BCPG Public Company Limited
Management Discussion and Analysis
For Year Ended December 31, 2020

18 February 2021

bcpg

World's Greenergy Icon

Evolving the world through the greener ways

Executive Summary

Financial Highlight

Unit: THB million	4Q19	4Q20	Δ %	3Q20	Δ %	2019	2020	Δ %
Revenue from sale and redering of service	981.2	1,136.7	*15.9%*	1,237.9	*(8.2%)*	3,426.6	4,230.7	*23.5%*
Share of profit of investment in associates*	87.5	147.0	*68.0%*	100.7	*46.0%*	374.6	508.2	*35.7%*
EBITDA	803.8	1,030.5	*28.2%*	1,133.8	*(9.1%)*	2,955.4	3,848.7	*30.2%*
Net profit	**484.8**	**310.7**	***(35.9%)***	**673.1**	***(53.8%)***	**1,801.4**	**1,912.3**	***6.2%***
Recurring profit*	**430.2**	**535.9**	***24.5%***	**642.7**	***(16.6%)***	**1,726.3**	**1,959.3**	**13.5%**

**Excluding gain/(loss) on FX and one-time items*

Q4/2020: BCPG or the Group of Companies recorded recurring net profit of THB 535.9 million, grew by 24.5% YoY but declined by 16.6% QoQ. These were resulted from the following factors.

+24.5% YoY

(+) Recognition of full quarter contribution from new projects including

(1) Hydro power project in Lao PDR named "Nam San 3B", which the company has acquired since February 2020.

(2) 4 new solar power projects in Thailand named "RPV", which the company has acquired since August 2020.

(+) Higher share of profit from investment in associate from geothermal power plants in Indonesia and wind power plant in the Philippines.

-16.6% QoQ

(-) Lower contribution from Hydro power project, "Nam San 3A and "Nam San 3B" due to seasonal factor that the third quarter is generally high season of earnings.

YE2020: BCPG recorded recurring net profit of THB 1,959.3 million, grew by 13.5% from the previous year. This was mainly driven by the following factors.

(+) Recognition of full-year contribution from

(1) Hydro power project in Lao PDR named "Nam San 3A", which the company has acquired since September 2019.

(2) Wind power project in Thailand named "Lomligor", which had COD since April 2019.

(+) Recognition of contribution from new projects including

1) Hydro power project in Lao PDR named "Nam San 3B", which the company has acquired since February 2020.

2) 4 new solar power projects in Thailand named "RPV" which the company has acquired since August 2020.

(+) Higher share of profit from investment in associate from geothermal power plants in Indonesia owing to lower planned maintenance days and wind power plant in the Philippine thanks to tariff escalation.

(+) The significant decrease of administrative expense due to less business travelling under the COVID-19 pandemic and less M&A advisory fees.

Key developments during 2020 until now

To expand investment platform in Lao PDR for export power generation to Vietnam

On 26 February 2020, BCPG Indochina Co., Ltd (a subsidiary of the Company) invested in hydropower plant projects in Lao PDR with a total contracted capacity of 45.0 MW by acquiring 100% shares in Nam San 3B Power Sold Co. Ltd., ("Nam San 3B"). This is the second hydropower project in the country of the Group of Companies, making the total contracted capacity of hydropower plant projects in Lao PDR increases to 114 MW. The Group of Companies invested in "Nam Sam 3A", the first hydropower project in Lao PDR in September 2019 with a total contracted capacity of 69MW.

Furthermore, the "Nam San 3A" and "Nam San 3B" hydropower plant projects have successfully signed PPA with Vietnam Electricity (EVN). The projects will sell electricity to EVN for 25 years from 2022 to 2043. The Group of Companies also signed a joint ownership to invest in the transmission line system and substation with local partner in Lao PDR to support the electricity selling scheme to EVN and the investment has begun in 2020.

To invest in 20 MW solar power plants in Thailand

On 11 August 2020, the Group of Companies signed Shareholders Agreement with Eternity Power Public Company Limited for the acquisition of 4 operating solar power plants in Thailand with total contracted capacity of 20.0 MW through the acquisition of 100.0% in RPV Energy Company Limited. The four solar power plants are located in 3 provinces, consisting of Kanchanaburi province, Lopburi province and Prachin Buri province with a contracted capacity of 10.0 MW, 5.0 MW and 5.0 MW respectively. The projects operated under two payment schemes – Adder (15.0 MW) and Feed-in Tariff (5.0 MW).

Achieved in issuing bond of geothermal power plants in Indonesia (Q4/2020)

Geothermal power plants in Indonesia including Salak and Darajat have successed in refinancing by issuing bond with Investment Grade level, lower average interest rate and fixed rate along the projects life. As a result, the Group of Companies received share payment from capital reduction of Star Energy Group Holding Pte. Ltd., with total amount of THB 842.34 million based on the Group of Companies holding stake of 33.33%.

Wind power plant in the Philippine received the approval of the annual FIT escalation (Q4/2020)

On 17 November 2020, Energy Regulatory Commission (ERC) of Republic of the Philippine approved the annual FIT escalation to wind power plant in the Philippine, Nabas. The new tariff rate is PHP 8.6 per kWh from the previous tariff of PHP 7.4 per kWh. Moreover, the project received the retroactive adjustment for 5 years (2016-2020), which the retroactive payment recognized in share of profit of investment in associate for the year 2020.

Capital increase to support future investment opportunity (Q4/2020)

The Group of Companies issued and offered the newly issued ordinary shares to existing shareholders of proportionate to their respective shareholdings (Rights Offering) at the offering price of THB 11.50 per share. The Group of Companies also issued and offered the warrants to subscribe for the newly issued ordinary shares in the capital increase of the Group of Companies without consideration to existing shareholders of the Group of Companies who subscribe for and are allocated the newly issued ordinary shares in the Rights Offering (BCPG-W1 and BCPG-W2). The transactions were on 3-6 November 2020 and 9 November 2020. The total amount of purchased shares by the existing shareholders were 249.9 million shares, equivalent to THB 2,874 million.

Additionally, the Group of Companies issued and offered the newly issued ordinary shares to private placement with the offering price clearly specified at THB 11.50 per share. The Group of Companies also issued and offered the warrants to subscribe for the newly issued ordinary shares in the capital increase of the Group of Companies without consideration to investors who subscribe for and are allocated the newly issued ordinary shares in Private Placement with the offering price clearly specified (BCPG-W3). The transactions were on 11 November 2020. The total amount of purchased shares by the private placement were 391.5 million shares, equivalent to THB 4,502 million.

In the year 2020, BCPG has successfully raised capital by receiving THB 7,376 million. As a result, the Group of Companies is ready for expanding business operations by investing, developing, and acquiring power plant projects based on the investment plan.

Well-support from leading financial institutions

The Group of Companies is well supported by leading financial institutions both in Thailand and abroad for projects that have already commercialized as well as developing projects. Asian Development Bank, Clean Technology Fund and Kasikorn Bank provided joint financial support to wind power plant, "Lomligor" of THB 616.1 million. The project has a contracted capacity of 9.0 MW and is located in Pak Panang district, Nakhon Si Thammarat province. Moreover, Export-Import Bank of Thailand (EXIM BANK), Industrial and Commercial Bank of China (ICBC (THAI)) and Sumitomo Mitsui Trust Bank or SMTB (THAI) provided joint financial support for acquiring 2 hydropower plant projects in Laos PDR, "Nam San 3A" and "Nam San 3B" of USD 172.0 million or approximately at THB 5,500 million.

Moreover, the Group of Companies received loans sponsorship for the construction projects in Japan of JPY 21,188 million or THB 6,358 million. EXIM BANK facilitated project financing for solar farm in Japan construction, namely "Komagane" and "Yabuki" while EXIM BANK was joint with SMTB (THAI) to facilitate project financing for solar farm in Japan construction, namely "Chiba 1".

Joint development of Chula Smart City project

BCPG set up the joint investment company with TEAM GROUP and Keppel DHCS, named Prathumwan Smart District Cooling Co., Ltd. with registered capital of THB 50 million.

Since July 2020, the joint company was awarded a contract by the Property Management of Chulalongkorn University (PMCU) to apply a District Cooling System to buildings in Chula Smart City which are in Suanluang Samyan. The project has cooling load of 18,000 Refrigeration Tons (RT) along with the contracted for 20 years. The construction is expected to start in late of 2021 and the revenue contribution from the project would be realized in late 2022.

Nominated to be in the ESG 100 group from Thaipat Institute

The Group of Companies was nominated to be one of the 100 listed companies by Thaipat Institute with outstanding performance in Environmental, Social and Governance from the assessment of 803 listed companies in the year 2020. This is the third consecutive year that the Group of Companies was selected to be in the ESG 100 Group.

Dividend payment from the operating results of the second half for the year 2020

On 17 February 2021, the Board of Directors in the meeting No.2/2021 has approved to the proposal of the dividend payment from the operating results of the second half for the 2020 (1 July 2020 – 31 December 2020) of THB 0.17 per share to the Annual General Meeting of Shareholders for the year 2021. The total dividend per share for the year 2020 is THB 0.33, totaling THB 768.82 million. This included the dividend payment from the operating results of the first half for the year 2020 (1 January 2020 – 30 June 2020) of THB 0.16 per share.

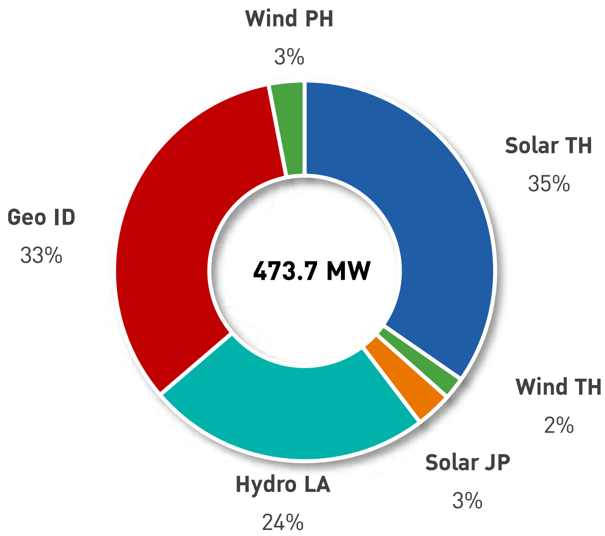
The Group of Companies' Contracted Capacity

Contracted capacity breakdown by countries and types of energy at the end of Q4/2020.

Unit: Equity MW

Country	4Q19	4Q20	Δ %	3Q20	Δ %
Thai					
	142.2	164.2	15.5	162.5	1.0
	9.0	9.0	0.0	9.0	0.0
Japan					
	14.7	14.7	0.0	14.7	0.0
Laos					
	69.0	114.0	65.2	114.0	0.0
Indonesia					
	157.5	157.5	0.0	157.5	0.0
The Philippines					
	14.4	14.4	0.0	14.4	0.0
Total	**406.8**	**473.7**	**16.5**	**472.1**	**0.3**

Contracted capacity breakdown by power types



At the end of Q4/2020, total contracted capacity was 473.7 MW, increased by 16.5% YoY, mainly from;

(1) Acquisition of "Nam San 3 B", hydro power plant in Lao PDR with a total contracted capacity of 69.0 MW in February 2020.
(2) Acquisition of "RPV", 4 solar power plants in Thailand with a total contracted capacity of 20.0 MW in August 2020.
(3) The commercial operation of new solar rooftop.

While compare to Q3/2020, total contracted capacity slightly increased by 0.3% QoQ from the commercial operation of new solar rooftop.

Financial Performance

Financial Performance for Q4/2020 and YE2020

Unit: THB million	4Q19	4Q20	Δ (%)	3Q20	Δ (%)	2019	2020	Δ (%)
Revenue from sale and redering of service	981.2	1,136.7	*15.9%*	1,237.9	*(8.2%)*	3,426.6	4,230.7	*23.5%*
Cost of sale and rendering of services	(304.7)	(395.7)	*29.9%*	(373.5)	*6.0%*	(961.4)	(1,436.2)	*49.4%*
Administrative expenses	(152.5)	(155.8)	*2.1%*	(114.6)	*35.9%*	(575.0)	(532.1)	*-7.5%*
Operating profit	524.0	585.2	*11.7%*	749.8	*(22.0%)*	1,890.1	2,262.4	*19.7%*
Share of profit of investment in associates (exlcuding one-time item)	87.5	147.0	*68.0%*	100.7	*46.0%*	374.6	508.2	*35.7%*
EBITDA	*803.8*	*1,030.5*	*28.2%,*	*1,133.8*	*(9.1%)*	*2,955.4*	*3,848.7*	*30.2%*
Other income/(expense)	8.4	10.2	*21.2%*	4.1	*145.1%*	20.1	28.7	*43.3%*
FX gain/(loss)	34.9	(69.2)	*NA*	58.0	*NA*	95	215.6	*NA*
Other one-time item	(20.0)	(162.1)	*NA*	(18.8)	*NA*	(20.0)	(251.0)	*NA*
Finance costs	(172.6)	(202.0)	*17.0%*	(209.9)	*(3.8%)*	(567.9)	(819.7)	*44.4%*
EBT	482.1	309.1	*-35.9%*	684.0	*-54.8%*	1,792.4	1,944.2	*8.5%*
Income tax (expense) benefit	2.0	0.8	*NA*	(10.7)	*NA*	8.3	(32.6)	*NA*
Minority interest	0.7	0.7	*NA*	(0.1)	*NA*	0.7	0.6	*NA*
Net profit	**484.8**	**310.7**	***(35.9%)***	**673.1**	***(53.8%)***	**1,801.4**	**1,912.3**	***6.2%***
Recurring profit*	**430.2**	**535.9**	***24.5%***	**642.7**	***(16.6%)***	**1,726.3**	**1,959.3**	**13.5%**
Basic Earnings per Share (THB)	0.22	0.13	*(40.9%)*	0.34	*(61.8%)*	0.90	0.92	*2.2%*

Remark:
**Excluding gain/(loss) on FX and one-time items*

	4Q19	4Q20	3Q20	2019	2020
FX gain/(loss) and one-time items:	**14.9**	**(225.2)**	**30.4**	**75.5**	**(47.1)**
FX gain/(loss)	34.9	(69.2)	58.0	95.4	215.6
Tax related to Gain/(loss) on foreign exchange	0.0	6.1	(8.8)	0.0	(11.7)
Refinancing related expense under share of profit from investment in associates	0.0	(171.5)	0.0	0.0	(171.5)
Other one-time item	(20.0)	9.4	(18.8)	(20.0)	(79.5)

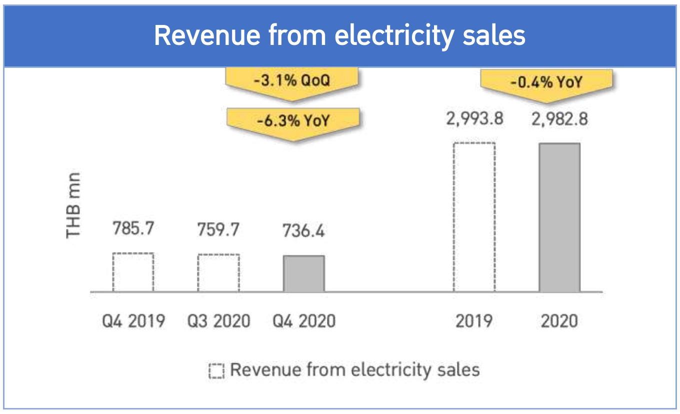
Revenue from sale and rendering of services

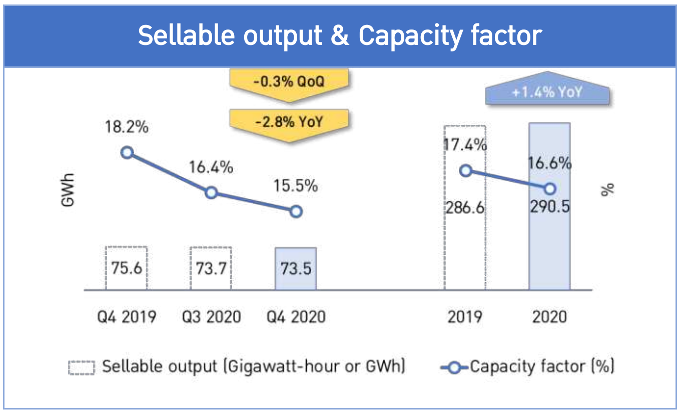
The Group of Companies' has revenue structures classified by country as follows:

Unit: THB mn	4Q19	4Q20	Δ %	3Q20	Δ %	2019	2020	Δ %
Thai	806.1	757.5	(6.0)	776.3	(2.4)	3,057.2	3,056.1	(0.0)
Laos	132.2	322.2	143.6	396.9	(18.8)	148.2	948.4	539.8
Japan	36.0	47.3	31.4	56.4	(16.1)	193.1	191.1	(1.0)
Other operating income	6.9	9.7	41.7	8.2	18.8	28.1	35.1	25.0
Total	**981.2**	**1,136.7**	**15.9**	**1,237.9**	**(8.2)**	**3,426.6**	**4,230.7**	**23.5**

The company and subsidiaries: Thailand

Solar



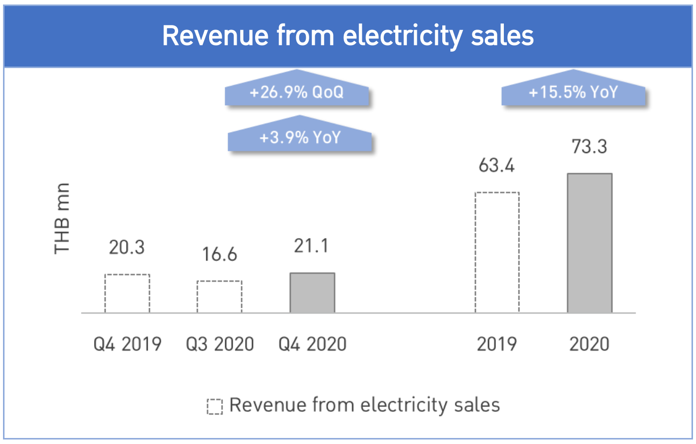


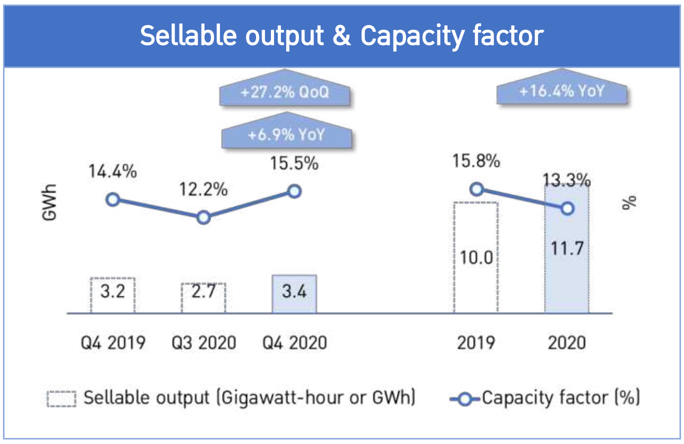
In Q4/2020, the Group of Companies recorded operating revenue from solar power plants in Thailand of THB 736.4 million, decreased by 6.3% YoY and 3.1% QoQ. These were resulted from the following factors.

YoY	QoQ
(-) The decrease of electricity generation by 2.8% YoY to 73.5 GWh as longer rainy season than usual impacted to the drop in the projects' irradiation compared to the same period of last year.	(-) The slightly decrease of electricity generation by 0.3% QoQ as more rain storm, particularly in October impacted to the drop in the projects' irradiation compared to the previous quarter.

For year 2020, the solar power plants in Thailand generated operating revenue of THB 2,982.8 million, slightly dropped by 0.4% YoY as the longer than usual of rainy season led to lower irradiation. However, the acquisition of "RPV" since August 2020 helped total electricity generation to increase by 1.4% YoY to 290.5 GWh.

Wind



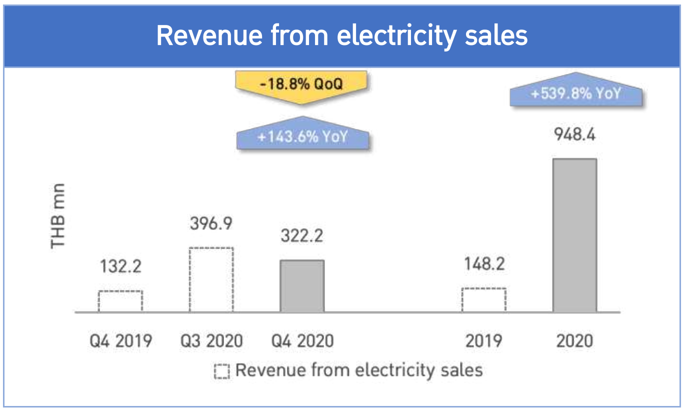


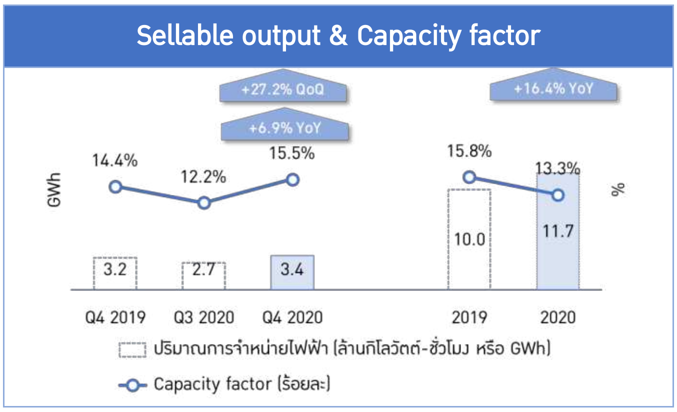
In Q4/2020, the Group of Companies recorded operating revenue from a wind power plant in Thailand of THB 21.1 million, increased by both 3.9% YoY and 26.9% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) The increase of electricity generation by 6.9% YoY to 3.4 GWh, mainly from higher monsoon at the project compared to the same period last year.	(+) The increase in electricity generation 27.2% QoQ, thanks to high season.

For year 2020, the wind power plant in Thailand generated operating revenue of THB 73.3 million, rose by 15.5% YoY. This resulted from the full year revenue recognition after the project had commercial operation since April 2019.

Subsidiaries: Laos



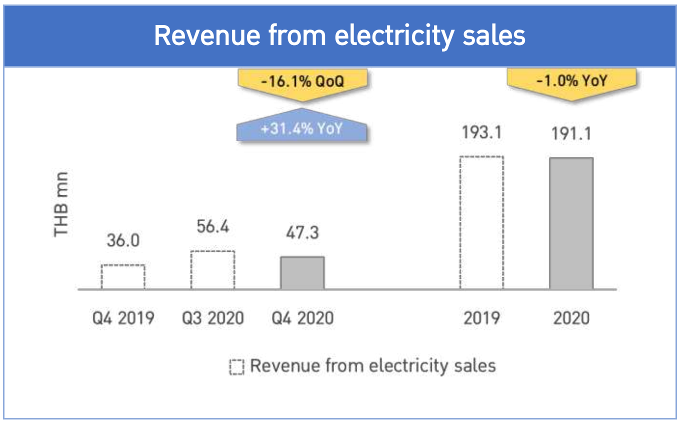


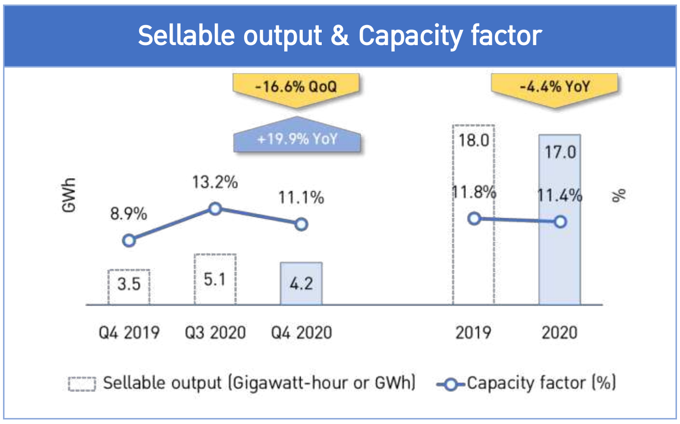
In Q4/2020, the Group of Companies recorded operating revenue from hydro power plants in Laos of THB 322.2 million, grew by 143.6% YoY but dropped by 18.8% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) The increase of electricity generation by 144.2% YoY to 157.1 GWh, thanks to (1) The increase of "Nam San 3A"'s capacity factor. (2) Recognition of the full quarter contribution from "Nam San 3B", which the Group of Companies has acquired since February 2020.	(-) The drop in electricity generation by 16.8%, due to seasonal factor of hydro power plant that the third quarter is high season.

For year 2020, the hydropower power plant in Lao PDR generated operating revenue of THB 948.4 million, significantly up 539.8% from last year. This was in tandem with electricity generation growth of 529.2% YoY to 453.3 GWh, backed by the full-year revenue recognition of "Nam San 3A" and revenue recognition of "Nam San 3B" after the Group of Companies has acquired since February 2020.

Subsidiaries: Japan





In Q4/2020, the operating revenue from solar power plants in Japan reported THB 47.3 million, which increased by 31.4% YoY but decreased by 16.1% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) The increase of electricity generation of 19.9% YoY to 4.2 GWh, thanks to (1) Higher irradiation from lower snowfall level compared to the same period last year. (2) The absence of curtailment to the solar projects in Japan.	(-) The decrease of electricity generation of 16.6% QoQ, due to the cloudy weather from winter season in Q4/2020.

For year 2020, the operating revenue from solar power plants in Japan reported THB 191.1 million, which dropped by 1.1% from last year. The electricity generation decreased of by 4.4% YoY to 17.0 GWh due to curtailment in early of 2020 caused by declined of electricity demand in the period.

Total Revenue from sale and rendering of services

Q4/2020 total revenue was at THB 1,136.7 million, rose by 15.9% YoY but declined by 8.2% QoQ. These were resulted from the following factors.

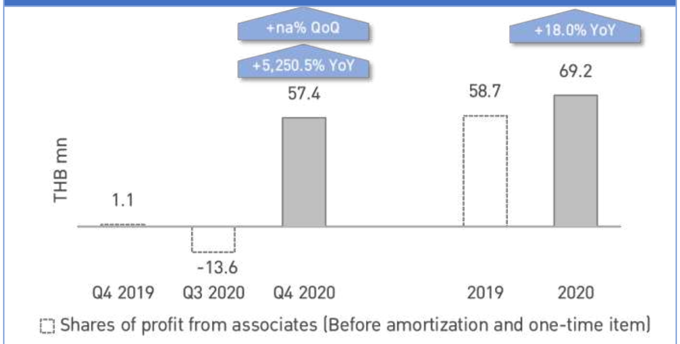
YoY	QoQ
(+) The full-quartered revenue recognition of 2 projects, namely "Nam San 3B" and "RPV".	(-) Lower revenue contribution of the hydro power projects, "Nam San 3A" and "Nam San 3B", which were impacted by the seasonal factor (high season is in the third quarter).

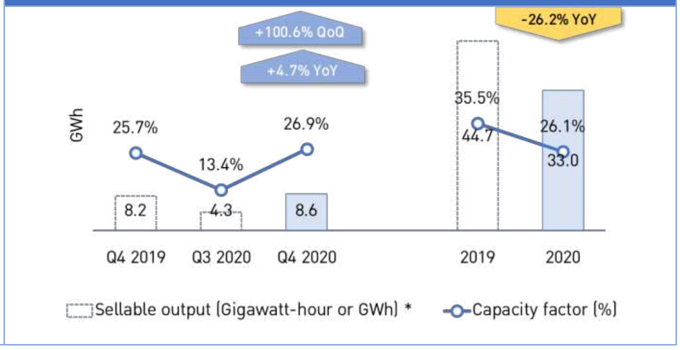
For year 2020, total revenue was at THB 4,230.7 million, rose by 23.5% YoY, thanks to the full-year revenue recognition of "Nam San 3A" and "Lomligor" projects as well as the new projects revenue recognition in 2020, including "Nam San 3B" and "RPV" for 10 months and 5 months, respectively.

Share of profit of investment in associates

The Group of Companies has share of profit of investment in associate's structure classified by country as follows:

Investment in associates: the Philippines





**Share of profits from operation excludes amortization and one-time items.*

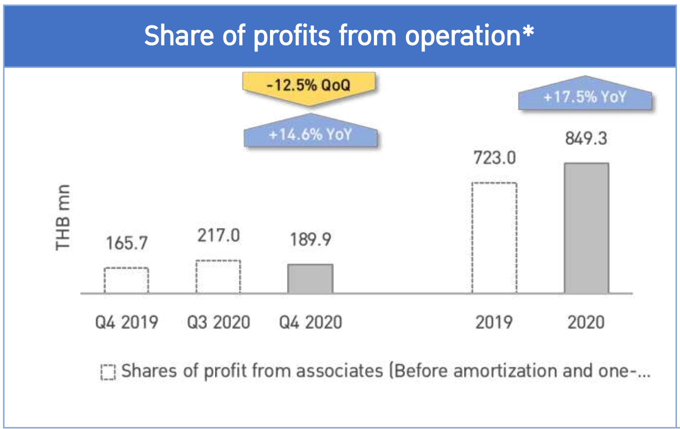
Unit: THB million	4Q19	4Q20	Δ YoY (%)	3Q20	Δ QoQ (%)	2019	2020	Δ YoY (%)
Share profits from operation	1.1	57.4	*5250.5%*	(13.6)	*(521.8%)*	58.7	69.2	*18.0%*
(-) Amortization	(7.8)	(7.9)	*(1.2%)*	(8.1)	*(2.3%)*	(32.0)	(32.3)	*0.8%*
Share profits from operation (after amortization)	(6.7)	49.5	*835.9%*	(21.7)	*328.3%*	26.6	36.9	*38.7%*

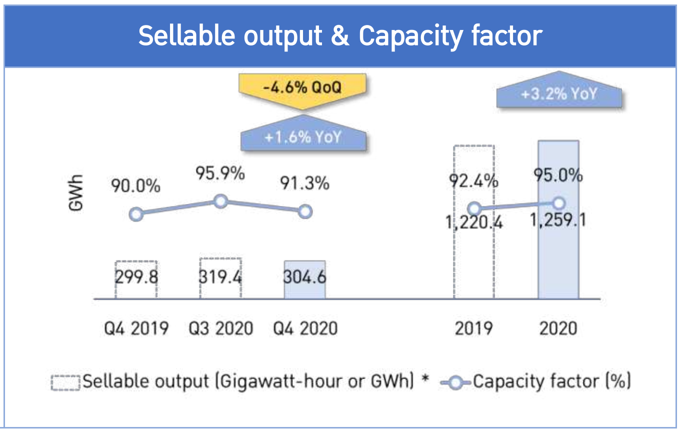
In Q4/2020, the Group of Companies recorded share of profits from operation (after amortization) of THB 49.5 million, turned from share of losses from operation (after amortization) in Q4/2019 and Q3/2020. These were resulted from the following factors.

YoY	QoQ
(+) Higher of average quarterly capacity factor to 26.9% from 25.7% in Q4/2019 led to the electricity sellable outputs rose by 4.7% YoY to 8.6 GWh, driven by higher wind speed in the quarter and the absence of maintenance shutdown of the transmission line compared to the same period last year. (+) Wind power project in the Philippine received approval of the annual FIT escalation. The new tariff rate is PHP 8.6 per kWh from the previous tariff of PHP 7.4 per kWh and has activated since November 2020. Moreover, the project received the 5 years retroactive payment (2016-2020).	(+) Higher electricity generation of 100.6% QoQ, supported by high season factor.

For year 2020, the recorded share of profits from operation (after amortization) of THB 36.9 million, increased by 38.7% YoY. The contribution from tariff escalation outpaced the lower electricity sellable output from lower average wind speed compared to the previous year.

Investment in associates: Indonesia





**Share of profits from operation excludes amortization and one-time items*

Unit: THB million	4Q19	4Q20	Δ YoY (%)	3Q20	Δ QoQ (%)	2019	2020	Δ YoY (%)
Share profits from operation	165.7	189.9	*14.6%*	217.0	*(12.5%)*	723.0	849.3	*17.5%*
(-) Amortization	(91.4)	(92.5)	*(1.1%)*	(94.6)	*(2.3%)*	(375.0)	(378.0)	*0.8%*
Share profits from operation (after amortization)	74.2	97.4	*31.2%*	122.4	*(20.4%)*	348.0	471.3	*35.4%*

In Q4/2020, the Group of Companies recorded share of profits from operation (after amortization) of THB 97.4 million, rose by 31.2% YoY but dropped by 20.4% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) Higher of average quarterly capacity factor to 91.3% from 90.0% in Q4/2019 from lower planned maintenance days. (+) Lower interest expense of the projects owing to loan repayment during the year.	(-) Lower of average quarterly capacity factor to from higher planned maintenance days. (-) Increase in drilling expenses related to additional of production well.

For year 2020, the recorded share of profits from operation (after amortization) of THB 471.3 million, up by 35.4% YoY. The average annual capacity factor increased to 95.0% compared to 92.4% in the previous year from lower planned maintenance days.

Share of profit of investment in associates (before one-time items)

Unit: THB million	4Q19	4Q20	Δ YoY (%)	3Q20	Δ QoQ (%)	2019	2020	Δ YoY (%)
Share profits from operation	166.7	247.3	*48.3%*	203.4	*21.6%*	781.6	918.5	*17.5%*
(-) Amortization	(99.2)	(100.4)	*(1.1%)*	(102.7)	*(2.3%)*	(407.0)	(410.3)	*0.8%*
Share profits from operation (after amortization)	67.5	147.0	*117.7%*	100.7	*46.0%*	374.6	508.2	*35.7%*

In Q4/2020, the Group of Companies recorded share of profit of investment in associates (before one-time items) of THB 147.0 million, up 117.7% YoY and 46.0% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) Higher in share of profit of wind power plant in the Philippine from higher capacity factor and the tariff escalation. (+) Higher in share of profit of geothermal power plants in Indonesia from higher capacity factor and lower interest expense of the projects.	(+) Higher share of profit of wind power plant in the Philippine from higher capacity factor and the tariff escalation.

For year 2020, the Group of Companies recorded share of profit of investment in associates (before one-time items) of THB 508.2 million, grew by 35.7% from the previous year. This was backed by higher in share of profit of wind power plant in the Philippine from the tariff escalation and higher in share of profit of geothermal power plants in Indonesia from higher capacity factor.

EBITDA from operation

In Q4/2020, EBITDA from the operation was at THB 1,030.5 million, increased by 28.2% YoY but decreased by 9.1% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) Higher operating revenue from the full quarter recognition of "Nam San 3B" and "RPV" projects. (+) Higher share of profit of investment in associates (before one-time items) from both wind power plant in the Philippine and geothermal power plants in Indonesia.	(-) Lower revenue due to the seasonal factor of hydro power plants in Lao PDR.

For year 2020, the Group of Companies recorded EBITDA from operation of THB 3,848.7 million, grew 30.2% from the previous year. This was in tandem with growth of operating revenue and share of profit of investment in associates (before one-time items) as well as decrease in administrative expense due to less business travelling and M&A fees.

Administrative expense

Q4/2020 administrative expense was at THB 155.8 million, increased by 2.1% YoY and 35.9% QoQ. These were resulted from the following factors.

YoY	QoQ
(-) Higher number of employees followed the business expansion.	(-) Higher expenses related to employee benefits owing to the seasonal factor that expenses related to employee benefits in the fourth quarter are generally higher than the third quarter's.

Unit: %	4Q19	3Q20	4Q20	2019	2020
SG&A / Sales	15.5	9.3	13.7	16.8	12.6

For year 2020, the administrative expense was at THB 532.1 million, decreased by 7.5% YoY due to less business travelling under the COVID-19 pandemic and less M&A advisory fees.

One-time items

In Q4/2020 and the year 2020, the Group of Companies has one-time items as follows.

	4Q19	4Q20	3Q20	2019	2020
FX gain/(loss) and one-time items:	**14.9**	**(225.2)**	**30.4**	**75.5**	**(47.1)**
FX gain/(loss)	34.9	(69.2)	58.0	95.4	215.6
Tax related to Gain/(loss) on foreign exchange	0.0	6.1	(8.8)	0.0	(11.7)
Refinancing related expense under share of profit from investment in associates	0.0	(171.5)	0.0	0.0	(171.5)
Other one-time item	(20.0)	9.4	(18.8)	(20.0)	(79.5)

Gain/(loss) from foreign exchange

In Q4/2020, the Group of Companies booked FX loss of THB 69.2 million. This came from the difference in FX translation of THB loan under subsidiary "BCPG Indochina Co., Ltd" using USD as a functional currency and the appreciate of THB against foreign currency in Q4/2020. These resulted in lower loan amount, which leads to loss from translation occurred.

YoY	QoQ
(-) FX gain of THB 34.9 million in Q4/2019 from the depreciate of THB against foreign currency.	(-) FX gain of THB 58.0 million in Q3/2020 from the depreciate of THB against foreign currency.

For the year 2020, the Group of Companies booked FX gain of THB 215.6 million, compared to FX gain of THB 95.4 million in 2019.

One-time expenses of geothermal power plants in Indonesia

In Q4/2020, the Group of Companies realized expenses related refinance scheme of geothermal power plants in Indonesia of THB 171.5 million, which some of the amount are non-cash. Moreover, the refinance scheme provided lower average interest rate and fixed rate along the projects life to Salak and Darajat projects.

For 2020, apart from refinancing related expenses, the Group of Companies also record one-time expenses in Q1/2020 including tax provision and allowance for account receivable totaling THB 66.7 million. Thus, a total one-time expense related to geothermal power plants in Indonesia in 2020 was THB 238.2 million.

Finance cost

In Q4/2020, the Group of Companies recorded finance cost of THB 202.0 million, up by 17.0% YoY but down 3.8% QoQ. These were resulted from the following factors.

YoY	QoQ
(-) Full quarter recognition of interest expense from loans related to the new projects acquisition during the year, including (1) Loan of hydro power plants in Lao PDR, named "Nam San 3B" (2) Loan of solar power plants in Thailand, named "RPV"	(+) The drop of market interest rate caused to lower cost of deb, which the majority loans of the Group of Companies are floating-rate loans. (+) Interest bearing debt repaid partially.

The average finance cost in Q4/2020 declined from both Q4/2019 and Q3/2020.

Unit: %	4Q19	3Q20	4Q20		2019	2020
Average finance costs*	3.5	3.0	2.9		3.2	3.1

** Remarks: The average finance costs calculated by an average of the interest-bearing debt of that period.*

For the year 2020, the Group of Companies recorded finance cost of THB 819.7 million, rose by 44.4% from the previous year. This came from the new projects acquisition as mentioned above.

Corporate income tax (CIT)

In Q4/2020, the Group of Companies recorded revenue from CIT of THB 0.8 million from one-time item related to FX loss. This is insignificantly change from Q4/2019 while there was expense from CIT in Q3/2020. These were resulted from the following factors.

YoY	QoQ
(+) Revenue from CIT of THB 2.0 million from one-time item related to FX loss in Q4/2019.	(+) Expense from CIT of THB 10.7 million from one-time item related to FX gain in Q3/2020.

For the year 2020, the Group of Companies recorded expense from CIT of THB 32.6 million, increased from the previous year that recorded revenue from CIT of THB 8.3 million. This resulted from tax expense from the new projects and one-time item related to FX gain.

Recurring net profit

In Q4/2020, the Group of Companies recorded recurring net profit (excluding gain/(loss) from FX and one-time items) of THB 535.9 million, grew by 24.5% YoY but declined by 16.6% QoQ. These were resulted from the following factors.

YoY	QoQ
(+) Recognition of full quarter contribution from new projects including (1) Hydro power project in Lao PDR named "Nam San 3B", which the company has acquired since February 2020. (2) 4 new solar power projects in Thailand named "RPV" which the company has acquired since August 2020. (+) Higher share of profit from investment in associate from geothermal power plants in Indonesia and wind power plant in the Philippine.	(-) Lower contribution from Hydro power project, "Nam San 3A and 3B" due to seasonal factor that the third quarter is generally high season of earnings.

Recurring net profit margin in Q4/2020 dropped from Q4/2019 and Q3/2020 due to higher earnings recognition of hydro power plants in Lao PDR, named "Nam San 3A" and "Nam San 3B".

Unit: %	4Q19	3Q20	4Q20	2019	2020
Recurring net profit margin	43.9	51.9	47.1	50.4	46.3

For the year 2020, the Group of Companies recorded recurring net profit (excluding gain/(loss) from FX and one-time items) of THB 1,959.3 million, grew by 13.5% from the previous year. This came from the full-year earnings recognition of the new projects in 2019, the recognition of the new projects in 2020, less planned maintenance days, tariff escalation and lower administrative expenses as mentioned above.

Net profit

In Q4/2020, the Group of Companies recorded net profit of THB 310.7 million, down by 35.9% YoY and 53.8% QoQ, mainly due to the one-time items.

YoY	QoQ
(-) FX loss of THB 69.2 million, compared to FX gain of THB 34.9 million in Q4/2019. (-) Expenses related to refinancing of geothermal power plants in Indonesia of THB 171.5 million.	(-) FX loss of THB 69.2 million, compared to FX gain of THB 58.0 million in Q3/2020. (-) Expenses related to refinancing of geothermal power plants in Indonesia of THB 171.5 million.

Net profit margin in Q4/2020 dropped from Q4/2019 and Q3/2020 due to the one-time items as mentioned.

Unit: %	4Q19	3Q20	4Q20		2019	2020
Net profit margin	45.3	54.4	27.3		52.6	45.2

For the year 2020, the Group of Companies recorded net profit of THB 1,923.3 million, grew by 6.2% from the previous year. This was in tandem with the growth of recurring net profit but partially offset by the one-time items as mentioned above.

Financial Position

Financial position analysis as of 31 December 2020

Unit: THB million	2019	% of total assets	2020	% of total assets	Δ (%)
Cash and cash equivalents	1,445	3.9%	11,138	21.7%	670.7%
Others current assets	1,008	2.7%	1,355	2.6%	34.4%
Total current assets	**2,453**	**6.6%**	**12,493**	**24.4%**	**409.3%**
Investments in associate & subsidiaries	13,624	36.7%	11,723	22.9%	-14.0%
Property, plant and equipment	13,676	36.8%	14,668	28.6%	7.3%
Others non current assets	7,384	19.9%	12,336	24.1%	67.1%
Total Assets	**37,137**	**100.0%**	**51,220**	**100.0%**	**37.9%**
Interest bearing debt	19,881	53.5%	27,061	52.8%	36.1%
Others liabilities	1,700	4.6%	1,609	3.1%	-5.3%
Total liabilities	**21,581**	**58.1%**	**28,671**	**56.0%**	**32.8%**
Equity attributable to owners of the Company	15,506	41.8%	22,480	43.9%	45.0%
Non-controlling interests	49	0.1%	69	0.1%	39.3%
Total liabilities and Equity	**37,137**	**100.0%**	**51,220**	**100.0%**	**37.9%**

Asset

Total assets were at THB 51,220 million, increased by THB 14,083 million or 37.9% from ending 2019. This was resulted from increase in cash and cash equivalent of THB 9,693 million from the capital increase and the refinance scheme of geothermal power plants in Indonesia (Salak and Darajat projects). Given to the refinancing, the Group of Companies received share payment from capital reduction of Star Energy Group Holding Pte. Ltd., with total amount of THB 842.34 million based on the Group of Companies holding stake of 33.33%.

In addition, intangible assets rose by THB 4,312 million from acquiring the hydropower plant, "Nam San 3B" in Lao PDR.

Liability

Total liabilities was THB 28,671 million, increased by 32.8% from 2019 mainly due to the increase of the interest-bearing debt to THB 27,061 million, which used as source of funds to acquire the hydropower plant "Nam San 3B" in Lao PDR and the 4 solar power plants in Thailand.

Interest-bearing debt classified by maturity, type currency and type of interest rates are as follow.

Maturity	2019	%	2020	%	Δ%
< 1 year	1,520.6	9.8	3,471.6	12.8	+3.0
1 – 5 years	11,430.1	73.4	16,239.0	60.0	-13.4
> 5 years	2,616.5	16.8	7,350.8	27.2	+10.4
Total	19,881.2	100.0	27,061.3	100.0	

Currency (%)	2019	2020
THB	51.1	41.9
JPY	43.0	26.3
USD	5.9	31.7
Total	100.0	100.0

Type of interest rate (%)	2019	2020
Fixed rate	9.8	15.2
Floating rate	90.2	84.8
Total	100.0	100.0

Comparing as of ending 2020 and ending 2019, interest- bearing debt with more than 5 years of termination debt rose and the increase in interest- bearing debt in USD terms resulted from an increase of loan related to "Nam San 3B" acquisition. The proportion of fixed rate and floating rate loan were 15.2% and 84.8%, respectively whichd remained in similar level as last year.

Equity

Equity attributable to owners of the group of companies worth THB 22,480 million, increased by 45.0% from the previous year due to the capital increase in the year 2020.

Cash Flow Statement

Cash flow statement analysis as of 31 December 2020

Unit: THB million	2019	2020	Δ YoY
Net cash from (used in) operating activities	2,120	3,079	959.4
Net cash from (used in) investing activities	(6,001)	(5,309)	691.6
Net cash from (repay to) financing activities	2,952	12,068	9,116.6
Net increase in cash and cash equivalents	**(930)**	**9,838**	**10,767.6**
Cash and cash equivalents at 1 January	2,425	1,445	(980.1)
Effect of exchange rate changes on balances held in foreign currencies	(50)	(145)	(94.4)
Cash and cash equivalents at end period	**1,445**	**11,138**	**9,693.1**
CAPEX	**(5,852)**	**(6,052)**	**(200.0)**

For year 2020, net cash flow from operating activities was at THB 3,079 million.

Net cash flow from investing activities during the year was at THB 5,309 million, mainly due to 2 investment activities;

(1) Investment for the acquisition of the hydropower plant "Nam San 3B" in Lao PDR in February 2020.

(2) Investment for the acquisition of the 4 solar power plants in Thailand in August 2020.

Net cash inflow for financing activities during the year was at THB 12,068 million, mainly came from the capital increase of THB 7,376 million, following EGM No.1/2020 resolution in October 2020.

Cash and cash equivalents at end of 2020 were at THB 11,138 million.

Key Financial Ratio

Key financial ratio analysis as of 31 December 2020

	2019	2020	△ %
Profitability ratio			
Gross profit margin (%)	71.9	66.1	(5.8)
EBITDA margin (%)*	77.7	81.2	3.5
Net profit margin (%)	52.6	45.2	(7.4)
ROE (%) (Annualized)	11.74	10.05	(1.69)
ROA (%) (Annualized)	5.3	5.3	0.0
Liquidity ratio			
Current ratio (x)	0.49	3.09	2.6
Account receivable turnover (x)	6.1	4.8	(1.3)
Average collection period (days)	60.0	75.8	15.8
Leverage ratio			
Interest-bearing debt/equity (x)	1.28	1.20	(0.08)
Net interest-bearing debt/equity (x)	1.19	0.71	(0.48)
Total liability/equity (x)	1.39	1.27	(0.12)

**EBITDA margin (%) = EBITDA/(sales + share of profit before one-time items)*

Profitability ratio

Gross profit margin in 2020 was 66.1%, lessened from the previous year. This mainly came from higher contribution from hydro power plant in Lao PDR ("Nam San 3A" and "Nam San 3B"). EBITDA margin rose to 81.2% from last year owing to higher share of profit of investment in associate (before one-time items) and lower administrative expenses.

However, net profit margin in 2020 dropped to 45.2 compared to the previous year due to one-time items of the expense related to the refinancing of geothermal power plants in Indonesia.

Liquidity ratio

The Group of Companies specifies credit term for trade receivables of no more than 60 days. As of ending 2020, majority operating income of the Group of Companies come from the State Enterprise, namely EGAT and PEA. These state enterprises need to follow the payment condition in Power Purchase Agreement (PPA) or practice of individual state enterprises.

Average collection period as of ending 2020 increased from the previous year, as electricity payment of hydro power plants, "Nam San 3A" and "Nam San 3B" in Lao PDR from EDL had a longer period. As a result, the average collection period was different from the past. However, the Group of Companies closely monitored EDL debt collection and continued to receive payment. In addition, the hydro power plants have Power Purchase Agreement (PPA) with EVN, which will begin to sell electricity within 2022. This would lessen average collection period by getting faster payment.

Leverage ratio

Interest-bearing debt to equity ratio in 2020, was lower to 1.20 times from 1.28 times in 2019 due to some interest-bearing debt repayment and enlarging equity from the capital increase in October 2020.

Other important information

Key factors which could affect to the Group of Companies performance

The group of companies estimates key factors which could affect its short-term operations as follow:

(+/-) Changes in the policy of the government and other related parties in conducting businesses in Thailand and Japan. The change might affect the group of companies's under-construction projects and the prospect of business in the future. However, our one of the main strategies is to focus an investment to the country that have clear renewable energy supporting policy in Power Development Plan. We also followed the change in a policy closely.

(+/-) The fluctuation of THB against JPY and USD will allow the group of companies to book gain/loss in FX translation due to net assets/liability balance sheet exposure in foreign currency. Nevertheless, the group of companies have plan to manage and follow net assets/liabilities to blend with both transaction and functional currency in each footprint to decrease impact from FX translation.

(+/-) A change in interest rate is expected to allow the financial cost of the group of companies to change slightly since approx. 90% of the group of companies's interest-bearing debt bear with floating rates. However, the group of companies believes that the financial cost will be well-managed under the prudent financial policy.

(+/-) Seasonality factors in each country have impact on electricity generation performance of the group of the group of companies from renewable energy including Solar conditions, Wind and Hydro. For example, in rainy season, electricity generation from solar will decrease while, on the other hand, electricity generation from hydropower will increase.

Dividend policy and historical payment

Not less than 40% of the group of companies's net profit based on the yearly separate financial statements, after having deducted all type of the reserve fund as required by the group of companies's articles of association and laws (with additional conditions).

Dividend payment	THB/Share	Type	Payout ratio
2020 operations	0.33*	Cash	40.2%
2019 operations	0.64	Cash	71.1%
2018 operations	0.64	Cash	57.7%

**Dividend payment for 1H20 operating results was THB 0.16 per share and dividend payment for 2H20 operating results, which would propose for AGM 2021 approval is THB 0.17 per share.*

Appendices

Sellable electricity output by each power plants

MWh		4Q19	4Q20	Δ (%)	3Q20	Δ (%)	2019	2020	Δ (%)
Total production		**146,691**	**238,250**	***62.4%***	**270,266**	***(11.8%)***	**386,647**	**772,639**	***99.8%***
Production - Thailand (Solar)		**75,635**	**73,495**	***(2.8%)***	**73,701**	***(0.3%)***	**286,588**	**290,457**	***1.4%***
Production - Adder		**66,248**	**62,817**	***(5.2%)***	**63,541**	***(1.1%)***	**251,632**	**250,744**	***-0.4%***
Tariff (Incl. adder)	(THB-kWh)	11.30	11.02	*(2.4%)*	11.17	*(1.4%)*	11.25	11.16	*-0.8%*
Production - FiT 5.66		**5,067**	**6,324**	***24.8%***	**5,770**	***9.6%***	**19,205**	**21,872**	***13.9%***
Feed in Tariff	(THB-kWh)	5.66	5.66	*0.0%*	5.66	*0.0%*	5.66	5.66	*0.0%*
Production - FiT 4.12		**3,602**	**3,068**	***(14.8%)***	**3,394**	***(9.6%)***	**14,174**	**13,471**	***-5.0%***
Feed in Tariff	(THB-kWh)	4.12	4.12	*0.0%*	4.12	*0.0%*	4.12	4.12	*0.0%*
Public solar		**717**	**1,286**	***79.3%***	**996**	***29.2%***	**1,577**	**4,371**	***177.2%***
Feed in Tariff	(THB-kWh)	2.97	2.97	*(0.0%)*	3.03	*(1.9%)*	2.88	2.98	*3.5%*
Production - Thailand (Wind)		**3,189**	**3,408**	***6.9%***	**2,678**	***27.2%***	**10,018**	**11,663**	***16.4%***
Lomligor		3,189	3,408	*6.9%*	2,678	*27.2%*	10,018	11,663	*16.4%*
Tariff (Incl. adder)	(THB-kWh)	6.38	6.20	*2.0%*	6.21	*(0.3%)*	6.33	6.28	*-0.8%*
Production - Japan (Solar)		**3,523**	**4,224**	***19.9%***	**5,063**	***(16.6%)***	**17,997**	**17,203**	***-4.4%***
Feed in Tariff	(JPY-kWh)	37.03	38.21	*3.2%*	37.75	*1.2%*	37.66	37.80	*0.4%*
Production - Laos (Hydro)		**64,345**	**157,124**	***144.2%***	**188,824**	***(16.8%)***	**72,044**	**453,316**	***529.2%***
Feed in Tariff	(US cents-kWh)	6.79	6.70	*(1.4%)*	6.71	*(0.2%)*	6.79	6.71	*-1.2%*

Revenue structure of each power plants

Unit: THB million	4Q19	4Q20	Δ (%)	3Q20	Δ (%)	2019	2020	Δ (%)
1. Revenue - Thailand (Solar)	785.7	736.4	*(6.3%)*	759.7	*(3.1%)*	2,993.8	2,982.8	*-0.4%*
2. Revenue - Thailand (Wind)	20.3	21.1	*3.9%*	16.6	*26.9%*	63.4	73.3	*15.5%*
3. Revenue - Japan (Solar)	36.0	47.3	*31.4%*	56.4	*(16.1%)*	193.1	191.1	*-1.0%*
4. Revenue - Loas PDR (Hydro)	132.2	322.2	*143.6%*	396.9	*(18.8%)*	148.2	948.4	*539.8%*
5. Other operating income	6.9	9.7	*41.7%*	8.2	*18.8%*	28.1	35.1	*25.0%*
Total revenue	**981.2**	**1,136.7**	***15.9%***	**1,237.9**	***(8.2%)***	**3,426.6**	**4,230.7**	***23.5%***

Net hare profits from investment in associates

Unit: THB million	4Q19	4Q20	Δ YoY (%)	3Q20	Δ QoQ (%)	2019	2020	Δ YoY (%)
Share profits from operation	166.7	247.3	*48.3%*	203.4	*21.6%*	781.6	918.5	*17.5%*
(-) Amortization	(99.2)	(100.4)	*(1.1%)*	(102.7)	*(2.3%)*	(407.0)	(410.3)	*0.8%*
Share profits from operation (after amortization)	67.5	147.0	*117.7%*	100.7	*46.0%*	374.6	508.2	*35.7%*
(+/-) One-time item								
Amortization of deferred issuance cost from refinancing	-	*(171.5)*	*NA*	-	*NA*	-	*(171.5)*	*NA*
Tax provision	*(20.0)*	-	*NA*	-	*NA*	*(20.0)*	*(23.9)*	*NA*
Allowance for account receivable	-	-	*NA*	-	*NA*	-	*(42.8)*	*NA*
Net share profits	47.5	(24.5)	*(151.6%)*	100.7	*(124.4%)*	354.7	270.1	*-23.9%*

Disclaimer

The information contained in this document is intended to provide and explain the Group of Companies' operation for shareholders and investors to follow and understand operations, financial position and operating factors that will affect the group of companies's operations better. The information and analysis contained herein have been done by the information as at the date of Financial Statement submission to the Stock Exchange of Thailand as well as relevant sources of information have been believed to be trustworthy. However, the analysis of such information may change in the future if certain factors which are subject to business economic and competitiveness are changed. The information contained herein does not take into consideration the investment objectives. The group of companies would ask shareholders and investors to use the information with best judgement with regards to the use of information from this presentation.