sold (thousand tons)	66,484	72,393	78,019	7.8%	17.4%	261,726	291,606	11.4%
Chilled water sold (million refrigeration tons)	6	6	7	6.7%	18.2%	27	25	-6.1%

Gain (loss) from exchange rate

Gain (loss) on exchange rate primarily results from loans of the power projects under the GMP and IPD group that were denominated in a foreign currency (USD), 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).

Moreover, in Q3'20, the Company has granted a loan in EUR to its subsidiary GIH, which incorporated in Singapore, to invest in BKR2 offshore wind project, and at the same time partially entered into Cross Currency Swap (CCS) agreements to hedge against exchange rate fluctuations, causing the Company to recognize unrealized gain(loss) from exchange rate from converting EUR denominated loan to THB, and mark to market the fair value of the CCS at the end of each accounting period. In cases where the Thai Baht appreciates against EUR, the Group will record a loss on exchange rate, as the Group's amount of outstanding loan to related parties converted to Thai Baht is lower. The reverse will occur if the Thai Baht depreciates against EUR. Currently, GIH has a EUR denominated loan from the Company in the higher amount than the loan GIH has given to BKR2. However, as the accounting standard requires that foreign currency denominated financial assets and loans, which is not in the functional currency of each country that a company is incorporated in, to be translated to income statement, GIH which has functional currency in USD but has debtor and loan payable in EUR, must also record unrealized gain (loss) from foreign exchange for the items. As a result, exchange rate between USD and EUR affects the Company's consolidated financial statement as well. In cases where the USD depreciates against EUR, GIH will record an unrealized loss on exchange rate, and the reverse will occur if the USD appreciates against EUR.

From the aforementioned reasons, although Thai Baht slightly appreciated against USD at the end of 2020 when compared to 2019, but USD depreciated against EUR compared to the date which GIH drew down loan from the Company and gave loan to BKR2 in Q3'20, resulting in the Company group to record a loss from foreign exchange rate at THB 134 million.

At the end of Q4'20 compared to Q3'20, Thai Baht appreciated against USD by THB 1.62, and appreciated against EUR by THB 0.283, while USD depreciated against EUR by USD 0.10, resulting in the Company's group to record a gain on exchange rate in Q4'20 by THB 455 million.

Nonetheless, in this report, the Group separates effects from unrealized exchange rate of the associate (GJP) which recorded a gain on exchange rate of THB 544 million in Q4'20, and THB 26 million in the year 2020, and the Company's subsidiaries which recorded a gain on exchange rate of THB 61 million in Q4'20, and THB 223 million in the year 2020, resulting in a total unrealized

loss on exchange rate attributable to the owners of the parent of THB 605 million in Q4'20, and THB 196 million in the year 2020. Details which are set forth as follows will explain the Group's performance accurately and appropriately:

Gain (loss) on exchange rate	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	THB mn	THB mn	THB mn	% QoQ	% YoY	THB mn	THB mn	% YoY
Gain (loss) on exchange rate	170	(278)	455	263.6%	167.8%	1,003	(134)	-113.3%
Less: Gain (loss) on exchange rate attributable to non-controlling interests	86	(173)	394	328.1%	357.2%	467	89	-81.0%
Gain (loss) on exchange rate attributable to the owners of the parent	84	(105)	61	157.6%	-27.4%	537	(223)	-141.5%
Add: Gain (loss) on exchange rate attributable to share of profit from an associate	150	(250)	544	317.9%	261.5%	840	26	-96.8%
Total gain (loss) from exchange rate attributable to owners of the parent	234	(355)	605	270.4%	158.3%	1,377	(196)	-114.2%

FX Rate at End of Period

	(Thai Baht / USD)	(Thai Baht / EUR)
Q4'18	32.6148	36.7620
Q3'19	30.7661	33.0624
Q4'19	30.3313	33.3775
Q2'20	31.0658	34.3318
Q3'20	31.8258	36.7782
Q4'20	30.2068	36.4949

PROFIT

Profit for the period	Q4'19	Q3'20	Q4'20	Change		2019	2020	Change
	THB mn	THB mn	THB mn	% QoQ	% YoY	THB mn	THB mn	% YoY
Gross profit	1,926	2,037	3,367	65.2%	74.8%	7,249	9,125	25.9%
<i>Gross profit from sales</i>	1,884	1,978	3,314	67.6%	75.9%	7,090	8,929	25.9%
<i>Gross profit from services</i>	42	50	50	0.7%	20.3%	159	184	16.1%
<i>Gross profit from service from concession agreement</i>	-	10	2	-79.0%	n.a.	-	12	n.a.
EBITDA ⁽¹⁾	2,598	3,499	4,165	19.0%	60.3%	10,638	13,455	26.5%
Profit for the period	1,454	1,255	2,736	117.9%	88.1%	7,166	6,144	-14.3%
Profit attributable to owners of the parent	905	970	1,844	90.1%	103.8%	4,887	4,282	-12.4%
Less: Gain (loss) on exchange rate attributable to owners of the parent	234	(355)	605	270.4%	158.3%	1,377	(196)	-114.2%
Core profit⁽²⁾	671	1,325	1,239	-6.5%	84.8%	3,509	4,478	27.6%
<i>Gross profit margin (sales)</i>	23.8%	25.9%	36.1%	10.2%	12.3%	23.9%	27.6%	3.8%
<i>Gross profit margin (services)</i>	49.7%	51.5%	51.4%	-0.1%	1.6%	49.8%	49.6%	-0.2%
<i>EBITDA margin</i>	30.0%	40.0%	40.4%	0.4%	10.4%	31.7%	37.6%	5.8%
<i>Net profit margin</i>	16.8%	14.4%	26.5%	12.2%	9.8%	21.4%	17.1%	-4.2%
<i>Core profit margin</i>	7.7%	15.2%	12.0%	-3.1%	4.3%	10.5%	12.5%	2.0%

⁽¹⁾ EBITDA = Earnings before Interest, Taxes, Depreciation, and Amortization, gain (loss) on exchange rate of the Company and of GJP

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

Gross profit

Gross profit in Q4'20 was THB 3,367 million, an increase of 74.8% YoY compared to Q4'19, mainly due to profit contribution recognized in Q4'20 from BKR2 offshore wind project which naturally has lower cost of sales than gas-fired power projects. Also, the cost of sales decreased at a higher rate than the decrease in sales revenue in this quarter, with average natural gas price dropping from 266.40 THB/mmbtu in Q4'19 to 214.00 THB/mmbtu in Q4'20 (-19.6% YoY) while Ft rate reduced at a lower rate from (0.1160) THB/kilowatt-hour to (0.1243) THB/kilowatt-hour (-7.2% YoY).

In 2020, gross profit was THB 9,125 million, an increase of 25.9% YoY compared to 2019. Gross profit margin improved from 23.9% to 27.6% partly from the profit recognition of BKR2 and lower cost of sales that decreases in the same direction as the natural gas price which dropped by 10.4% YoY from 272.9 THB/mmbtu in 2019 to 244.5 THB/mmbtu in 2020, while average Ft reduced by 2.4% YoY.

Gross profit from services in 2020 increased by 16.1% YoY from 2019 due mainly to the higher revenue from management fee from the provision of management services by the Company to its associate GJP, which increased as stipulated in the service agreement, revenue from service agreement with HKP, and received service fee from SPP power plants under GEC group, with gross profit margin from services remaining at the same level.

EBITDA

EBITDA in Q4'20 was THB 4,165 million, an increase of 60.3% YoY, and in 2020 EBITDA was THB 13,455 million, an increase of 26.5% YoY from 2019.

Core profit

Core profit was recorded at THB 1,239 million in Q4'20, an increase of 84.8% YoY, and in 2020 core profit was THB 4,478 million, an increase of 27.6% YoY from 2019 from the following factors:

- 1) Profit contribution from BKR2 offshore wind farm in Germany in Q4'20.
- 2) Full year profit recognition from 12SPPs under GMP group.
- 3) Performance contribution from GCG biomass project which commenced commercial operation in March 2020.
- 4) Sharp drop in average price of natural gas (a decrease of 19.6% YoY in Q4'20 and a decrease of 10.4% YoY in 2020) while Ft rate declined at a lower rate. Also, total cost increased at a slower pace than revenue growth resulting in an improved gross profit of 12SPPs under GMP.
- 5) Share of core profit from GJP softened in Q4'20 compared to Q4'19 mainly due to the 2 IPPs under GJP group which completed yearly Contracted Available Hours (CAH) at the beginning of December, compared to Q4'19 where the CAH was completed in the middle of December, resulting in the Availability Payment received to be lower in Q4'20, as it was collected more rapidly in Q1'20 – Q3'20. However, in 2020, GJP's core profit improved due to higher volume of electricity sold to EGAT by 7SPPs.
- 6) Dividend income in 2020 was THB 440 million, significantly increased from THB 101 million last year, mainly consisted of THB 295 million from INTUCH, and THB 142 million from SPCG.

Net profit attributable to the owners of the parent

Net profit attributable to the owners of the parent in Q4'20 was THB 1,844 million, an increase of 103.8% YoY from THB 905 million in Q4'19. Apart from the 84.8% YoY increase in core profit, there was an unrealized foreign exchange gain of THB 605 million in Q4'20 compared to unrealized FX gain of THB 234 million in Q4'19, which resulted in the overall increase of the Company's net profit.

Net profit attributable to the owners of the parent in 2020 was THB 4,282 million, a decrease of 12.4% YoY compared to 2019. Although core profit improved significantly, net profit declined due to unrealized FX loss of THB 196 million in 2020, compared to unrealized FX gain of THB 1,377 million recorded in 2019. Nonetheless, the recording of such gain(loss) on exchange rate is an accounting transaction which has no impact on the cash flow and performance of the Group at all.

FINANCIAL POSITION AS OF DECEMBER 31, 2020

Financial position	As of December 31, 2019	As of December 31, 2020	Change
	<i>THB mn</i>	<i>THB mn</i>	<i>%</i>
Cash, cash equivalents, short-term deposits at financial institutions used as collateral	14,810	22,998	55.3%
Trade accounts receivable	5,199	5,660	8.9%
Investments in associates and joint ventures	21,247	22,079	3.9%
Advance payments for land and power plant construction	3,070	6,701	118.3%
Property, plant and equipment, net	80,961	129,718	60.2%
Non-current assets	2,104	28,523	n.a.
Other assets	6,887	29,901	334.2%
Total assets	134,278	245,581	82.9%
Short-term loans from financial institutions	68	11,500	n.a.
Accounts payable for power plant construction	2,773	7,177	158.8%
Trade accounts payable	1,689	1,353	-19.9%
Long-term loans from financial institutions	69,274	85,936	24.1%
Debentures	7,494	43,428	479.5%
Other liabilities	3,940	24,106	511.8%
Total liabilities	85,238	173,501	103.5%
Issued and paid-up capital	10,667	11,733	10.0%
Share premium	20,889	51,822	148.1%
Unappropriated retained earnings	6,084	7,310	20.1%
Other components of equity	(790)	(8,670)	997.0%
Other equity	1,577	1,831	16.1%
Total equity attributable to owners	38,427	64,027	66.6%
Non-controlling interests	10,613	8,053	-24.1%
Total equity	49,040	72,080	47.0%
Total equity excluding other components of equity	49,830	80,749	62.0%

TOTAL ASSETS

Total assets as of December 31, 2020 was THB 245,581 million, an increase of THB 111,303 million or 82.9% from December 31, 2019. The increase was attributable to the following factors:

- 1) Property, plant and equipment net increased by 60.2% or THB 48,758 million, majorly from value recognition of property, plant and equipment of BKR2 project into the consolidated financial statement after the Company acquired a 50% stake in the project, as well as the increment in value according to construction progress of GSRC, GPD, and Mekong Wind Phase 1-3 projects.

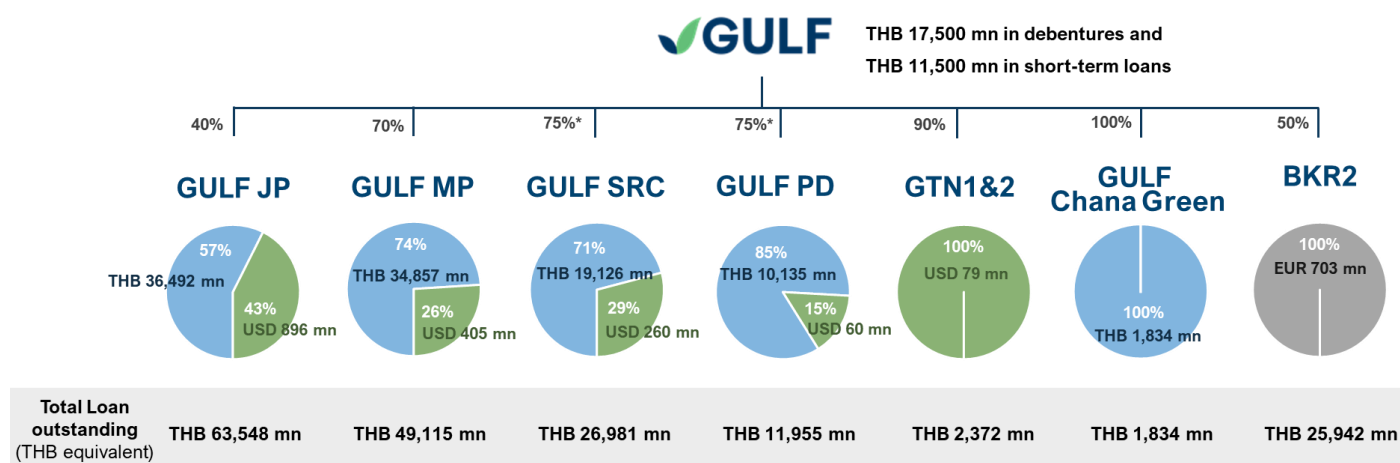
- 2) Other assets increased by 549.8% or THB 49,433 million, mainly from:
 - Other non-current assets increased by THB 26,418 million, from investment in ordinary shares of Intouch Holdings Public Company Limited.
 - Intangible assets and goodwill increased by THB 16,241 million mainly from the investment in BKR2 project.
 - Accounts payable for power plant construction increased by THB 3,631 million pursuant to construction progresses of GPD and Mekong Phase 1-3.
 - Deferred tax assets increased by THB 2,644 million, 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.
 - Loan to related companies increased by THB 2,314 million for investment in the project in Oman.
- 3) Cash, cash equivalent and deposits at financial institutions used as collateral increased by 55.3% or THB 8,188 million mainly from:
 - Proceeds from the Company's sales of newly issued ordinary shares totaling THB 32,000 million.
 - Cash received from the issuance of the Company's unsubordinated and unsecured debentures totaling THB 10,000 million.

TOTAL LIABILITIES

Total liabilities as of December 31, 2020 was THB 173,501 million, an increase of THB 88,263 million or 103.5% from December 31, 2019. The increase was attributable to the following factors:

- 1) Debentures increased by THB 35,934 million, mainly due to the issuance of the Company's unsubordinated and unsecured debentures totaling THB 10,000 million, and the value recognition of BKR2 project's outstanding debentures into the consolidated financial statement, after the Company acquired the project.
- 2) Short term liabilities increased by THB 11,500 million, from the Company's short-term loan from financial institutions to be used as a working capital.
- 3) Other liabilities increased by 566.8% or THB 20,491 million, mainly increased from:
 - Non-current financial liabilities which increased by THB 13,495 million mainly resulted from the adoption of TFRS 9, which required a fair value measurement of financial derivative contracts for the entire contract life on the Company's financial statement (mostly interest rate swap contracts).
 - An increase in deferred tax liabilities of THB 3,457 million, which is mainly attributable to the BKR2 project.
- 4) Long-term loans from financial institutions increased by THB 16,662 million primarily from the loan drawdowns for the construction of GSRC and GPD power projects.

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



* Based on % profit sharing received from GSRC & GPD

TOTAL EQUITY

Total equity as of December 31, 2020 was THB 72,080 million, an increase of THB 23,040 million or 47.0% from December 31, 2019 due to following factors:

- 1) Allotment of newly issued ordinary shares, resulting in an increase in share capital of THB 1,067 million and increased share premium of THB 30,933 million.
- 2) Other components of equity decreased by THB 7,879 million, and non-controlling interests decreased by THB 2,560 million, mostly due to the loss from interest rate swap derivatives fair value measurement required under TFRS 9. The loss was from the 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.
- 3) Retained earnings increased by THB 1,479 million from the recognition of net profit attributable to the parent company of THB 4,282 million but decreased due to dividend payment of THB 2,773 million or 89.5% dividend payout ratio in 2019.

CAPITAL STRUCTURE

As of December 31, 2020, the Group recorded a net interest-bearing debt to equity ratio of 2.41 times. However, net interest-bearing debt (including lease liabilities) to equity according to covenant of bonds issued in 2019 was recorded at 1.47 times and net interest-bearing debt (excluding lease liabilities) to equity according to covenant of bonds issued in 2020 was recorded at 1.40 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 which have terms of over 15 years, combined with the Company's capital increase in 2020, resulted in the Company's stronger financial position and its ability to take out more loans to support future growth opportunities for the Company.

STATEMENT OF CASH FLOWS

Statement of cash flows	For the year ended December 31, 2020
	<i>THB mn</i>
Net cash generated from (used in) operating activities	10,579
Net cash used in investing activities	(70,410)
Net cash generated from (used in) financing activities	63,100
Net increase (decrease) in cash and cash equivalents	3,269
Gain (loss) adjustment from foreign exchange translation of cash and cash equivalents	(13)
Cash and cash equivalents as of January 1, 2020	12,646
Cash and cash equivalents as of December 31, 2020	15,902

As of December 31, 2020, the Company and its subsidiaries recorded cash and cash equivalents of THB 15,902 million attributable to the following factors:

Net cash received from operating activities of THB 10,579 million mainly from:

- Cash from operating profit of THB 11,122 million which was generated from profit for the year of THB 6,144 million, plus unrealized FX loss of THB 773 million, finance costs of THB 3,665 million, and depreciation and amortization of THB 3,431 million, but less share of profit from investments in associates and joint ventures of THB 2,462 million.
- Deduct by net cash used in operating assets and liabilities THB 543 million

Net cash used in investing activities of THB 70,410 million mainly from:

- Deposits at financial institutions used as collateral of THB 4,931 million
- Payments for investment in subsidiaries, namely BKR2 of THB 18,529 million
- Payments for acquisition of an associate PTT NGD of THB 2,476 million.
- Payments for property, plant and equipment of THB 10,846 million, primarily for projects under GSRC, GPD and GCG
- Payments for advance payments for land and power plant construction of THB 6,744 million pursuant to construction progresses of GPD and Mekong Phase 3.
- Payments for other financial assets of THB 26,204 million, pursuant to the Company's investment in ordinary shares of Intouch Holdings Public Company Limited
- Dividend received, and interest received of THB 3,219 million in total

Net cash received from financing activities of THB 63,100 million mainly from:

- Net cash received from short-term loans of THB 11,107 million
- Cash received from long-term loans of THB 21,721 million
- Cash received from the issuance of debentures of THB 10,000 million
- Cash received from the Company's capital increase of THB 31,999 million
- Dividend paid, and Dividend paid to non-controlling interests of THB 4,347 million
- Payments for finance costs of THB 3,272 million

KEY FINANCIAL RATIOS

Financial ratios	Q4'19	Q3'20	Q4'20	2019	2020
Basic earnings per share (THB)	0.08	0.09	0.16	0.46	0.39
Gross profit margin from sales (%)	23.8%	25.9%	36.1%	23.9%	27.6%
EBITDA margin	30.0%	40.0%	40.4%	31.7%	37.6%
Net profit margin ¹ (%)	16.8%	14.4%	26.5%	21.4%	17.1%
Core profit margin ^{1,2} (%)	7.7%	15.2%	12.0%	10.5%	12.5%
Return on equity (%)	15.3%	8.5%	10.1%	15.3%	10.1%
Return on assets ³ (%)	5.6%	2.8%	3.2%	5.6%	3.2%
	Dec 31, 2019	Sep 30, 2020	Dec 31, 2020		
Book value per share (THB)	3.60	4.98	5.46		
Current ratio (times)	2.20	1.85	1.02		
Quick ratio (times)	2.04	2.38	0.93		
Debt to equity (times)	1.74	2.38	2.41		
Net interest-bearing debt (<u>including</u> lease liabilities) to equity according to covenant of bonds issued in 2019 ⁴ (times)	1.25	1.35	1.47		
Net interest-bearing debt (<u>excluding</u> lease liabilities) to equity according to covenant of bonds issued in 2020 ⁵ (times)	1.30	1.26	1.40		

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

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

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

⁴ Net interest bearing debt to equity (for bonds issued in 2019) = (Total interest-bearing debt + lease liabilities - cash and cash equivalent - deposits at financial institutions used as collateral) / equity which excludes other components of equity

⁵ Net interest bearing debt to equity (for bonds issued in 2020) = (Total interest-bearing debt - current portion of lease liabilities and lease liabilities - cash and cash equivalent - deposits at financial institutions used as collateral) / (equity - other components of equity - unrealized gain or loss on exchange rate - non-controlling interest from unrealized gain or loss on hedging instruments)

PROGRESS OF PROJECTS UNDER CONSTRUCTION AND DEVELOPMENT

POWER GENERATION AND RENEWABLE ENERGY BUSINESS



Gulf SRC (Thailand)

Fuel Type	Gas-fired	
Capacity	2,650 MW (4 units, 662.5 MW each)	
SCOD	Unit 1: 31 March 2021 Unit 2: 1 October 2021	Unit 3: 1 April 2022 Unit 4: 1 October 2022
Status	Under construction: 88.3% completed	



Gulf PD (Thailand)

Fuel Type	Gas-fired	
Capacity	2,650 MW (4 units, 662.5 MW each)	
SCOD	Unit 1: 31 March 2023 Unit 2: 1 October 2023	Unit 3: 1 April 2024 Unit 4: 1 October 2024
Status	Under construction: 24% completed	



Hin Kong Power (Thailand)

Fuel Type	Gas-fired	
Capacity	1,540 MW (2 units, 770 MW each)	
SCOD	Unit 1: March 2024 Unit 2: January 2025	
Status	<ul style="list-style-type: none"> EPC signed construction design and financing on progress Expected to sign GSA in Q2'21 Expected to start construction within 2021 	



Burapa Power (Thailand)

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



DIPWP (Oman)

Fuel Type	Gas-fired	
Capacity	Power: approx. 326 MW Water: approx. 1,667 m ³ /hour	
SCOD	Phase 1 (40 MW): Q2'21 Phase 2 (286 MW): 2022	
Status	Under construction: 86.8% completed	



Mekong Wind Power Project (Vietnam)

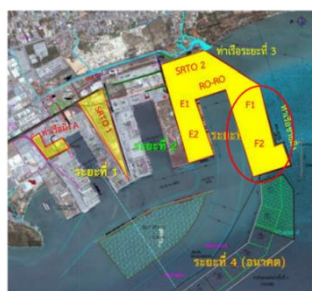
Fuel Type	Offshore Wind
Capacity	Phase 1: 30 MW Phase 2-3: 98 MW Phases 4-8: 182 MW
SCOD	Phase 1: expected in May 2021 Phases 2-3: within October 2021 Phases 4-8: Under MOIT consideration
Status	Phase 1: Under development: 49.1% completed Phases 2-3: Under development: 5.7% completed Phases 4-8: Under MOIT consideration to be included in PDP8

INFRASTRUCTURE & UTILITIES BUSINESS



Map Ta Phut Industrial Port Development Phase 3 (Thailand)

Scope	Infrastructure: Land reclamation Superstructure: LNG terminal
Capacity	Land reclamation: 1,000 rais LNG terminal: up to 10.8 MTPA
Construction Period	Land reclamation: 2021 - 2024 LNG terminal: 2024 – 2027* *subject to LNG demand
Status	Expected to start construction within 1H'21



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 = [2025] F2 = [2029]
Status	Expected to sign PPP Contract within Q2'21



M6 & M81 Intercity Motorways (Thailand)

Scope	Operation and Maintenance of toll collection system, traffic management and control system, and other infrastructures
Capacity	M6: 196 km M81: 96 km
SCOD	[2023]
Status	On the process of selecting EPC contractor and expected to sign PPP contract within Q1'21-Q2'21

ONE BANGKOK



One Bangkok Project (Thailand)

Scope	Electricity Distribution System (Power) District Chilled Water Distribution System (DCS)
Capacity	Power: 240 MW DCS: 36,000 RT
SCOD	Phase 1 – 2022 (Power & DCS) Phase 1 – 4 2023 – 2026 (DCS)
Status	<ul style="list-style-type: none"> • EPC signed in January 2021 • Under construction design

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
BKR2	Borkum Riffgrund 2 Offshore Wind Farm GmbH & Co. oHG, an offshore wind farm operator in Germany
BPG	Burapa Power Generation Co., Ltd., a power project operator under BPH
BSE	Bangkok Smart Energy Co., Ltd., a JV in which the Company has a 33.3% stake
BPH	Burapa Power Holding Co., Ltd., a JV in which the Company has a 35.0% stake
DIPWP	Duqm Integrated Power and Water Project, a power project operator in Oman
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
GCG	Gulf Chana Green Co., Ltd., a biomass project operator in which the Company has a 100% stake
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 Co., Ltd., a subsidiary in which the Company has a 70.0% stake
GMP	Gulf MTP LNG Terminal Co., Ltd., a subsidiary in which the Company has a 70% 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, a solar farm operator in Vietnam
GTN2	Gulf Tay Ninh 2 Joint Stock Company, a solar farm operator in Vietnam
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
Marafiq	Centralised Utilities Company L.L.C., a JV in which the Company has a 49% stake
Mekong	Mekong Wind Power Joint Stock Company
MTP3	Map Ta Phut Industrial Port Development Phase 3
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
TFRIC 12	Thai Financial Reporting Standard applied for Service Concession Arrangements
TFRS 9	Thai Financial Reporting Standard applied for Financial Instruments
TFRS 16	Thai Financial Reporting Standard applied for Leases