

# MD&A

Q3/2020



## Management Discussion and Analysis

3<sup>rd</sup> Quarter of 2020

### Q3/2020 and Recent Highlights

In the third quarter of 2020, economic factors that affected company's results of operations include (i) natural gas price and coal price that continued to drop further from previous quarter resulting in lower costs of sales and increasing industrial customers sales margin in spite of the slightly decrease of the fuel adjustment charge (Ft) for the collection of September - December 2020 of 0.83 Satang/unit resulting in the Ft of -12.43 Satang/unit. Besides, the GPSC has been closely monitoring impacts of COVID-19 pandemic on our industrial customers' operational plans. In Q3/2020, electricity and steam demand from our petrochemical customers in Map Ta Phut Industrial Estate and our automotive customers in Siam Eastern Industrial park and others increased qoq contributing this quarter's net profit (of the Company) to significantly increase by 36% qoq. Regarding measures in response to COVID-19 pandemic, we have adopted measures to ensure stability and continuity of our electricity and utilities supply system.

In terms of business expansion, GPSC focuses on expansion of investment in innovation to create new business revenues or new S-Curve corresponding to the fast-moving environment of energy and electricity generation sectors and become an energy solution service provider of PTT Group through three new business development initiatives as follows:

- 1) **Battery Business:** investment in a pilot plant of a battery manufacturing facility using Semi Solid Lithium-ion technology. Capacity of the first phase is 30 MWh which the first battery cell is expected to be completed in December this year. GPSC is coordinating with several parties to introduce the prototype for mobility and stationary purposes such as EV bus, Charging stations and other applications. After this, we will consider the investment expansion in next phase.
- 2) **Energy Storage & System Integration:** develop to become a provider of Smart Energy Storage System: ESS. Currently, GPSC has developed and implemented various projects e.g. Cooperation project with PTT Global Chemical Public Company Limited (GC), co-developed a 1.5 MWh ESS to store excess electricity to be used during peak demands in order to help optimize and stabilize power system at the Science & Innovation Centre of GC, Rayong and "Smart city" pilot project for Vidyasirimedhi Institute of Science and Technology (VISTEC) to develop new innovations or innovation platform to support new S-curve business, etc.
- 3) **Smart Energy Management:** conduct studies and select technologies compatible with New Energy Market to shape new business opportunities.

In Q3/2020, GPSC has worked in collaboration with Suranaree University of Technology in 6-MW Solar Rooftop and Floating Solar project worth approximately THB 150 million. This project integrates several Smart Energy technology including blockchain-based smart grid for management of solar power generation, Artificial Intelligence (AI) to ensure real time performance controlling and tracking and to optimize energy production decision-making by using collected data; for example, meteorological and solar irradiance data can be used to analyze solar power generation capacity in advance to increase accuracy and efficiency in power production. The project is planned to further serve as a learning center of the north eastern region of the country and a gateway of GPSC to scale up its energy management business with universities.

In addition, in Q3/2020, GPSC, together with PTT Group, jointly unveiled the pilot project for a 100-kW floating solar installed at PTT Tank Terminal Company Limited in Map Ta Phut, Rayong. GPSC, as a power flagship of PTT Group, has commission Combined Heat and Power producing Company Limited (CHPP), a subsidiary of GPSC, to design and install the floating solar. The electricity generated in the initial phase will be used by office buildings and will be a model for further research and development.

Also, GPSC had a significant success in issuing Green Debentures worth THB 5,000 million to institutional and/or high net worth investors with subscriptions of over 6-time oversubscription. Due to the high demand, GPSC was able to gain appropriate funding costs. The debentures are senior unsecured green bonds which were assigned a credit rating of AA- by TRIS Rating Company Limited and comprise of three tranches: 1) 5-year tranche of THB 1,500 million with a fixed coupon rate of 2.11%; 2) 10-year tranche of THB 1,000 million with a fixed coupon rate of 2.94%; and 3) 15-year tranche of THB 2,500 million with a fixed coupon rate of 3.24%. The proceeds will be used to support financing of Rayong Waste to Energy (WTE) project and solar power plant projects as parts of GPSC's plan to scale up our renewable businesses.

## Q3/2020 Operating Results

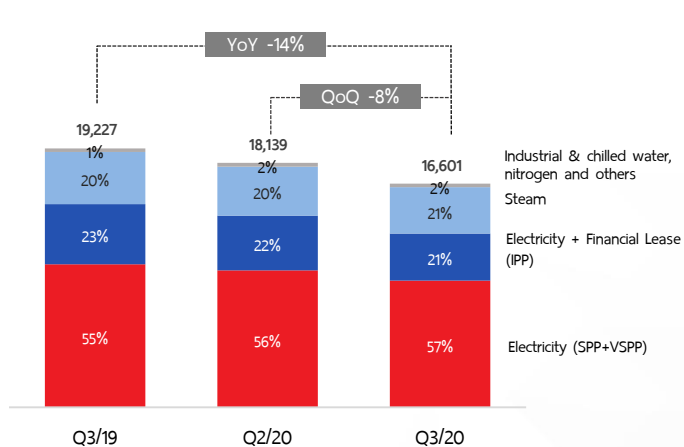
Overall operating results of the Company and its subsidiaries (unit: THB million)	Q3/19	Q2/20	Q3/20	change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
Operating revenue	19,227	18,138	16,601	(14%)	(8%)	48,283	53,047	10%
Cost of sales (excluding depreciation and amortization) <sup>1</sup>	(13,835)	(12,488)	(11,217)	(19%)	(10%)	(34,402)	(36,648)	7%
<b>Gross profit<sup>1</sup></b>	<b>5,391</b>	<b>5,650</b>	<b>5,384</b>	<b>(0%)</b>	<b>(5%)</b>	<b>13,881</b>	<b>16,398</b>	<b>18%</b>
Selling and administrative expenses	(433)	(437)	(408)	(6%)	(7%)	(1,407)	(1,263)	(10%)
Other operating income	6	5	5	(24%)	(0%)	12	15	25%
<b>EBITDA</b>	<b>4,965</b>	<b>5,218</b>	<b>4,981</b>	<b>0%</b>	<b>(5%)</b>	<b>12,485</b>	<b>15,150</b>	<b>21%</b>
Depreciation and amortization	(2,026)	(2,098)	(2,068)	2%	(1%)	(4,945)	(6,240)	26%
<b>EBIT</b>	<b>2,939</b>	<b>3,120</b>	<b>2,913</b>	<b>(1%)</b>	<b>(7%)</b>	<b>7,540</b>	<b>8,910</b>	<b>18%</b>
Finance costs	(1,956)	(991)	(1,026)	(48%)	3%	(3,943)	(3,058)	(22%)
Other non-operating income and expenses	291	339	543	87%	60%	608	1,054	74%
Shares of profit of associates and joint ventures	138	110	638	363%	482%	374	680	82%
Income tax expenses	(129)	(284)	(314)	143%	11%	(205)	(851)	316%
<b>Profit before FX and extraordinary items</b>	<b>1,283</b>	<b>2,293</b>	<b>2,755</b>	<b>115%</b>	<b>20%</b>	<b>4,374</b>	<b>6,735</b>	<b>54%</b>
Net foreign exchange gain (loss) <sup>2</sup>	17	(5)	21	25%	(515%)	207	(13)	(106%)
<b>Net profit</b>	<b>1,300</b>	<b>2,288</b>	<b>2,776</b>	<b>114%</b>	<b>21%</b>	<b>4,581</b>	<b>6,722</b>	<b>47%</b>
Non-controlling interests	(407)	(392)	(201)	(50%)	(49%)	(1,665)	(672)	(60%)
<b>Net profit for the Company</b>	<b>893</b>	<b>1,896</b>	<b>2,574</b>	<b>188%</b>	<b>36%</b>	<b>2,916</b>	<b>6,050</b>	<b>107%</b>
<b>Adjusted Net Income<sup>3</sup></b>	<b>1,265</b>	<b>2,264</b>	<b>2,937</b>	<b>132%</b>	<b>30%</b>	<b>3,648</b>	<b>7,149</b>	<b>96%</b>
Gross profit margin (%)	28%	31%	32%	4%	1%	29%	31%	2%
Net profit margin (%)	5%	10%	16%	11%	5%	6%	13%	7%
Adjusted Net Income margin (%)	7%	12%	18%	11%	5%	8%	13%	6%

Notes: 1. Since Q1/2020, outage amortization of GHECO-One has been reclassified to maintenance cost. This, partly, has been a contributing factor of increased maintenance cost reported in Q1/2020 onwards.

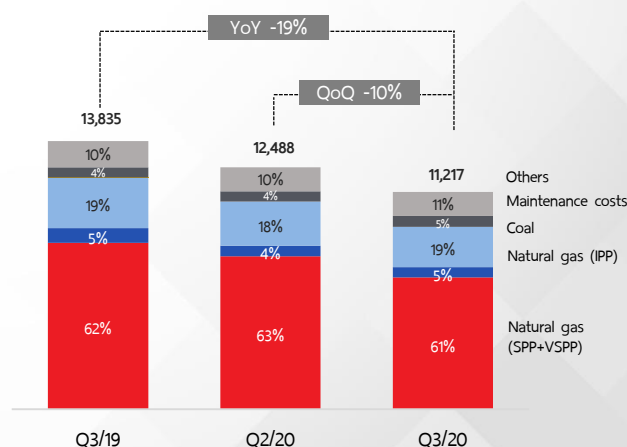
2. Since Q1/2020, net foreign exchange gain (loss) has taken into account fair value valuation of derivatives in accordance with TFRS9.

3. Adjusted Net Income is net profit attributed to the Company excluding "fair value of intangible assets from the acquisition of GLOW". (see details on page 24)

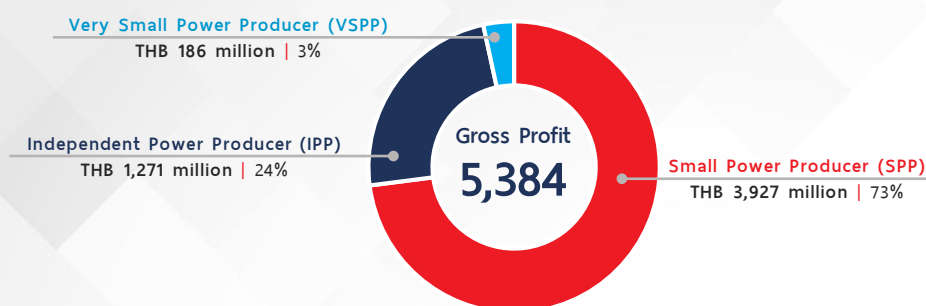
## Operating Revenue (THB million, %)



## Cost of Sales (THB million, %)



### Q3/2020 Gross Profit Breakdown by Plant Type (THB million, %)



**Gross profit** in Q3/2020 was THB 5,384 million, decreased by THB 7 million or 0.1% from Q3/2019 and decreased by THB 266 million or 5% from Q2/2020.

## Quarterly Comparison of Company's Performance

### yoy Q3/2020 VS Q3/2019

Adjusted Net Income in Q3/2020 was THB 2,937 million, increased by THB 1,672 million from Q3/2019 or 132%, and mainly due to the following:

- **Gross profit of Independent Power Producer (IPP)** decreased by THB 442 million, mainly due to the following:
  - Lower gross profit of GHECO-One due to lower Availability Payment from 8.5-day maintenance and a drop in average coal price.
  - Lower gross profit of HHPC due to lower electricity dispatch corresponding to this year's drought situation.
- **Gross profit of Small Power Producer (SPP)** increased by THB 269 million mainly due to higher margin from sales of electricity and steam to industrial customers as a result of lower gas price despite adjustment of Ft down in September 2020 and a drop in overall sales volume of electricity and steam.
- **Gross profit of Very Small Power Producer (VSPP) and others** increased by THB 81 million mainly from recognition of gross profit from Global Renewable Power Co., Ltd. (GRP) after the acquisition completion on 26 March 2020.

### qoq Q3/2020 VS Q2/2020

Adjusted Net Income in Q3/2020 was THB 2,937 million, increased by THB 673 million from Q2/2020 or 30%, and mainly due to the following:

- **Gross profit of Independent Power Producer (IPP)** decreased by THB 240 million mainly due to the following:
  - Lower gross profit of GHECO-One due to lower Availability Payment from 8.5-day maintenance and a drop in average coal price.
  - Lower gross profit of HHPC due to lower electricity dispatch.
- **Gross profit of Small Power Producer (SPP)** decreased by THB 89 million or 2%. Despite revenue from electricity and steam sales dropped, natural gas cost also dropped contributing this quarter's gross profit to be maintained at the same level as that of last quarter.
- **Gross profit of Very Small Power Producer (VSPP) and others** decreased by THB 59 million mainly from decreased revenue from electricity sales of Ichinoseki Solar Power 1 GK (ISP-1) due to lower solar radiation intensity than in Q3/2019.

## Quarterly Comparison of Company's Performance (cont.)

yoy

Q3/2020 VS Q3/2019

- **Other non-operating income and expenses** was THB 543 million in Q3/2020, increased by THB 252 million yoy mainly from THB 270 million dividend received from Ratchaburi Power Company Limited (RPCL), increased by THB 165 million from Q3/2019.
- **Selling and administrative expenses and Other expenses** in Q3/2020, was decreased by THB 733 million yoy mainly from finance costs after the Right Offering (RO) completed in Q4/2019 amounting THB 930 million while Income tax expenses increased amounting THB 185 million.
- **Shares of profit of associates and joint ventures** was THB 638 million in Q3/2020, increased by THB 500 million yoy an increase in shares of profits from Xayaburi Power Company Limited (XPCL) by THB 455 million. XPCL started its commercial operation in October 2019.
- **Non-controlling interests** decreased by THB 205 million mainly due to lower net profit of GHECO-One and HHPC and 99.83% recognition of GLOW's results in Q3/2020 while in Q3/2019, only 95.25% of GLOW's results was recognized.

qoq

Q3/2020 VS Q2/2020

- **Other non-operating income and expenses** was THB 543 million in Q3/2020, increased by THB 204 million qoq mainly from THB 270 million dividend received from Ratchaburi Power Company Limited (RPCL).
- **Selling and administrative expenses and Other expenses** was slightly decreased by THB 21 million qoq from Q2/2020.
- **Shares of profit of associates and joint ventures** was THB 638 million in Q3/2020, increased by THB 528 million qoq mainly due to an increase in shares of profits from Xayaburi Power Company Limited (XPCL) by THB 506 million in Q3/2020 due to higher energy dispatch during rainy season and lower financing costs.
- **Non-controlling interests** decreased by THB 190 million mainly due to lower net profit of GHECO-One and HHPC.

## 9 months Comparison of Company's Performance (9M/2020 VS 9M/2019)

Adjusted Net Income for the first nine months of 2020 was THB 7,149 million, increased by THB 3,501 million or 96% from Adjusted Net Income of the first nine months of 2019 which was mainly due to the following:

- Full Q1 and Q2 results of GLOW were recognized in 2020, while in 2019, only 18-day recognition in Q1/2019 and full quarter recognition in Q2/2019 and Q3/2019.
- **SG&A** for the first nine months of 2020 was THB 1,263 million, decreased by THB 145 million YTD mainly due to last year's provision of employee's severance pay corresponding to revision of the Labour Protection Act (effective on 5 April 2019).
- **Depreciation and amortization** for the first nine months of 2020 was THB 6,240 million, increased by THB 1,295 million YTD due to an increase in total asset as a result of the acquisition of GLOW and CUP-4 plant started its commercial operation in Q3/2019.
- **Finance costs** for the first nine months of 2020 was THB 3,058 million, decreased by THB 885 million YTD mainly due to partial repayment of bridge loan using proceeds from the Right Offering (RO) completed in Q4/2019.
- **Other non-operating income and expenses** for the first nine months of 2020 was THB 1,054 million, increased by THB 447 million YTD mainly due to: (i) THB 270 million dividend received from RPCL; (ii) land eviction fee amounting THB 223 million in Q2/2020 which is paid by EGAT as a compensation for electric power transmission rights of way; (iii) recognition of gain on bargain purchase after the assessment of the fair value of net assets from the acquisition of 9 solar power generation plants via Global Renewable Power Company Limited (GRP).
- **Shares of profit of associates and joint ventures** for the first nine months of 2020 was THB 680 million, increased by THB 306 million YTD mainly due to an increase in shares of profits from Xayaburi Power Company Limited (XPCL) by THB 176 million. XPCL started its commercial operation in October 2019.
- **Foreign exchange loss** for the first nine months of 2020 was THB 13 million while during the same period of last year, there was an foreign exchange gain of THB 207 million. This was due to record of (i) a decrease in unrealized FX gain of THB 178 million mainly from Sriracha's financial lease accounting adjustment; (ii) a decrease in realized FX gain of THB 16 million; and (iii) an increase in loss from fair value valuation of derivatives instruments of THB 26 million.

### Synergy from Acquisition of GLOW

In the year 2020, the Company expects to be able to recognize synergy value from the merger of approximately over THB 500 million mainly from the management of power plants, power and steam network integration and management of Long-Term Service Agreements (LTSA) to achieve highest efficiency and reduce operating costs. In addition, the Company is also focusing on (i) improvement of procurement process via active and inventory cost control in order to achieve economies or scales; and (ii) other cost management such as financing costs, insurance costs, working capital management, and organizational cost control. The Company has evaluated preliminary which is expected to gradually increase from 2019 to 2024 and reach the synergy value of approximately THB 1,600 million in 2024.

In the first 9 months of year 2020, the Company recognized synergy value of approximately THB 466 million which is from management of electricity and steam supply system to enhance flexibility and efficiency of the system. For instance, we completed steam network integration connecting steam transmission network of GLOW SPP facilities to Rayong Central Utility Plant 3 (CUP-3). The connected network can support steam transmission of approximately 10-30 ton/hour. In addition, another part of recognized synergy value is from reduced costs such as SG&A, financing costs, and other costs.

### Economic Factors in 2020

**Thailand economic situation in 2020:** the Bank of Thailand revised up its growth forecast for this year to 7.8% contraction, from its previous forecast at 8.1% contraction has recently as the impacts from COVID-19 pandemic on the Thai economy was less than previously expected in Q2/2020. The pandemic causes the worst global energy demand contraction in 70 years affecting demands for oil, LPG, LNG and electricity, etc.

**Ft adjustment:** the Energy Regulatory Commission (ERC) announced the decrease of the fuel adjustment charge (Ft) for the collection of September-December 2020 of 0.83 Satang/unit resulting in the Ft of -12.43 Satang/unit, lower than previous Ft of -11.60 Satang/unit. This results in a slightly decrease in average electricity price. The main reason for this Ft adjustment is to reflect the lower natural gas costs which are the main costs of electricity generation.

**Electricity usage during Jan to July 2020** decreased by 2.7% from the usage during the same period of the previous year. Electricity usage of industrial sector and business sector dropped 7% and 11.4%, respectively, due to global economic slowdown as a result of COVID-19 pandemic. However, household sector's electricity usage increased 8.7% partly due to seasonality and the implementation of lockdown measures causing people to work from home. However, July's electricity usage of industrial and business sector was improving from the previous months due to the lockdown relaxation and government's economic stimulus package aimed at boosting domestic tourism.

### Awards Received in Q3/2020

On 23 July 2020, the Company has received 4 awards at the **10<sup>th</sup> Annual Corporate - Institutional Investment Poll** which are **(1) Most Organised Investor Relations (2) Most Consistent Dividend Policy (3) Best Strategic Corporate Social Responsibility and (4) Most Improved Investor Relations** from Alpha Southeast Asia, Hong Kong. The awards result based on investors poll that reflect the management capability of the company internationally and proves the determination of business management for sustainable growth and taking responsibilities for all stakeholders.

On 16 September 2020, the company received award at the "Climate Actions Together" event from Mr. Jatuporn Buruspat, Permanent Secretary of the Ministry of Natural Resource and Environment, who presided over the award ceremony. The event hosted by the Thailand Greenhouse Gas Management Organization (Public Organization), was held to honor local businesses and organizations taking the lead in the management and reduction of greenhouse gas emissions in 2020. This year, the Company received 3 awards including:

- 1) Excellence in **Low Carbon and Sustainable Business Index: LCSi** in 2020
- 2) **Thailand Voluntary Emission Reduction Program: T-VER** from the first phase of the Central Utility Plant 4

### Awards Received in Q3/2020

- 3) **Low Emission Support Scheme** from the Central Utility Plant 1,2, and 3 Sriracha Power Plant (SRC) and the Zero Waste Village project.

In addition, Glow Energy Public Company Limited or GLOW, a member of GPSC Group, also received awards in the **Carbon Footprint Organization: CFO** categories from the Glow SPP 2 Power Plant, Glow SPP 3 Power Plant, Glow Energy Phase 4 Power Plant, Glow Energy Phase 5 Power Plant and GHECO-One Power Plant. **Carbon Footprint Product: CFP** and **Carbon Footprint Reduction: CFR** categories from the Glow Energy Phase 1 Power Plant and Glow Energy Phase 2 Power Plant.

On 24 September 2020, the Company received **the Eco Factory certification award** of the Institute of Waste and Sustainability, the Industrial Council for the 2020 "Eco Innovation Forum 2020". The organization aims to create a sustainable development for industrial sector which focuses on a good management of factory, safety, raising effectiveness in resource consumption, reducing negative impact on environment as well as contribute to society and all stakeholders.

## Operating Results: Independent Power Producer (IPP)

Operating results (unit: THB million)	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Revenue from electricity sales</b>								
- Availability Payment: AP	1,566	1,610	1,301	(17%)	(19%)	4,034	4,388	9%
- Energy Payment: EP	2,690	2,239	1,982	(26%)	(11%)	7,297	7,115	(2%)
- Money received to submit to Power Developments Funds	2	0	0	(77%)	(3%)	9	5	(45%)
<b>Total revenue from electricity sales</b>	<b>4,258</b>	<b>3,850</b>	<b>3,283</b>	<b>(23%)</b>	<b>(15%)</b>	<b>11,340</b>	<b>11,508</b>	<b>1%</b>
Revenue from finance lease agreement	198	207	203	3%	(2%)	636	628	(1%)
Other income	21	7	3	(88%)	(63%)	34	20	(41%)
<b>Total revenue</b>	<b>4,477</b>	<b>4,064</b>	<b>3,489</b>	<b>(22%)</b>	<b>(14%)</b>	<b>12,010</b>	<b>12,156</b>	<b>1%</b>
<b>Cost of raw materials</b>								
- Natural gas <sup>1</sup>	748	548	534	(29%)	(3%)	2,708	2,269	(16%)
- Coal	1,688	1,590	1,318	(22%)	(17%)	3,797	4,445	17%
- Others	39	16	28	(29%)	75%	83	82	(1%)
<b>Total cost of raw materials</b>	<b>2,475</b>	<b>2,154</b>	<b>1,879</b>	<b>(24%)</b>	<b>(13%)</b>	<b>6,588</b>	<b>6,796</b>	<b>3%</b>
Maintenance cost <sup>2</sup>	63	156	153	143%	(2%)	137	453	230%
Others (excluding depreciation and amortization)	226	243	185	(18%)	(24%)	602	666	11%
<b>Total cost of sales of goods and rendering of services</b>	<b>2,764</b>	<b>2,552</b>	<b>2,217</b>	<b>(20%)</b>	<b>(13%)</b>	<b>7,327</b>	<b>7,915</b>	<b>8%</b>
<b>Gross profit</b>	<b>1,713</b>	<b>1,511</b>	<b>1,271</b>	<b>(26%)</b>	<b>(16%)</b>	<b>4,683</b>	<b>4,242</b>	<b>(9%)</b>
<b>Gross profit margin</b>	<b>38%</b>	<b>37%</b>	<b>36%</b>	<b>(2%)</b>	<b>(1%)</b>	<b>39%</b>	<b>35%</b>	<b>(4%)</b>

Notes : 1 Including gas pipeline transmission cost (fixed cost)

2 Since Q1/2020, outage amortization of GHECO-One has been reclassified to maintenance cost. This, partly, has been a contributing factor of increased maintenance cost reported in Q1/2020 onwards.

## Revenue: IPP

Key revenue drivers	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Availability Rate (%)</b>								
Sriracha Power Plant	100%	100%	100%	0%	0%	100%	100%	(0%)
GIPP	100%	100%	100%	0%	0%	100%	100%	0%
GHECO-One	98%	99%	88%	(10%)	(11%)	84%	94%	11%
<b>Electricity dispatch (GWh)</b>								
Sriracha Power Plant	153	49	46	(70%)	(6%)	794	493	(38%)
GIPP	0	0	0	n/a	n/a	0	0	n/a
GHECO-One	1,436	1,440	1,290	(10%)	(10%)	3,170	4,099	29%
Houay Ho Power	101	130	85	(16%)	(35%)	318	316	(1%)
<b>Total electricity dispatch</b>	<b>1,690</b>	<b>1,618</b>	<b>1,421</b>	<b>(16%)</b>	<b>(12%)</b>	<b>4,282</b>	<b>4,907</b>	<b>15%</b>
<b>Average selling price</b>								
Average selling price (THB/kWh)	2.65	2.52	2.47	(7%)	(2%)	2.80	2.47	(12%)

Note: For 9M/2019, GLOW's electricity sales volume reflects sales volume incurred after the acquisition of GLOW which accounted for the period of 18 days in Q1 and full quarter in Q2 and Q3

Total revenue of Independent Power Producer (IPP) business in Q3/2020 was THB 3,489 million, down by THB 988 million or 22% from Q3/2019 and down by THB 575 million or 14% from Q2/2020 due to the following contributing factors:



## Quarterly Comparison of IPP's Revenue

**yoy** Q3/2020 VS Q3/2019

Revenue from IPP business decreased yoy mainly due to the following contributing factors:

- **Revenue from Sriracha Power Plant** decreased by THB 182 million mainly as a result of lower Energy Payment (EP) received from EGAT corresponding to lower electricity dispatch to EGAT. On the other hand, a portion of the Availability Payment (AP) that is linked to USD increased due to THB depreciation. Additionally, revenue from finance lease agreement also increased as a result of financial lease accounting (TFRIC 4) adjustment.
- **Revenue from IPP business of GLOW** decreased by THB 806 million mainly due to GHECO-One's lower revenue by THB 784 million from decreased Availability Payment due to 8.5-day maintenance, decreased Energy Payment as a result of 10% lower electricity dispatch and 17% drop in average coal price. Revenue of HHPC also decreased yoy due to this year's drought situation.

**qoq** Q3/2020 VS Q2/2020

Revenue from IPP business decreased qoq mainly due to the following contributing factors:

- **Revenue from Sriracha Power Plant** decreased by THB 11 million primarily from decreased Energy Payment (EP) received from EGAT corresponding to a drop in energy dispatch to EGAT.
- **Revenue from IPP business of GLOW** decreased by THB 555 million primarily from GHECO-One's decreased revenue by THB 482 million from decreased Availability Payment due to 8.5-day maintenance, decreased Energy Payment as a result of 10% lower electricity dispatch and 9% drop in average coal price. Revenue of HHPC also decreased 36% due to 35% lower electricity sales volume.

## 9 months Comparison of IPP's Revenue (9M/2020 VS 9M/2019)

Revenue from IPP business from the first nine months of 2020 increased by THB 146 million or 1% from same period of the previous year primarily due to the following:

- **Revenue from IPP Business of GLOW** increased by THB 708 million mainly due to full recognition of revenue from GLOW in 2020 while only 18-day recognition in Q1/2019 and full-quarter recognition in Q2/2019 and Q3/2019.
- **Revenue from Sriracha Power Plant** decreased by THB 486 million mainly due to decreased Energy Payment (EP) following lower electricity dispatch to EGAT despite increased Availability Payment (AP) from a portion of AP that is USD-linked and revenue from finance lease agreement as a result of financial lease accounting (TFRIC 4) adjustment.

## Cost of Sales of Goods and Rendering of Services: IPP

Key cost drivers	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Natural Gas</b>								
<b>Natural gas consumption</b>								
GPSC's natural gas consumption ('000 MMBTU)	1,222	398	366	(70%)	(8%)	6,273	3,889	(38%)
GLOW's natural gas consumption ('000 MMBTU)	4.67	1.93	2.17	(54%)	13%	5.79	6.14	6%
<b>Coal</b>								
Coal consumption (Ton JPU)	507,119	512,490	463,202	(9%)	(10%)	1,113,933	1,459,887	31%
Average coal cost (excluding freight) (USD/Ton JPU)	98.7	89.7	81.7	(17%)	(9%)	97.7	87.5	(10%)

Cost of sales of goods and rendering of services of IPP business in Q3/2020 was THB 2,217 million, decreased by THB 547 million or 20% from Q3/2019 and decreased by THB 335 million or 13% from Q2/2020 primarily due to the following factors:

## Quarterly Comparison of IPP's Cost of Sales of Goods and Rendering of Services

**yoy** Q3/2020 VS Q3/2019

Cost of sales of goods and rendering of services of IPP business in Q3/2020 decreased THB 547 million yoy mainly due to the following:

- **Cost of natural gas** decreased by THB 214 million mainly due to lower natural gas consumption of Sriracha Power Plant as a result of lower electricity dispatch to EGAT.
- **Cost of coal** decreased by THB 370 million following GHECO-One's lower electricity sales volume and 17% lower average coal price.

**qoq** Q3/2020 VS Q2/2020

Cost of sales of goods and rendering of services of IPP business in Q3/2020 decreased THB 335 million qoq mainly due to the following:

- **Cost of natural gas** decreased by THB 14 million mainly due to lower natural gas consumption of Sriracha Power Plant as a result of lower electricity dispatch to EGAT.
- **Cost of coal** decreased by THB 272 million following GHECO-One's lower electricity sales volume decreased by 10% and 9% lower average coal price.

## 9 months Comparison of IPP's Cost of Sales of Goods and Rendering of Services (9M/2020 VS 9M/2019)

Cost of sales of goods and rendering of services of IPP business increased by THB 588 million or 8% from same period of the previous year primarily due to full recognition of costs from GLOW in 2020 while only 18-day recognition in Q1/2019 and full-quarter recognition in Q2/2019 and Q3/2019. However, cost of natural gas decreased by THB 439 million due to lower natural gas consumption of Sriracha Power Plant as a result of lower electricity dispatch to EGAT.

**Gross Profit: IPP**

Gross profit of IPP business in Q3/2020 was THB 1,271 million, decreased by THB 442 million or 26% from Q3/2019 primarily due to the following:

- GHECO-One's decreased revenue from decreased Availability Payment due to 8.5-day maintenance, decreased Energy Payment as a result of lower electricity dispatch and a drop in average coal price;
- Sriracha's decreased revenue mainly as a result of lower electricity dispatch to EGAT; and
- HHPC's decreased revenue due to lower electricity dispatch as a result of this year's drought situation.

Gross profit of IPP business in Q3/2020 decreased by THB 240 million or 16% from Q2/2020 primarily due to the following:

- GHECO-One's decreased revenue from decreased Availability Payment due to 8.5-day maintenance, decreased Energy Payment as a result of lower electricity dispatch and a drop in average coal price;
- Sriracha's decreased revenue mainly as a result of lower electricity dispatch to EGAT; and
- HHPC's decreased revenue due to lower electricity dispatch as a result of lower electricity dispatch.



Main components of revenue of Independent Power Producers (IPP) are:

- Availability Payment (AP)** that is paid based on the Availability Rate of the power plant and covers cost of plant construction and other fixed costs such as maintenance costs; and
- Energy payment (EP)** that is paid based on electricity sales volume and covers fuel and other variable costs incurred to the power plant (pass-through costs structure).

## Operating Results: Small Power Producer (SPP)

Operating results (unit: THB million)	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Revenue</b>								
Revenue from electricity sales	10,534	9,931	9,232	(12%)	(7%)	25,389	29,044	14%
Revenue from steam sales	3,859	3,633	3,451	(11%)	(5%)	9,935	10,597	7%
Other income	201	200	188	(6%)	(6%)	529	574	9%
<b>Total revenue</b>	<b>14,594</b>	<b>13,764</b>	<b>12,872</b>	<b>(12%)</b>	<b>(6%)</b>	<b>35,853</b>	<b>40,215</b>	<b>12%</b>
<b>Cost of raw materials</b>								
Natural gas	8,600	7,903	6,802	(21%)	(14%)	21,476	22,421	4%
Coal	918	681	767	(16%)	13%	1,870	2,228	19%
Others	247	181	229	(7%)	26%	661	574	(13%)
<b>Total cost of raw materials</b>	<b>9,765</b>	<b>8,765</b>	<b>7,798</b>	<b>(20%)</b>	<b>(11%)</b>	<b>24,007</b>	<b>25,223</b>	<b>5%</b>
Maintenance cost	376	368	396	5%	7%	938	1,102	17%
Others (excluding depreciation and amortization)	795	614	750	(6%)	22%	1,865	1,978	6%
<b>Total cost of sales of goods and rendering of services</b>	<b>10,936</b>	<b>9,748</b>	<b>8,944</b>	<b>(18%)</b>	<b>(8%)</b>	<b>26,810</b>	<b>28,303</b>	<b>6%</b>
<b>Gross profit</b>	<b>3,658</b>	<b>4,017</b>	<b>3,927</b>	<b>7%</b>	<b>(2%)</b>	<b>9,043</b>	<b>11,912</b>	<b>32%</b>
<b>Gross profit margin</b>	<b>25%</b>	<b>29%</b>	<b>31%</b>	<b>5%</b>	<b>1%</b>	<b>25%</b>	<b>30%</b>	<b>4%</b>

## Revenue: SPP

Key revenue drivers	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Electricity sales volume</b>								
GPSC's electricity sales volume (GWh)	1,124	1,117	1,087	(3%)	(3%)	3,240	3,222	(1%)
GLOW's electricity sales volume <sup>1</sup> (GWh)	2,483	2,202	2,032	(18%)	(8%)	5,417	6,492	20%
<b>Electricity average selling price</b>								
Weighted average selling price (THB/kWh)	2.92	2.99	2.96	1%	(1%)	3.03	2.99	(1%)
<b>Steam sales volume</b>								
GPSC's steam sales volume ('000 tons)	1,684	1,646	1,657	(2%)	1%	4,899	4,900	0%
GLOW's steam sales volume <sup>1</sup> ('000 tons)	2,037	1,735	1,783	(12%)	3%	4,316	5,231	21%
<b>Steam average selling price</b>								
Weighted average selling price (THB/ton)	1,037	1,074	1,003	(3%)	(7%)	1,078	1,046	(3%)

Note: 1. For 9M/2019, GLOW's electricity and steam sales volume reflects sales volume incurred after the acquisition of GLOW which accounted for the period of 18 days in Q1 and full quarter in Q2 and Q3

Total revenue of Small Power Producer (SPP) business in Q3/2020 was THB 12,872 million, decreased by THB 1,723 million or 12% from Q3/2019 and decreased by THB 893 million or 6% from Q2/2020, mainly due to the following contributing factors:

## Quarterly Comparison of SPP's Revenue

## yoy Q3/2020 VS Q3/2019

Revenue from SPP business decreased yoy partly from factors contributing lower selling price per unit of electricity and steam which are lower natural gas price and coal price and adjustment of the fuel adjustment charge (Ft) for the collection of Sep-Dec 2020 down to -12.43 Satang/unit from -11.60 Satang/unit during Q3/2019. In addition to the aforementioned price factors, electricity and steam sales volume contributed to changes in SPP revenues as follows:

- **Revenue from SPP business of GLOW** decreased by THB 1,488 million mainly as a result of operational management of existing capacity to meet industrial customers' demands during GE Phase 5's downtime. Besides, sales volume of electricity and steam decreased by 5.7% and 12.5%, respectively.
- **Revenue from SPP business of GPSC** decreased by THB 235 million mainly from a decrease of revenue of Rayong Central Utility Plant (CUP) by THB 175 million due to decreased electricity sales volume to EGAT and steam by 10.5% and 6.6%, respectively. Nonetheless, electricity sale volume to industrial customers increased by 2%. Revenue of IRPC-CP decreased by THB 59 million from 6.2% lower electricity sales volume to industrial customers while steam sales volume increased significantly by 35.6% and electricity sales volume to EGAT maintained at the same level yoy.

## qoq Q3/2020 VS Q2/2020

Revenue from SPP business decreased partly from factors contributing lower selling price per unit of electricity and steam which are lower natural gas price and coal price and adjustment of the fuel adjustment charge (Ft) in September 2020 down to -12.43 Satang/unit from -11.60 Satang/unit in previous quarter. In addition to the aforementioned price factors, electricity and steam sales volume contributed to changes in SPP revenues as follows:

- **Revenue from SPP business of GLOW** decreased by THB 564 million mainly as a result of operational management of existing capacity to meet industrial customers' demands during GE Phase 5's downtime. Sales volume of electricity and steam to industrial customers increased 2.4% and 2.8%, respectively.
- **Revenue from SPP business of GPSC** decreased by THB 329 million mainly from a decrease of revenue of Rayong Central Utility Plant (CUP) by THB 283 million due to decreased electricity sales volume to EGAT and steam by 19.6% and 2.5%, respectively. Electricity sale volume to industrial customers, on the other hand, maintained at the same level to previous quarter. Meanwhile, revenue of IRPC-CP decreased by THB 45 million from 1.5% lower electricity sales volume while steam sales volume increased significantly by 20.6%

## 9 months Comparison of SPP's Revenue (9M/2020 VS 9M/2019)

Revenue from SPP business from the first nine months of 2020 increased by THB 4,362 million or 12% from same period of the previous year primarily due to full recognition of revenue from GLOW in 2020 while only 18-day recognition in Q1/2019 and full-quarter recognition in Q2/2019 and Q3/2019. However, revenue from SPP business of GPSC decreased by THB 438 million mainly from price factors while overall electricity and steam sales volume increased.

## Cost of Sales of Goods and Rendering of Services: SPP

Key cost drivers	Q3/19	Q2/20	Q3/20	change +/-		9M/19	9M/20	Change
				YoY	QoQ			+ / (-)
<b>Natural Gas</b>								
<b>Natural gas consumption</b>								
GPSC's natural gas consumption ('000 MMBTU)	12,487	12,834	12,397	(1%)	(3%)	36,968	37,373	1%
GLOW's natural gas consumption ('000 MMBTU)	18,623	16,438	15,190	(18%)	(8%)	39,311	47,799	22%
<b>Average natural gas price</b>								
Average natural gas price (THB/MMBTU)	276	270	247	(11%)	(9%)	282	263	(7%)
<b>Coal</b>								
GLOW's coal consumption <sup>1</sup> (Ton JPU)	288,391	265,237	291,698	1%	10%	591,157	839,610	42%
Average coal cost (excluding freight)(USD/Ton JPU)	95.3	72.8	74.2	(22%)	2%	91.0	75.0	(18%)

Note: 1. For 9M/2019, GLOW's natural gas and coal consumption reflects consumption incurred after the acquisition of GLOW which accounted for the period of 18 days in Q1 and full quarter in Q2. and Q3.

Cost of sales of goods and rendering of services of SPP business in Q3/2020 was THB 8,944 million, decreased by THB 1,992 million or 18% from Q3/2019 and decreased by THB 803 million or 8% from Q2/2020 mainly from the following factors:

### Quarterly Comparison of SPP's Cost of Sales of Goods and Rendering of Services

#### yoy Q3/2020 VS Q3/2019

Cost of sales of goods and rendering of services of SPP business in Q3/2020 decreased THB 1,992 million yoy mainly due to the following:

- **Cost of natural gas** decreased by THB 1,798 million (THB 347 million decrease from GPSC SPP and THB 1,451 million decrease from GLOW SPP) mainly from lower average natural gas price and lower natural gas consumption corresponding to operational management of existing capacity to meet industrial customers' demands during GE Phase 5's downtime and lower sales of electricity and steam sales to industrial customers.
- **Cost of coal** decreased by THB 151 million primarily from 22% drop in average coal price despite 1% higher coal consumption.
- **Maintenance cost** increased by THB 19 million mainly due to GE Phase 5 replacement and repair costs.

#### qoq Q3/2020 VS Q2/2020

Cost of sales of goods and rendering of services of SPP business in Q3/2020 decreased THB 803 million qoq mainly due to the following:

- **Cost of natural gas** decreased by THB 1,100 million (THB 314 million decrease from GPSC SPP and THB 786 million decrease from GLOW SPP) mainly from lower average natural gas price and lower natural gas consumption corresponding to operational management of existing capacity to meet industrial customers' demands during GE Phase 5's downtime despite higher sales of electricity and steam sales to industrial customers.
- **Cost of coal** increased by THB 86 million from 10% higher coal consumption and 2% higher average coal price.
- **Maintenance cost** increased by THB 27 million mainly due to GE Phase 5 replacement and repair costs.

### 9 months Comparison of SPP's Cost of Sales of Goods and Rendering of Services (9M/2020 VS 9M/2019)

Cost of sales of goods and rendering of services of SPP business increased by THB 1,627 million or 6% primarily due to full recognition of costs from GLOW in 2020 while only 18-day in Q1/2019 and full-quarter recognition in Q2/2019 and Q3/2019. However, cost of sales of goods and rendering of services of GPSC SPP alone decreased by THB 275 million mainly due to lower natural gas cost from lower average natural gas price and lower gas consumption by GPSC SPP.

### Gross Profit: SPP

Gross profit of SPP business in Q3/2020 was THB 3,927 million, increased by THB 269 million or 7% from gross profit of SPP business in Q3/2019. Despite overall decrease in electricity and steam sales volume, increased gross profit was a result of higher margin from electricity and steam sold to industrial customers from lower natural gas price in spite of lower Ft implemented in September 2020.

When comparing to gross profit of Q2/2020, there was a slight decrease in gross profit by THB 89 million or 2% in Q3/2020 reflecting decreased electricity and steam sales revenue from our operational management of existing capacity to meet industrial customers' demands during GE Phase 5's downtime. However, lower natural gas cost helped maintain this quarter's gross profit at the same level as that of previous quarter.

## Operating Results: Very Small Power Producer (VSPP) and Others

Operating results (unit: THB million)	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Revenue</b>								
Revenue from electricity sales	96	239	180	87%	(25%)	285	490	72%
Revenue from chilled water sales	51	50	51	(0%)	2%	155	150	(3%)
Other income	8	24	10	16%	(60%)	36	39	10%
<b>Total revenue</b>	<b>156</b>	<b>314</b>	<b>241</b>	<b>55%</b>	<b>(23%)</b>	<b>476</b>	<b>679</b>	<b>43%</b>
<b>Cost of raw materials</b>								
Natural gas and others	28	52	34	22%	(34%)	94	115	22%
<b>Total cost of raw materials</b>	<b>28</b>	<b>52</b>	<b>34</b>	<b>22%</b>	<b>(34%)</b>	<b>94</b>	<b>115</b>	<b>22%</b>
Maintenance cost	9	8	11	22%	30%	25	28	10%
Others (excluding depreciation and amortization)	15	9	11	(26%)	20%	47	35	(25%)
<b>Total cost of sales of goods and rendering of services</b>	<b>51</b>	<b>69</b>	<b>55</b>	<b>8%</b>	<b>(20%)</b>	<b>166</b>	<b>177</b>	<b>7%</b>
<b>Gross profit</b>	<b>105</b>	<b>245</b>	<b>186</b>	<b>77%</b>	<b>(24%)</b>	<b>310</b>	<b>502</b>	<b>62%</b>
<b>Gross profit margin</b>	<b>67%</b>	<b>78%</b>	<b>77%</b>	<b>10%</b>	<b>(1%)</b>	<b>65%</b>	<b>74%</b>	<b>9%</b>

Note: VSPP and others include Combine Heat and Power Producing Company Limited (CHPP), Ichinoseki Solar Power 1 GK (ISP1), Refuse Derived Fuel Plant (RDF) and Global Renewable Power Company Limited (GRP).

## Revenue: VSPP and Others

Key revenue drivers	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			
<b>Electricity</b>								
Sales volume (GWh)	9	30	24	165%	(19%)	27	61	124%
Average selling price (THB/kWh)	10.52	7.98	7.44	(29%)	(7%)	10.39	8	(21%)
<b>Chilled water</b>								
Sales volume ('000 RT)	7,504	7,299	7,625	2%	4%	22,636	21,810	(4%)
Average selling price (THB/RT)	6.85	6.85	6.72	(2%)	(2%)	6.86	6.87	0%

Revenue from Very Small Power Producer (VSPP) and other businesses was THB 241 million in Q3/2020, increased by THB 85 million or 55% from Q3/2019 while decreased by THB 73 million or 23% from Q2/2020 due to the following:

## Quarterly Comparison of VSPP's and Others' Revenue

**yoy** Q3/2020 VS Q3/2019

Revenue from VSPP and other businesses increased yoy mainly due to the following:

- **Revenue from electricity sales** increased by THB 84 million mainly due to recognition of revenue from Global Renewable Power Co., Ltd. (GRP) after an acquisition completion on 26 March 2020.
- **Other income** increased by THB 2 million primarily due to an increase in revenue from Engineering, Procurement and Construction service (EPC) and solar cells implementation of Combine Heat and Power Producing Company Limited (CHPP) as the revenue recognition is based on the progress of ongoing projects.

**qoq** Q3/2020 VS Q2/2020

Revenue from VSPP and other businesses decreased qoq mainly due to the following:

- **Revenue from electricity sales** decreased by THB 59 million mainly from Ichinoseki Solar Power 1 GK (ISP-1) due to lower electricity production and sales volume from the third quarter seasonality effect.
- **Other income** decreased by THB 14 million due to the revenue from EPC service and solar cells of Combine Heat and Power Producing Company Limited (CHPP) decreased.

## 9 months Comparison of VSPP's and Others' Revenue (9M/2020 VS 9M/2019)

Revenue from VSPP and other businesses increased by THB 204 million or 43% from 9M/2019 mainly due to recognition of revenue from electricity sales from Global Renewable Power Co., Ltd (GRP) after an acquisition completion on 26 March 2020 as well as an increased of revenue from EPC service and solar cells implementation of Combine Heat and Power Producing Company Limited (CHPP).

## Cost of Sales of Goods and Rendering of Services: VSPP and Others

Cost of sales of goods and rendering of services of VSPP and other businesses was THB 55 million, increased by THB 4 million or 8% from Q3/2019 and decreased by THB 14 million or 20% from Q2/2020 primarily due to the following:

### Quarterly Comparison of VSPP's Cost of Sales of Goods and Rendering of Services

#### yoy Q3/2020 VS Q3/2019

Cost of sales of goods and rendering of services of VSPP and other businesses increased yoy mainly due to the following:

- **Other costs** increased due to recognition of cost of sales of goods and rendering of services from Global Renewable Power Co., Ltd (GRP) after an acquisition completion on 26 March 2020 and increased cost associated with the EPC work of Combine Heat and Power Producing Company Limited (CHPP) according to ongoing projects.

#### qoq Q3/2020 VS Q2/2020

Cost of sales of goods and rendering of services of VSPP and other businesses decreased qoq mainly due to the following:

- **Other costs** decreased due to the decrease in cost of implementing solar cells according to the fewer number of projects from Combine Heat and Power Producing Company Limited (CHPP).

## 9 months Comparison of VSPP's Cost of Sales of Goods and Rendering of Services (9M/2020 VS 9M/2019)

Cost of sales of goods and rendering of services of VSPP and other businesses increased by THB 12 million or 7% from 9M/2019 primarily due to recognition of costs and operating expenses from Global Renewable Power Co., Ltd. (GRP) after an acquisition completion on 26 March 2020, together with the increase in cost of EPC service and solar cells implementation from Combine Heat and Power Producing Company Limited (CHPP).

## Gross Profit: VSPP and Others

Gross profit of VSPP and other businesses was THB 186 million in Q3/2020, increased by THB 81 million or 77% from Q3/2019 while decreased by THB 59 million or 24% from Q2/2020 due to the following contributing factors:

- 1) Recognition of revenue from Global Renewable Power Co., Ltd. (GRP) after an acquisition completion on 26 March 2020;
- 2) However, the revenue from electricity sales from Ichinoseki Solar Power 1 GK (ISP-1) decreased due to lower solar radiation intensity than 2019, resulting in lower generation of electricity.

## Other Expenses

Selling and administrative expenses and Other expenses (unit: THB million)	Q3/19	Q2/20	Q3/20	Change +/(-)		9M/19	9M/20	Change +/(-)
				YoY	QoQ			YoY
Selling and administrative expenses	433	437	408	(6%)	(7%)	1,407	1,263	(10%)
Depreciation and amortization <sup>1</sup>	2,026	2,098	2,068	2%	(1%)	4,945	6,240	26%
Finance costs	1,956	991	1,026	(48%)	3%	3,943	3,058	(22%)
Income tax expense	129	284	314	143%	11%	205	851	316%
Net foreign exchange losses (gain) <sup>2</sup>	(17)	5	(21)	(25%)	515%	(207)	13	106%
<b>Total other expenses</b>	<b>4,527</b>	<b>3,815</b>	<b>3,794</b>	<b>(16%)</b>	<b>(1%)</b>	<b>10,293</b>	<b>11,426</b>	<b>11%</b>

Notes: 1 Since Q1/2020, outage amortization of GHECO-One has been reclassified to maintenance cost. This, partly, has been a contributing factor of increased maintenance cost reported in Q1/2020 onwards.

2 Since Q1/2020, net foreign exchange gain (loss) has taken into account fair value valuation of derivatives in accordance with TFRS9.

Other expenses was THB 3,794 million in Q3/2020, dropped by THB 733 million or 16% from Q3/2019 and slightly dropped by THB 21 million or 1% from Q2/2020 mainly due to the following:

## Quarterly Comparison of Other Expenses

### yoy Q3/2020 VS Q2/2019

- **Selling and administrative expenses:** was THB 408 million in Q3/2020, decreased by THB 25 million or 6% from Q3/2019.
- **Depreciation and amortization:** was THB 2,068 million in Q3/2020, increased by THB 42 million or 2% from Q3/2019.
- **Finance costs:** was THB 1,026 million in Q3/2020, decreased by THB 930 million or 48% from Q3/2019 mainly due to partial repayment of bridge loan using proceeds from the Right Offering (RO) completed in Q4/2019.
- **Income tax expenses:** was THB 314 million in Q3/2020, increased by THB 185 million or 143% from Q3/2019 mainly due to higher income before tax, higher tax rate of GHECO-One in 2020 (10% tax rate started to apply in November 2019) and an increase in deferred tax expenses arising from the implementation of Thai Financial Reporting Standard on lease agreements (TFRS 16) and revenue from contracts with customers (TFRS 15).
- **Net foreign exchange gain/losses:** net gain of THB 21 million was recorded in Q3/2020, while in Q3/2019, there was a record of net FX gain of THB 242 million. This was due to record of (i) realized FX loss increased by THB 17 million; (ii) gain from fair value valuation of derivatives instruments increased by THB 14 million; and (iii) unrealized FX loss increased by THB 34 million.

### qoq Q3/2020 VS Q2/2020

- **Selling and administrative expenses:** was THB 408 million in Q3/2020, decreased by THB 29 million or 7% from Q2/2020.
- **Depreciation and amortization:** was THB 2,068 million in Q3/2020, decreased by THB 30 million or 1% from Q2/2020.
- **Finance costs:** was THB 1,026 million in Q3/2020, increased by THB 34 million or 3% from Q2/2020 mainly due to a drawdown of long-term loan in July and issuance of Green debentures in August increasing interest payment.
- **Income tax expenses:** was THB 314 million in Q3/2020, increased by THB 30 million or 11% from Q2/2020 due to higher income before tax.
- **Net foreign exchange gain/losses:** net gain of THB 21 million was recorded in Q3/2020, increased by THB 26 million or 515% from Q2/2020 primarily due to (i) unrealized FX loss decreased by THB 39 million; (ii) realized FX gain increased THB 8 million; and (iii) gain from fair value valuation of derivatives instruments decreased by THB 5 million.



### Shares of Profit of Associates and Joint Ventures

Shares of Profit (Loss) of Associates and Joint Ventures (unit: THB million)	Share-Holding %	Q3/19	Q2/20	Q3/20	change +/-		9M/19	9M/20	change +/-
					YoY	QoQ			YoY
<b>Independent Power Producer (IPP)</b>									
Xayaburi Power Company Limited (XPCL)	25%	(9)	(59)	446	N/A	851%	(25)	152	715%
<b>Small Power Producer (SPP)</b>									
Bangpa-in Cogeneration Company Limited (BIC)	25%	33	42	43	29%	1%	87	117	35%
Nava Nakorn Electricity Generating Company Limited (NNEG)	30%	29	11	29	(2%)	163%	22	70	219%
Nam Lik 1 Power Company Limited (NL1PC)	40%	17	14	21	24%	55%	48	51	5%
<b>Very Small Power Plant (VSPP)</b>									
Thai Solar Renewable Company Limited (TSR)	40%	70	89	83	18%	(7%)	246	260	6%
Eastern Seaboard Clean Energy Company Limited (ESCE)	33%	(2)	13	16	746%	25%	(4)	31	820%
<b>Total shares of profit (loss) of associates and joint ventures</b>		<b>138</b>	<b>110</b>	<b>638</b>	<b>363%</b>	<b>482%</b>	<b>374</b>	<b>680</b>	<b>82%</b>

Shares of profit of associates and joint ventures in Q3/2020 was THB 638 million, increased by THB 500 million or 363% from Q3/2019 and increased by THB 528 million or 482% from Q2/2020.

#### Xayaburi Power Co. Ltd. (XPCL)



**XAYABURI POWER**  
YOUR SENSE OF ENERGY

Shares of **profit** from XPCL increased by THB 506 million from Q2/2020 due to higher electricity dispatch corresponding to higher water level and rainy season approaching and lower finance cost as a result of lower floating interest rate.

#### Nam Lik 1 Power Co. Ltd. (NL1PC)



Shares of **profit** from NL1PC increased by THB 4 million and THB 7 million from Q3/2019 and Q2/2020 respectively due to higher water level corresponding to rainy season.

#### Bangpa-in Cogeneration Co. Ltd. (BIC)



Shares of **profit** from BIC increased by THB 10 million and THB 1 million from Q3/2019 and Q2/2020 respectively due to increased electricity and steam sales volume.

#### Thai Solar Renewable Co. Ltd. (TSR)



Shares of **profit** from TSR increased by THB 13 million from Q3/2019 while decreased by THB 6 million from Q2/2020 due to low solar radiation intensity in the third quarter according to a seasonality effect.

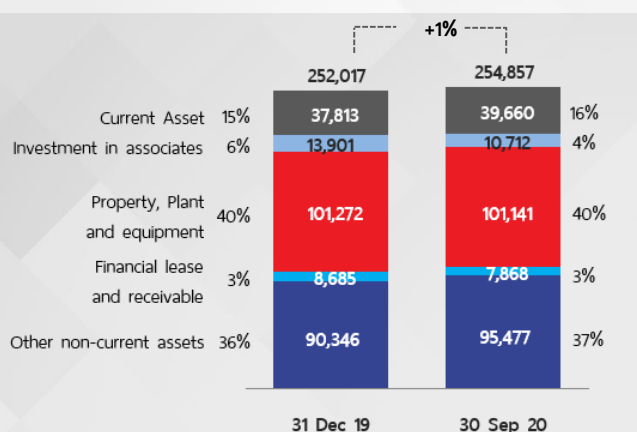
#### Nava Nakorn Electricity Generating Co. Ltd. (NNEG)



Shares of **profit** from NNEG increased by THB 18 million from Q2/2020 mainly due to higher electricity and steam demands from industrial customers.

## Summary of Financial Position of the Company and its Subsidiaries

### Total Asset (THB million, %)

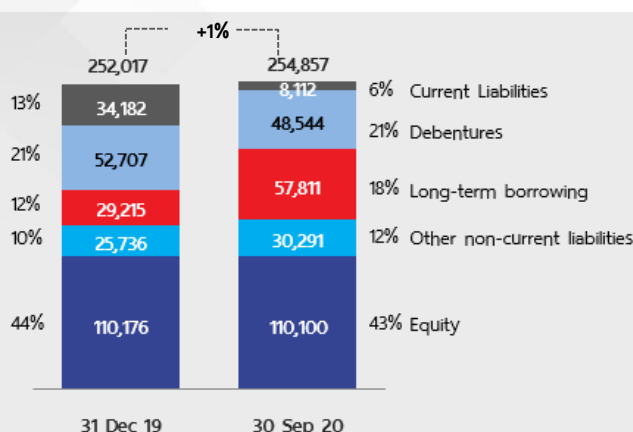


#### Total Assets

As of 30 September 2020, total assets of the Company and its subsidiaries was THB 254,857 million, increased by THB 2,840 million or 1% from 31 December 2019 which was primarily as a result of the following:

- **Current assets:** increased by THB 1,847 million or 5% mainly due to (i) a decrease in cash and cash equivalent of THB 2,560 million; and (ii) a decrease in trade accounts receivable of THB 1,078 million.
- **Other non-current assets:** increased by THB 5,131 million or 6% mainly due to an increase in right of use of assets totaling THB 2,829 million.
- **Financial lease and receivable-net:** decreased by THB 817 million or 9%

### Total Liabilities and Equity (THB million, %)



#### Total Liabilities

As of 30 September 2020, total liabilities of the Company and its subsidiaries was at THB 141,757 million, increased by THB 2,916 million or 2% from 31 December 2019 which was primarily as a result of the following:

- **Current liabilities:** decreased by THB 26,070 million or 76% mainly from decreased short-term loans by THB 19,215 million, decreased account payable by THB 2,025 million, and decreased short-term loans from the Company's subsidiaries by THB 4,913 million.
- **Long-term borrowings and debentures:** increased by THB 24,433 million or 30% mainly from long-term loans with financial institutions increased by THB 28,596 million and debentures decreased by THB 4,164 million.
- **Other non-current liabilities:** increased by THB 4,555 million or 18% mainly from recognition of long-term lease liabilities of THB 2,744 million and from recognition of derivatives liabilities of THB 2,086 million.

#### Total Equity

As of 30 September 2020, total shareholders' equity of the Company and its subsidiaries was at THB 110,100 million, decreased by THB 76 million or 0.07% from 31 December 2019 due to an unappropriated retained earnings increased by THB 1,936 million, other components of shareholders' equity decreased by THB 1,664 million and non-controlling interest decreased by THB 348 million.

### Total Interest-Bearing Debt (THB million)



As of 30 September 2020, the Company and its subsidiaries has total interest-bearing debt (excluding lease liabilities) of THB 106,392 million which comprised of current liabilities totaling THB 12,162 million or 11% and non-current liabilities totaling THB 94,230 million or 89%.

Cash Flow (unit: THB million)	Q3/2020
Net cash flow from operating activities	15,718
Net cash used in investing activities	(4,134)
Net cash flow used in financing activities	(9,081)
<b>Net cash and cash equivalent (before exchange rate effect)</b>	<b>2,503</b>
Effect of exchange rate to cash and cash equivalent	57
<b>Net increase in cash and cash equivalents (after taken into account exchange rate)</b>	<b>2,560</b>
Cash and cash equivalents at the beginning of the period <sup>1</sup>	18,839
<b>Cash and cash equivalents at the end of the period<sup>1</sup></b>	<b>21,399</b>

At the end of Q3/2020, the Company and its subsidiaries had a net increase in cash and cash equivalent of THB 2,560 million from the end of 2019 which was primarily as a result of the following:

### Cash Flow from Operating Activities

For Q3/2020, the Company and its subsidiaries had net cash inflow from operating activities of THB 15,718 million, which was from cash received from operating activities of THB 16,866 million deducted by corporate income tax payment of THB 1,147 million.

### Cash Flow from Financing Activities

For Q3/2020, the Company and its subsidiaries had net cash used in financing activities of THB 9,081 million, which was from: (i) utilization of short-term loans from financial institutions and related parties of THB 39,667 million; (ii) loan repayment to financial institutions of THB 39,795 million; (iii) cash paid for short-term loans to previous shareholders of subsidiaries for acquisition the business of THB 1,125 million; (iv) interest and fees paid to financial institutions of THB 2,740 million; and (v) dividend paid and others of THB 5,088 million.

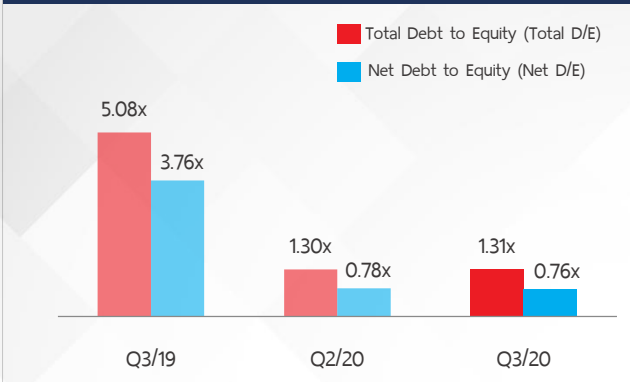
### Cash Flow from Investing Activities

Investment (unit: THB million)	Q3/2020
CAPEX and fixed assets	(3,303)
Cash paid for investments in associates and subsidiaries	(1,612)
Dividend received and others	781

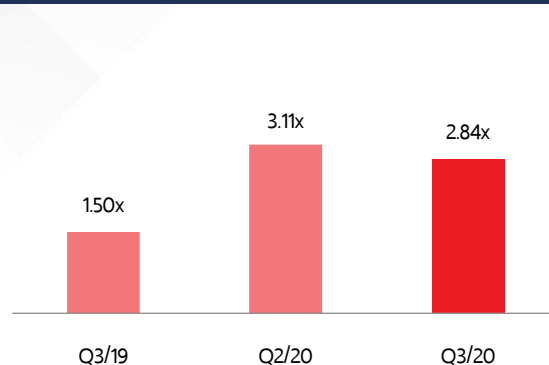
For Q3/2020, the Company and its subsidiaries had net cash used in investment activities of THB 4,134 million which was: (i) CAPEX of THB 3,303 million; (ii) cash paid for investments in associates and subsidiaries of THB 1,612 million; and (iii) dividend received and others of THB 781 million.

## Key Financial Ratios

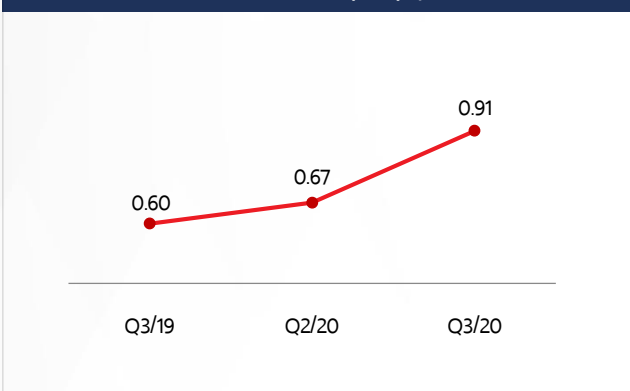
### TOTAL DEBT TO EQUITY AND NET DEBT TO EQUITY RATIO | times



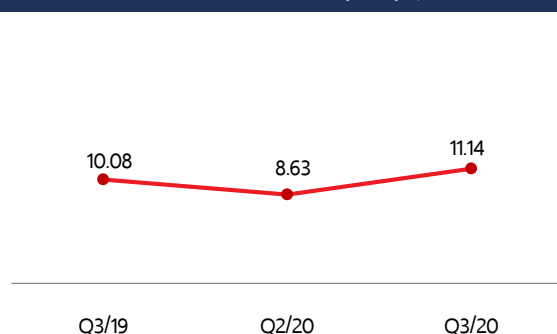
### INTEREST COVERAGE RATIO | times



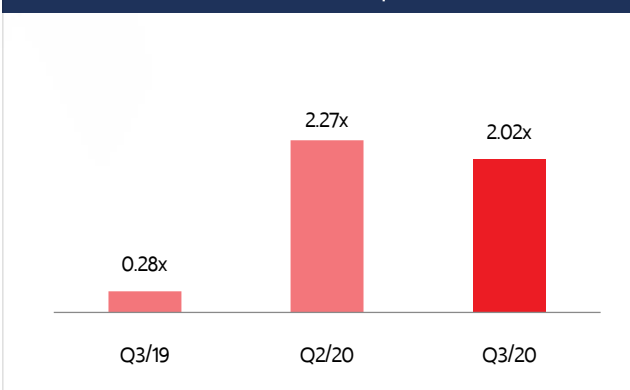
### EARNING PER SHARE (EPS) | THB/Share



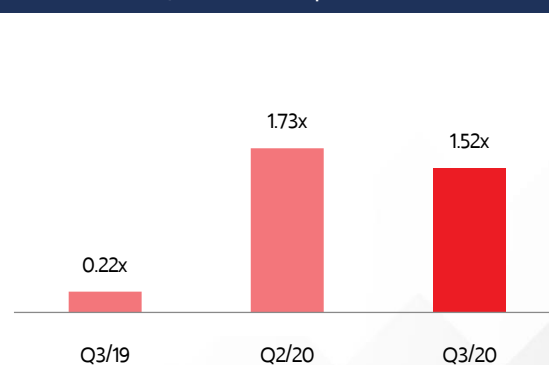
### RETURN ON EQUITY (ROE) | %



### CURRENT RATIO | times



### QUICK RATIO | times



#### Total Debt to Equity Ratio

Total debt / Equity

#### Net Debt to Equity Ratio

(Interest-bearing debt - (cash and cash equivalent + restricted cash + temporary investment)) / Equity

#### Interest Coverage Ratio

Earnings before Interest and Taxes (EBIT) / Interest expenses

#### Earning per Share

Net profit for the Company / Weighted average number of common shares

#### Current Ratio

Current assets / Current liabilities

#### Quick Ratio

(Cash and cash equivalent + restricted cash + temporary investment + account receivable) / Current liabilities )

# Update of Projects Under Construction

COD | 31 Oct 2020

SCOD | Q2/2021

SCOD | 2023



## Nava Nakorn Electricity Generating (NNEG Expansion)



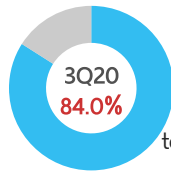
Project updates:

The project has commenced the Commercial Operation Date and recognized its revenue under the Power Purchase Agreement on 31 Oct 2020.

## Rayong Waste to Energy (WTE)



Project updates:

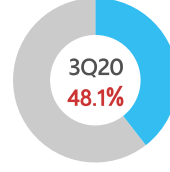


The RDF project construction has been completed and has started to sort waste in order to produce RDF energy since 2018. While the RDF Power Plant project construction progress has reached 84% which is on schedule for COD in Q2/2021.

## Energy Recovery Unit (ERU)



Project updates:



- Engineering design work: 90% of 3D Model Review
- Construction: Foundation work: Major Equipment Foundation
- Procurement of main machinery and equipment: Purchase, Manufacturing Plan, PIM are on schedule and expect to COD in the year 2023.

First Battery Cell | DEC/2020

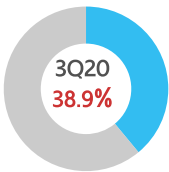


## Battery Pilot Plant | 30 MWh Semi-Solid



Project updates:

The procurement of main machinery and equipment is completed and expect to installed in Q4/2020. The engineering design, construction and system testing are on schedule. The first battery cell will be launched on December 2020.



SCOD | Q4/2565



## SPP Replacement - Stage 1 | Glow Energy Phase 2

Project updates:

An existing plant is under the demolition work with the progress of 79% and the land being prepare for new power plant.

Projects	Electricity Capacity (MW)	Steam Production Capacity (t/h)	Contracted PPA with EGAT (MW)	SCOD
SPP Replacement project Stage 1				
• Glow Energy Phase 2	192	300	60 (2 PPAs)	2022
SPP Replacement project Stage 2				
• GLOW SPP 2	192	300	60 (2 PPAs)	2024
• GLOW SPP 3	120	200	60 (2 PPAs)	2024, 2025

Note: 1. The SPP replacement project stage 2 is under the feasibility study for further investment approval.

Power Plants of the Company, its subsidiaries, associates and joint ventures

Power plant	Fuel Type	Location	Installed Power capacity (MW)	Equity Power capacity (MW)	Equity in operation (MW)	Steam equity capacity (t/h)	Customers	Direct shareholding	Commercial Operation Date (COD)
<b>Independent Power Producer (IPP)</b>									
Houay Ho	Hydro	Attapeu Province, Lao PDR.	152	102	102	-	EGAT / EDL	GLOW (67%)	1999
Sriracha	Natural gas	Sriracha	700	700	700	-	EGAT	GPSC (100%)	2000
GIPP	Natural gas	WHA Chonburi Industrial Estate 1	713	677	677	-	EGAT	GLOW (95%)	2003
RPCL	Natural gas	Ratchaburi	1,400	210	210	-	EGAT	GPSC (15%)	2008
GHECO-One	Coal	Map Ta Phut Industrial Estate	660	429	429	-	EGAT	GLOW (65%)	2012
XPCL	Hydro	Laos	1,285	321	321	-	EGAT / EDL	GPSC (25%)	2019
<b>Total capacity of IPP</b>			<b>4,910</b>	<b>2,439</b>	<b>2,439</b>				
<b>Small Power Producer (SPP)</b>									
GLOW Energy Phase 1	Natural gas	Map ta phut Industrial Estate	-	-	-	250	IU	GLOW (100%)	1994
GLOW Energy Phase 2	Natural gas	Map ta phut Industrial Estate	281	281	281	300	EGAT / IU	GLOW (100%)	1996
GLOW Energy Phase 4	Natural gas	Map ta phut Industrial Estate	77	77	77	137	EGAT / IU	GLOW (100%)	2005
GLOW Energy Phase 5	Natural gas	Map ta phut Industrial Estate	328	328	328	160	EGAT / IU	GLOW (100%)	2011
GLOW SPP 2 / GLOW SPP 3	Coal and natural gas	Map ta phut Industrial Estate	513	513	513	190	EGAT / IU	GLOW (100%)	1999
GLOW SPP 11 Phase 1	Natural gas	Siam Eastern Industrial Park	120	120	120	-	EGAT / IU	GLOW (100%)	2000
GLOW SPP 11 Phase 3	Natural gas	Siam Eastern Industrial Park	42	42	42	-	EGAT / IU	GLOW (100%)	2006
GLOW SPP 11 Phase 2	Natural gas	Siam Eastern Industrial Park	110	110	110	-	EGAT / IU	GLOW (100%)	2012
GLOW Energy CFB 3	Coal	Map ta phut Industrial Estate	85	85	85	79	-	GLOW (100%)	2010
CUP-1	Natural gas	Hemaraj eastern industrial estate	226	226	226	890	EGAT / IU	GPSC (100%)	2006
CUP-2	Natural gas	Rayong industrial land	113	113	113	170	EGAT / IU	GPSC (100%)	2008
CUP-3	Natural gas	Hemaraj eastern industrial estate	-	-	-	280	IU	GPSC (100%)	2009
BIC-1	Natural gas	Bangpa-in industrial estate	117	29.25	29.25	5	EGAT / IU	GPSC (25%)	2013
BIC-2	Natural gas	Bangpa-in industrial estate	117	29.25	29.25	5	EGAT / IU	GPSC (25%)	2017
IRPC-CP Phase 1	Natural gas	IRPC industrial Zone	45	23	23	86.7	EGAT / IU	GPSC (51%)	2015

Power plants of the Company, its subsidiaries, associates and joint ventures (Cont.)

Power plant	Fuel Type	Location	Installed Power capacity (MW)	Equity Power capacity (MW)	Equity in operation (MW)	Steam equity capacity (t/h)	Customers	Direct shareholding	Commercial Operation Date (COD)
IRPC-CP Phase 2	Natural gas	IRPC industrial Zone	195	99.4	99.4	66.3	EGAT/ IU	GPSC (51%)	2017
NNEG	Natural gas	Nava Nakorn industrial promotion Zone	125	38	38	9	EGAT/ IU	GPSC (30%)	2016
NNEG Expansion (COD: 31 Oct. 2020)	Natural gas	Nava Nakorn industrial promotion Zone	60	18	-	3	IU	GPSC (30%)	2020
Rayong Expansion (CUP-3)	Natural gas	Hemaraj eastern industrial estate	15	15	15	-	IU	GPSC (100%)	2019
Rayong Expansion (CUP-4)	Natural gas	Hemaraj eastern industrial estate	45	45	45	70	IU	GPSC (100%)	2019
<b>Total capacity of SPP</b>			<b>2,614</b>	<b>2,192</b>	<b>2,174</b>	<b>2,701</b>			
<b>Very Small Power Producer (VSPP)</b>									
CHPP	Natural gas	Government complex	5	5	5	-	MEA / The Government Complex	GPSC (100%)	2008
CHPP (Solar)	Solar	Chanthaburi	5	5	5	-	PEA	GPSC (100%)	2016
Glow Energy Solar Plant	Solar	Asia Industrial Estate	155	155	155	-	PEA	GLOW (100%)	2012
TSR (SSE1)	Solar	Suphanburi and Kanjanaburi	80	32	32	-	PEA	GPSC (40%)	2013
GLOW Energy Solar PV Rooftop	Solar	Hemaraj Saraburi Industrial Estate	0.87	0.87	0.87	-	IU	GLOW (100%)	2018
GLOW Energy Solar PV Rooftop	Solar	Amata Rayong Industrial Estate	1.00	1.00	1.00	-	IU	GLOW (100%)	2019
ISP1	Solar	Japan	20.8	20.59	20.59	-	IU	GPSC (99%)	2017
GRP	Solar	Phichit, Suphan Buri, Lopburi, Khon Kaen	39.5	39.5	39.5	-	PEA	GPSC (100%)	2014-15
NL1PC	Hydro	Laos	65	26	26	-	EDL	GPSC (40%)	2019
Chonburi Clean Energy (CCE)	Industrial waste	Hemaraj Chonburi Industrial Estate	8.6	2.87	2.87	-	PEA/ IU	GLOW (33%)	2019
Rayong Waste To Energy (WTE) (Under construction)	RDF	Rayong	9.8	9.8	-	-	PEA	GPSC (100%)	2021
<b>Total capacity of VSPP</b>			<b>237</b>	<b>145</b>	<b>134.5</b>	<b>-</b>			
<b>Others</b>									
ERU (Under construction)	Petroleum Pitch	Chonburi	250	250	-	175	Thai Oil PLC	GPSC (100%)	2023
<b>Total capacity of Others</b>			<b>250</b>	<b>250</b>	<b>-</b>	<b>175</b>			
<b>Total</b>			<b>8,011</b>	<b>5,026</b>	<b>4,748</b>	<b>2,876</b>			

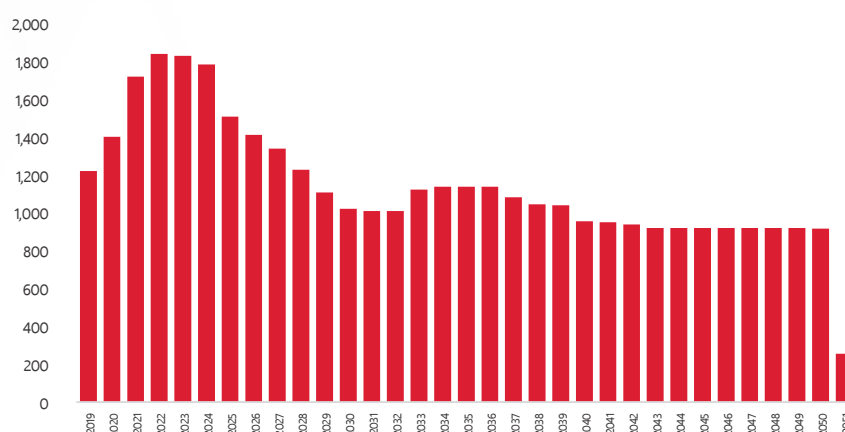
## Fair Value Assessment of Net Assets from the Acquisition of GLOW

As accounting standard establishes that after any business acquisition, fair value of a company being acquired must be assessed by using comparable present market value. GPSC has evaluated fair value of GLOW by using the purchase price of 69.11% of GLOW's shares from ENGIE Global Developments B.V. on 14 March 2019 at THB 93,001 million. Details of fair value assessment of GLOW are as follows:

Items	unit: THB million		
	Book Value of GLOW	Fair Value of GLOW	Differential Value
Assets	107,655	155,500	47,845
Liabilities	(56,246)	(66,497)	(10,251)
<b>Net Assets of GLOW at 14 March 2019</b>	<b>51,409</b>	<b>89,003</b>	<b>37,594</b>
<b>Non-Controlling interests at 30.89%</b>		<b>(32,092)</b>	
<b>Total Net Asset obtained GLOW at 69.11%</b>		<b>56,911</b>	
<b>Goodwill</b>		<b>36,090</b>	
<b>Proportion of acquisition cost 69.11%</b>		<b>93,001</b>	

From the fair value stated in the table, the majority portion is derived from valuing the Power Purchase Agreements (PPA) totaling THB 37,594 million. The fair value recognition of net assets acquired from GLOW will be amortized yearly. The amortization of PPA will be completed based on the remaining period of the contracts categorized under intangible assets by using straight-line method with estimated useful life of 5 to 31 years.

### Amortization of fair value assessed from net assets acquired from GLOW during 2019 - 2051 (computed based on 100% of GLOW shares)



## Adjusted Net Income

Adjusted Net Income is net profit attributable to the Company excluding “fair value of intangible assets from the acquisition of GLOW” which was derived from the assessment of the fair value of net assets and allocation of business acquisition cost which were calculated backwards from 14 March 2019 (the first day that GPSC has recognize GLOW's performance in GPSC's consolidated financial statement). The Adjusted Net Income is a good representation of GPSC's earnings from normal operations. In Q3/2020, such amortization expense added up to THB 363.

Adjusted Net Income (unit: THB million)	Q3/19	Q2/20	Q3/20	Change +/-		9M/19	9M/20	Change +/-
				YoY	QoQ			YoY
Net Profit for the Company	893	1,896	2,574	75%	20%	2,916	6,050	107%
<u>Add back:</u> Amortization of assets acquired from the acquisition of GLOW	372	368	363	2%	0%	732	1,099	50%
<b>Adjusted Net Income</b>	<b>1,265</b>	<b>2,264</b>	<b>2,937</b>	<b>57%</b>	<b>16%</b>	<b>3,648</b>	<b>7,149</b>	<b>96%</b>





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