



บริษัท โกลบอล เพาเวอร์ ซินเนอร์ยี จำกัด (มหาชน)  
Global Power Synergy Public Company Limited

# Management Discussion

## and Analysis

# MD&A

Q2/2020



THE INNOVATIVE POWER  
FLAGSHIP OF PTT GROUP

### Q2/2020 and Recent Highlights

In the second quarter of 2020, economic factors that affected company's results of operations include (i) coal price and gas price that continued to drop further from previous quarter resulting in lower costs of sales and (ii) COVID-19 pandemic. Based on our close monitoring of the ongoing impacts of the pandemic on our industrial customers' operational plans, there was continuing strong electricity and steam demand from our main customers, petrochemical customers in Map Ta Phut Industrial Estate. Meanwhile, demands of our customers in automotive sector showed signs of downturn but did not significantly affect company's results of operations as revenue from automotive customers accounted for approximately only 2% of our total revenue from industrial customers.

Regarding measures in response to COVID-19 pandemic, we have adopted measures to ensure stability and continuity of our electricity and utilities supply system such as implementation of Business Continuity Plan (BCP) and Work from home arrangement for supporting staff and preparation of safe house for field operational staff.

Additionally, in July, the Ministry of Finance approved the establishment of GPSC Treasury Center Company Limited (GPSC TC), a 100% owned subsidiary of GPSC set up to increase efficiency and flexibility of GPSC Group's financial management via local and international funding, foreign exchange management, and cash management activities. The establishment of the GPSC TC is to support the expansion of our innovative power businesses, both in the short and long term.

Also, GPSC hold a group roadshow for the upcoming Green Debenture Offering of THB 5,000 million to institutional and/or high net worth investors. 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. GPSC's senior unsecured green bonds have been assigned AA- by TRIS Rating Company Limited and comprise 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%.

## Q2/2020 Operating Results

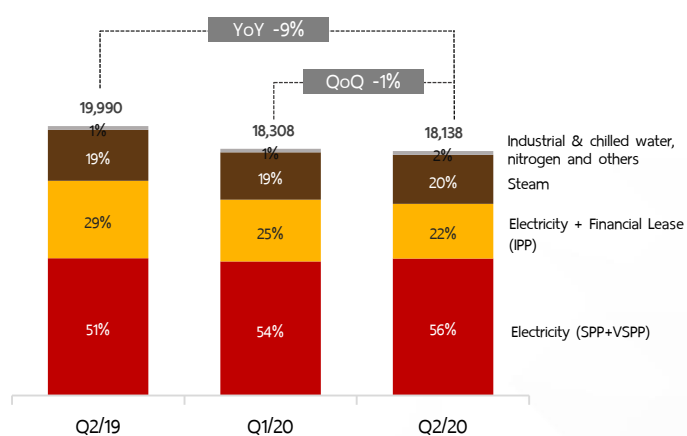
Overall operating results of the Company and its subsidiaries (unit: THB million)	Q2/19	Q1/20	Q2/20	change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			
Operating revenue	19,990	18,308	18,138	(9%)	(1%)	29,057	36,446	25%
Cost of sales (excluding depreciation and amortization) <sup>1</sup>	(14,062)	(12,943)	(12,488)	(11%)	(4%)	(20,651)	(25,432)	24%
<b>Gross profit<sup>1</sup></b>	<b>5,928</b>	<b>5,365</b>	<b>5,650</b>	<b>(5%)</b>	<b>5%</b>	<b>8,405</b>	<b>11,014</b>	<b>30%</b>
Selling and administrative expenses	(606)	(418)	(437)	(28%)	4%	(975)	(855)	(12%)
Other operating income	3	5	5	84%	0%	5	10	87%
<b>EBITDA</b>	<b>5,324</b>	<b>4,951</b>	<b>5,218</b>	<b>(2%)</b>	<b>5%</b>	<b>7,436</b>	<b>10,169</b>	<b>37%</b>
Depreciation and amortization	(2,145)	(2,074)	(2,098)	(2%)	1%	(2,835)	(4,172)	47%
<b>EBIT</b>	<b>3,179</b>	<b>2,877</b>	<b>3,120</b>	<b>(2%)</b>	<b>8%</b>	<b>4,601</b>	<b>5,997</b>	<b>30%</b>
Finance costs	(1,615)	(1,041)	(991)	(39%)	(5%)	(1,987)	(2,032)	2%
Other non-operating income and expenses	149	173	339	127%	96%	317	511	61%
Shares of profit of associates and joint ventures	106	(68)	110	3%	262%	236	42	(82%)
Income tax expenses	(30)	(254)	(284)	851%	12%	(76)	(537)	611%
<b>Profit before FX and extraordinary items</b>	<b>1,790</b>	<b>1,688</b>	<b>2,293</b>	<b>28%</b>	<b>36%</b>	<b>3,091</b>	<b>3,981</b>	<b>29%</b>
Net foreign exchange gain (loss) <sup>2</sup>	242	(30)	(5)	(102%)	(83%)	190	(35)	(118%)
<b>Net profit</b>	<b>2,031</b>	<b>1,658</b>	<b>2,288</b>	<b>13%</b>	<b>38%</b>	<b>3,281</b>	<b>3,946</b>	<b>20%</b>
Non-controlling interests	(950)	(78)	(392)	(59%)	400%	(1,258)	(470)	(63%)
<b>Net profit for the Company</b>	<b>1,081</b>	<b>1,580</b>	<b>1,896</b>	<b>75%</b>	<b>20%</b>	<b>2,023</b>	<b>3,476</b>	<b>72%</b>
<b>Adjusted Net Income<sup>3</sup></b>	<b>1,441</b>	<b>1,948</b>	<b>2,264</b>	<b>57%</b>	<b>16%</b>	<b>2,383</b>	<b>4,212</b>	<b>77%</b>
Gross profit margin (%)	30%	29%	31%	1%	2%	29%	30%	1%
Net profit margin (%)	5%	9%	10%	5%	2%	7%	11%	4%
Adjusted Net Income margin (%)	7%	11%	12%	5%	2%	8%	12%	3%

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.

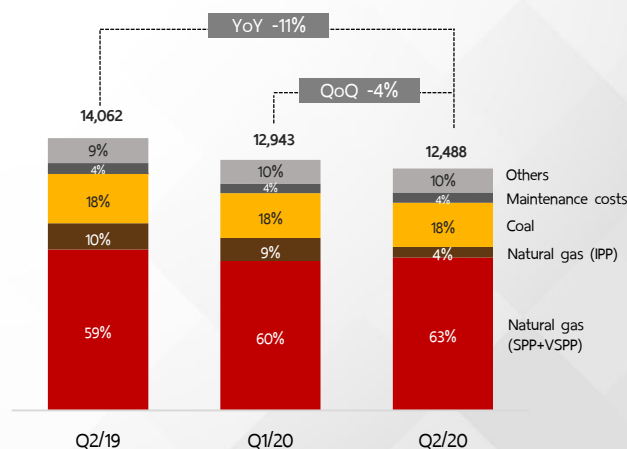
2. Since Q1/2020, net foreign exchange gain (loss) has taken into account fair value valuation of derivatives in accordance with TFRS9.

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 23)

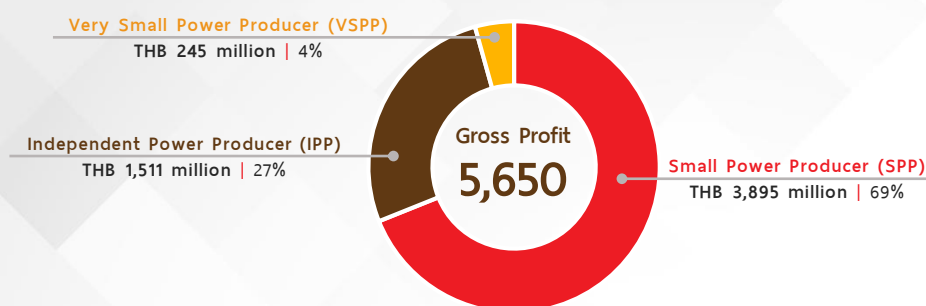
### Operating Revenue (THB million, %)



### Cost of Sales (THB million, %)



### Q2/2020 Gross Profit Breakdown by Plant Type (THB million, %)



**Gross profit** in Q2/2020 was THB 5,650 million, decreased by THB 278 million or 5% from Q2/2019 and increased by THB 285 million or 5% from Q1/2020.

### Quarterly Comparison of Company's Performance

#### yoy Q2/2020 VS Q2/2019

Adjusted Net Income in Q2/2020 was THB 2,264 million, increased by THB 823 million from Q2/2019 or 57%, and mainly due to the following:

- **Gross profit of Independent Power Producer (IPP)** decreased by THB 677 million, mainly due to lower Availability Payment of GHECO-One according to the payment structure of the PPA with EGAT. Gross profit of Houay Ho Power Plant (HHPC) also decreased as a result of lower water level in the reservoir than that in Q2/2019. Gross profit of Sriracha Power Plant increased as 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.
- **Gross profit of Small Power Producer (SPP)** increased by THB 278 million corresponding to lower natural gas and coal price and higher electricity and steam demands of industrial customers of Rayong Central Utility Plant (CUP) despite lower electricity and steam demands of industrial customers of GLOW SPP.
- **Gross profit of Very Small Power Producer (VSPP) and others** increased by THB 115 million mainly from recognition of gross profit from Global Renewable Power Co., Ltd. (GRP) after the acquisition completion on 26 March 2020 and from increased gross profit of Combine Heat and Power Producing Company Limited (CHPP) from Engineering, Procurement and Construction service (EPC) in Q2/2020.

#### qoq Q2/2020 VS Q1/2020

Adjusted Net Income in Q2/2020 was THB 2,264 million, increased by THB 316 million from Q1/2020 or 16%, and mainly due to the following:

- **Gross profit of Independent Power Producer (IPP)** increased by THB 52 million mainly due to increased gross profit of GLOW IPP plants of THB 61 million as a result of an GHECO-One's increased Availability Payment (AP) due to higher Availability Rate of the plant and higher weight factor. Besides, increased power dispatch of HHPC is another contribution of increased IPP gross profit. In spite of the above, Sriracha Power Plant's gross profit decreased by THB 9 million due to lower Availability Payment (AP) and lower power dispatch to EGAT.
- **Gross profit of Small Power Producer (SPP)** increased by THB 61 million reflecting higher electricity and steam demands of industrial customers of Rayong Central Utility Plant (CUP). On the other hand, gross profit of GLOW SPP dropped slightly in Q2/2020 partly due to an unplanned outage of GLOW Energy Phase 5 Plant in June 2020.
- **Gross profit of Very Small Power Producer (VSPP) and others** increased by THB 173 million mainly from recognition of gross profit from Global Renewable Power Co., Ltd. (GRP) after the acquisition completion on 26 March 2020 and increased revenue from electricity sales of Ichinoseki Solar Power 1 GK (ISP-1) due to higher light intensity than in Q2/2019. Besides, other income of Combine Heat and Power Producing Company Limited (CHPP) also increased from Engineering, Procurement and Construction service (EPC) in Q2/2020.

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

**yoy**

**Q2/2020 VS Q2/2019**

- **Other income:** increased from 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.
- **Other expenses** decreased by THB 340 million mainly from (i) lower finance costs of THB 624 million or 39% from Q2/2019 due to partial repayment of bridge loan using proceeds from the Right Offering (RO) completed in Q4/2019 and (ii) lower selling and administrative expenses by THB 170 million or 28% due to provision of employee's severance pay corresponding to revision of the Labour Protection Act of GLOW and unwinding costs of FX forward contracts of GLOW in Q2/2019.
- **Shares of profit of associates and joint ventures** increased by THB 3 million mainly due to increased revenue from increased electricity and steam sales of Bangpa-In Cogeneration Company Limited (BIC) and Nava Nakorn Electricity Generating Company Limited (NNEG) in Q2/2020 due to maintenance shutdown of both plants in Q2/2019.
- **Non-controlling interests** decreased by THB 558 million mainly from 99.83% recognition of GLOW's results in Q2/2020 while in Q2/2019, only 69.11% and 95.25% of GLOW's results was recognized before and after the completion of Mandatory Tender Offer (MTO), respectively.

**qoq**

**Q2/2020 VS Q1/2020**

- **Other income:** increased from 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.
- **Other expenses** in Q2/2020 was THB 3,815 million, slightly decreased by THB 2 million from Q1/2020.
- **Shares of profit of associates and joint ventures** increased by THB 177 million mainly due to a decrease in shares of loss from Xayaburi Power Company Limited (XPCL) to THB 59 million in Q2/2020 which decreased from shares of loss in Q1/2020 by THB 176 million.

**Half-year Comparison of Company's Performance (6M/2020 VS 6M/2019)**

Adjusted Net Income for the first half of 2020 was THB 4,212 million, increased by THB 1,829 million or 77% from Adjusted Net Income of the first half 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 results from Q1/2019 and full-quarter results in Q2/2019 were recognized; and
- Increased Sriracha Power Plant's gross profit as a result of increased Availability Payment (AP) from a portion of AP that is USD-linked and increased revenue from finance lease agreement as a result of financial lease accounting (TFRIC 4) adjustment.

### Synergy from Acquisition of GLOW

In the year 2020, the Company expects to be able to recognize synergy value from the merger of approximately THB 400-500 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 6 months of year 2020, the Company recognized synergy value from the above activities of approximately THB 292 million and 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 and enhance flexibility and efficiency of steam supply system.

### Economic Factors in 2020

**Thailand economic situation in 2020:** the Bank of Thailand has recently downgraded the forecast of Thailand's full-year economic outlook to a 8.1% contraction due to impacts from COVID-19 pandemic. The pandemic causes the worst global energy demand contraction in 70 years affecting demands for oil, LPG, LNG and electricity, etc. Ministry of Energy closely monitors Thailand energy situation and is prompt to revise Thailand's Energy plan particularly the Power Development Plan (PDP) of 2018 - 2037 (first revision) which is expected to be revised in Q4/2020. Another headline of Q2/2020 was the new Energy Minister particularly his policy stance on developing community power plant and regulating LNG imports by private sectors.

**Ft adjustment:** the Energy Regulatory Commission (ERC) announced the decrease of the variable electricity tariff (Ft) for the collection of September-December 2020 of 0.83 Satang/unit resulting in the Ft of -12.43 Satang/unit, lower than the 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 May 2020** decreased by 3.2% from the usage during the same period of the previous year. Demands from industrial and business sectors dropped due to global economic slowdown as a result of COVID-19 pandemic. However, household sector's electricity usage increased 7% partly due to seasonality and the implementation of lockdown measures causing people to work from home. On the other hand, electricity usage in industrial sector dropped by 5.4% due to lower demand especially in automotive and textile sector while cement sector still observed an increased electricity usage of 5.9% due to growing construction sector.

### Awards Received in Q2/2020

In April 2020, the Company received "2020 Thailand Waste-to-Energy Company of the Year" award from Frost & Sullivan, an international research and consulting firm. The award demonstrates our continuing determination in operating our business sustainably which is in line with our aim to raise sustainable and clean energy contribution to our portfolio.

## Operating Results: Independent Power Producer (IPP)

Operating results (unit: THB million)	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			
<b>Revenue from electricity sales</b>								
- Availability Payment: AP	1,970	1,477	1,610	(18%)	9%	2,468	3,087	25%
- Energy Payment: EP	3,554	2,894	2,239	(37%)	(23%)	4,607	5,133	11%
- Money received to submit to Power Developments Funds	5	4	0.5	(91%)	(88%)	7	4	(36%)
<b>Total revenue from electricity sales</b>	<b>5,529</b>	<b>4,375</b>	<b>3,850</b>	<b>(30%)</b>	<b>(12%)</b>	<b>7,082</b>	<b>8,225</b>	<b>16%</b>
Revenue from finance lease agreement	205	218	207	(1%)	(5%)	382	425	11%
Other income	9	11	7	(24%)	(36%)	13	18	36%
<b>Total revenue</b>	<b>5,743</b>	<b>4,604</b>	<b>4,064</b>	<b>(29%)</b>	<b>(12%)</b>	<b>7,477</b>	<b>8,668</b>	<b>16%</b>
<b>Cost of raw materials</b>								
- Natural gas <sup>1</sup>	1,344	1,187	548	(59%)	(54%)	1,960	1,735	(11%)
- Coal	1,781	1,537	1,590	(11%)	3%	2,109	3,127	48%
- Others	27	39	16	(42%)	(59%)	44	54	24%
<b>Total cost of raw materials</b>	<b>3,152</b>	<b>2,763</b>	<b>2,154</b>	<b>(32%)</b>	<b>(22%)</b>	<b>4,113</b>	<b>4,917</b>	<b>20%</b>
Maintenance cost <sup>2</sup>	137	144	156	14%	8%	173	300	73%
Others (excluding depreciation and amortization)	266	238	243	(9%)	2%	376	481	28%
<b>Total cost of sales of goods and rendering of services</b>	<b>3,555</b>	<b>3,145</b>	<b>2,552</b>	<b>(28%)</b>	<b>(19%)</b>	<b>4,662</b>	<b>5,697</b>	<b>22%</b>
<b>Gross profit</b>	<b>2,188</b>	<b>1,459</b>	<b>1,511</b>	<b>(31%)</b>	<b>4%</b>	<b>2,815</b>	<b>2,970</b>	<b>6%</b>
<b>Gross profit margin</b>	<b>38%</b>	<b>32%</b>	<b>37%</b>	<b>(1%)</b>	<b>5%</b>	<b>38%</b>	<b>34%</b>	<b>(3%)</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	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			
<b>Availability Rate (%)</b>								
Sriracha Power Plant	100%	99%	100%	0%	1%	99%	100%	1%
GIPP	100%	100%	100%	0%	0%	100%	100%	0%
GHECO-One	100%	96%	99%	(1%)	5%	100%	98%	2%
<b>Electricity dispatch (GWh)</b>								
Sriracha Power Plant	466	398	49	(89%)	(88%)	641	447	(30%)
GIPP	0	0	0	N/A	N/A	0	0	N/A
GHECO-One	1,448	1,369	1,440	(1%)	5%	1,727	2,809	63%
Houay Ho Power	181	101	130	(28%)	28%	217	231	7%
<b>Total electricity dispatch</b>	<b>2,095</b>	<b>1,868</b>	<b>1,618</b>	<b>(23%)</b>	<b>(13%)</b>	<b>2,584</b>	<b>3,487</b>	<b>35%</b>
<b>Average selling price</b>								
Average selling price (THB/kWh)	2.75	2.47	2.52	(8%)	2%	2.89	2.48	(14%)

Note: For 6M/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.

Total revenue of Independent Power Producer (IPP) business in Q2/2020 was THB 4,064 million, down by THB 1,679 million or 29% from Q2/2019 and down by THB 540 million or 12% from Q1/2020 due to the following contributing factors:

## Quarterly Comparison of IPP's Revenue

**yoy** Q2/2020 VS Q2/2019

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

- **Revenue from Sriracha Power Plant** decreased by THB 765 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 914 million mainly due to GHECO-One's decreased AP and EP, the latter corresponded to 11% drop in coal price and 1% drop in electricity sales volume.

**qoq** Q2/2020 VS Q1/2020

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

- **Revenue from Sriracha Power Plant** decreased by THB 668 million primarily from decreased Energy Payment (EP) received from EGAT corresponding to a drop in energy dispatch to EGAT. Availability Payment (AP) also slightly dropped.
- **Revenue from IPP business of GLOW** increased by THB 128 million primarily from GHECO-One's increased revenue by THB 91 million mainly from 3% rise of Availability Payment which was in line with improvement of Availability Rate from 96% in Q1/2020 to 99% in Q2/2020 and higher weight factor in Q2/2020. Revenue of HHPC also increased 31% due to 29% higher electricity sales volume.

## Half-year Comparison of IPP's Revenue (6M/2020 VS 6M/2019)

Revenue from IPP business from the first half of 2020 increased by THB 1,191 million or 16% from same period of the previous year primarily due to the following:

- **Revenue from IPP Business of GLOW** increased by THB 1,495 million mainly due to full Q1 and Q2 recognition of revenue from GLOW in 2020 while only 18-day and full-quarter revenue recognition in Q1/2019 and Q2/2019, respectively.
- **Revenue from Sriracha Power Plant** decreased by THB 304 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	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			
<b>Natural Gas</b>								
<b>Natural gas consumption</b>								
GPSC's natural gas consumption ('000 MMBTU)	3,670	3,124	398	(89%)	(87%)	5,051	3,522	(30%)
GLOW's natural gas consumption ('000 MMBTU)	0.00	2.04	1.93	0%	(6%)	1.11	3.97	256%
<b>Coal</b>								
Coal consumption (Ton JPU)	509,820	484,259	512,490	1%	6%	606,814	996,749	64%
Average coal cost (excluding freight) (USD/Ton JPU)	101.0	90.9	89.7	(11%)	(1%)	99.3	90.2	(9%)

Cost of sales of goods and rendering of services of IPP business in Q2/2020 was THB 2,552 million, decreased by THB 920 million or 26% from Q2/2019 and decreased by THB 593 million or 19% from Q1/2020 primarily due to the following factors:



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

**yoy** Q2/2020 VS Q2/2019

Cost of sales of goods and rendering of services of IPP business in Q2/2020 decreased yoy mainly due to the following:

- **Cost of natural gas** decreased by THB 796 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 191 million following GHECO-One's lower electricity sales volume and 11% lower average coal from Q2/2019.

**qoq** Q2/2020 VS Q1/2020

Cost of sales of goods and rendering of services of IPP business in Q2/2020 decreased qoq mainly due to the following:

- **Cost of natural gas** decreased by THB 639 million mainly due to lower natural gas consumption of Sriracha Power Plant as a result of lower electricity dispatch to EGAT.
- **Cost of coal** increased by THB 53 million due to 5% higher coal consumption of GHECO-One.

Half-year Comparison of IPP's Cost of Sales of Goods and Rendering of Services  
(6M/2020 VS 6M/2019)

Cost of sales of goods and rendering of services of IPP business increased by THB 1,035 million or 22% from same period of the previous year primarily due to full Q1 and Q2 recognition of costs from GLOW in 2020 while only 18-day and full-quarter recognition in Q1/2019 and Q2/2019, respectively. However, cost of natural gas decreased by THB 225 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 Q2/2020 was THB 1,511 million, decreased by THB 677 million or 33% from Q2/2019 primarily due to the following:

- **Gross profit of IPP business of GLOW** decreased by THB 731 million due to a drop in GHECO-One's AP and decreased gross profit of Houay Ho Power Plant (HHPC) following lower electricity sales volume due to lower level of water in the reservoir than last year's.
- **Gross profit of Sriracha Power Plant** increased by THB 54 million mainly as a result of increased AP from a portion of AP that is USD-linked and increased revenue from finance lease agreement as a result of financial lease accounting (TFRIC 4) adjustment.

Gross profit of IPP business in Q2/2020 increased by THB 52 million or 4% from Q1/2020 primarily due to the following:

- **Gross profit of IPP business of GLOW** increased by THB 61 million mainly due to GHECO-One's increased AP and higher weight factor in Q2/2020 and higher HHPC's revenue due to higher electricity sales volume.
- **Gross profit of Sriracha Power Plant** decreased by THB 9 million due to lower AP and EP.



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)	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			YoY
<b>Revenue</b>								
Revenue from electricity sales	10,079	9,881	9,931	(1%)	1%	14,855	19,811	33%
Revenue from steam sales	3,790	3,513	3,630	(4%)	3%	6,076	7,143	18%
Other income	201	186	200	(0%)	8%	328	386	18%
<b>Total revenue</b>	<b>14,070</b>	<b>13,579</b>	<b>13,761</b>	<b>(2%)</b>	<b>1%</b>	<b>21,259</b>	<b>27,341</b>	<b>29%</b>
<b>Cost of raw materials</b>								
Natural gas	8,314	7,716	7,903	(5%)	2%	12,876	15,618	21%
Coal	762	780	681	(11%)	(13%)	952	1,461	53%
Others	211	164	181	(14%)	11%	414	345	(17%)
<b>Total cost of raw materials</b>	<b>9,287</b>	<b>8,659</b>	<b>8,765</b>	<b>(6%)</b>	<b>1%</b>	<b>14,242</b>	<b>17,425</b>	<b>22%</b>
Maintenance cost	417	338	368	(12%)	9%	562	707	26%
Others (excluding depreciation and amortization)	749	748	733	(2%)	(2%)	1,070	1,481	38%
<b>Total cost of sales of goods and rendering of services</b>	<b>10,453</b>	<b>9,745</b>	<b>9,867</b>	<b>(6%)</b>	<b>1%</b>	<b>15,874</b>	<b>19,612</b>	<b>24%</b>
<b>Gross profit</b>	<b>3,617</b>	<b>3,834</b>	<b>3,895</b>	<b>8%</b>	<b>2%</b>	<b>5,385</b>	<b>7,729</b>	<b>44%</b>
<b>Gross profit margin</b>	<b>26%</b>	<b>28%</b>	<b>28%</b>	<b>3%</b>	<b>0%</b>	<b>25%</b>	<b>28%</b>	<b>3%</b>

## Revenue: SPP

Key revenue drivers	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			YoY
<b>Electricity sales volume</b>								
GPSC's electricity sales volume (GWh)	1,060	1,018	1,117	5%	10%	2,116	2,135	1%
GLOW's electricity sales volume <sup>1</sup> (GWh)	2,211	2,258	2,202	(0%)	(2%)	2,685	4,460	66%
<b>Electricity average selling price</b>								
Weighted average selling price (THB/kWh)	3.08	3.02	2.99	(3%)	(1%)	3.09	3.00	(3%)
<b>Steam sales volume</b>								
GPSC's steam sales volume ('000 tons)	1,628	1,598	1,646	1%	3%	3,215	3,244	1%
GLOW's steam sales volume <sup>1</sup> ('000 tons)	1,906	1,713	1,735	(9%)	1%	2,279	3,448	51%
<b>Steam average selling price</b>								
Weighted average selling price (THB/ton)	1,072	1,061	1,074	0%	(1%)	1,106	1,067	(3%)

Note: 1. For 6M/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.

Total revenue of Small Power Producer (SPP) business in Q2/2020 was THB 13,761 million, decreased by THB 309 million or 2% from Q2/2019 and increased by THB 182 million or 1% from Q1/2019, mainly due to the following contributing factors:

## Quarterly Comparison of SPP's Revenue

**yoy** Q2/2020 VS Q2/2019

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

- **Revenue from SPP business of GLOW** decreased by THB 425 million mainly as a result of lower sales volume of electricity, steam and industrial water to industrial customers and lower steam selling price which is linked to natural gas price as a reference price.
- **Revenue from SPP business of GPSC** increased by THB 116 million mainly from an increase of revenue of Rayong Central Utility Plant (CUP) by THB 183 million due to higher electricity sales volume to EGAT and industrial customers. However, revenue of IRPC-CP decreased by THB 66 million from lower electricity sales volume to EGAT and industrial users and also lower steam sales volume.

**qoq** Q2/2020 VS Q1/2020

Revenue from SPP business increased qoq mainly due to the following contributing factors:

- **Revenue from SPP business of GPSC** increased by THB 393 million mainly from an increase of revenue of Rayong Central Utility Plant (CUP) by THB 337 million due to higher electricity sales volume to EGAT and industrial customers and higher steam sales volume. Besides, revenue of IRPC-CP also increased due to higher electricity sales volume to EGAT and industrial customers despite slightly lower average electricity selling price.
- **Revenue from SPP business of GLOW** decreased by THB 211 million mainly from decreased revenue from electricity sales by THB 253 million as a result of lower sales volume to EGAT and industrial customers in automotive sector. However, steam and industrial water sales increased in Q2/2020.

## Half-year Comparison of SPP's Revenue (6M/2020 VS 6M/2019)

Revenue from SPP business from the first half of 2020 increased by THB 6,082 million or 29% from same period of the previous year primarily due to full Q1 and Q2 recognition of revenue from GLOW in 2020 while only 18-day and full-quarter revenue recognition in Q1/2019 and Q2/2019, respectively. However, revenue from SPP business of GPSC decreased by 2% mainly from decreased revenue of IRPC-CP due to lower electricity sales to EGAT and industrial customers.

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

Key cost drivers	Q2/19	Q1/20	Q2/20	change +/-		6M/19	6M/20	Change
				YoY	QoQ			YoY
<b>Natural Gas</b>								
<b>Natural gas consumption</b>								
GPSC's natural gas consumption ('000 MMBTU)	12,295	12,142	12,834	4%	6%	24,481	24,976	2%
GLOW's natural gas consumption ('000 MMBTU)	17,119	16,170	16,438	(4%)	2%	20,687	32,609	58%
<b>Average natural gas price</b>								
Average natural gas price (THB/MMBTU)	283	273	270	(4%)	(1%)	285	271	(5%)
<b>Coal</b>								
GLOW's coal consumption <sup>1</sup> (Ton JPU)	247,983	282,675	265,237	7%	(6%)	301,744	547,912	82%
Average coal cost (excluding freight)(USD/Ton JPU)	89.24	77.75	72.82	(18%)	(6%)	89.58	75.42	(16%)

Note: 1. For 6M/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.

Cost of sales of goods and rendering of services of SPP business in Q2/2020 was THB 9,867 million, decreased by THB 587 million or 6% from Q2/2019 and increased by THB 121 million or 1% from Q1/2020 mainly from the following factors:

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

#### yoy Q2/2020 VS Q2/2019

Cost of sales of goods and rendering of services of SPP business in Q2/2020 decreased yoy mainly due to the following:

- **Cost of natural gas** decreased by THB 411 million (THB 62 million decrease from GPSC SPP and THB 349 million decrease from GLOW SPP) mainly from lower average natural gas price and lower natural gas consumption of GLOW SPP corresponding to lower sales of electricity and steam sales to industrial customers of GLOW SPP.
- **Cost of coal** decreased by THB 81 million primarily from 18% drop in average coal price despite higher coal consumption of 7%.
- **Maintenance cost** decreased by THB 49 million due to no major planned maintenance of GLOW SPP plants in Q2/2020.

#### qoq Q2/2020 VS Q1/2020

Cost of sales of goods and rendering of services of SPP business in Q2/2020 increased qoq mainly due to the following:

- **Cost of natural gas** increased by THB 187 million (THB 106 million increase from GPSC SPP and THB 81 million increase from GLOW SPP) mainly from increased gas consumption as a result of:

- 1) Increased electricity and steam sales volume of GPSC SPP; and
- 2) An unplanned outage of GLOW Energy Phase 5 in June 2020 impacting overall production efficiency of GLOW SPP plants,

However, average natural gas price slightly dropped by 1% from Q1/2020.

- **Cost of coal** decreased by THB 99 million from 6% lower coal consumption and 6% lower average coal price.
- **Maintenance cost** increased by THB 149 million mainly from costs associated with Glow Energy Phase 5 repairs.

### Half-year Comparison of SPP's Cost of Sales of Goods and Rendering of Services (6M/2020 VS 6M/2019)

Cost of sales of goods and rendering of services of SPP business increased by THB 3,738 million of 24% primarily due to full Q1 and Q2 recognition of costs from GLOW in 2020 while only 18-day and full-quarter costs recognition in Q1/2019 and Q2/2019, respectively. However, cost of sales of goods and rendering of services of GPSC SPP alone decreased by 4% mainly due to lower natural gas cost from lower average natural gas price despite 2% higher gas consumption by GPSC SPP.

### Gross Profit: SPP

Gross profit of SPP business in Q2/2020 was THB 3,895 million, increased by THB 278 million or 8% from gross profit of SPP business in Q2/2019 corresponding to higher electricity sales volume and lower average natural gas price. When comparing to gross profit of Q1/2020, there was an increase in gross profit by THB 61 million or 2% in Q2/2020 reflecting increased electricity and steam sales volume and lower average natural gas price.

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

Operating results (unit: THB million)	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			
<b>Revenue</b>								
Revenue from electricity sales	124	71	239	94%	236%	189	311	65%
Revenue from chilled water sales	55	49	50	(9%)	3%	104	99	(5%)
Other income	3	5	24	726%	385%	28	29	5%
<b>Total revenue</b>	<b>181</b>	<b>125</b>	<b>314</b>	<b>73%</b>	<b>151%</b>	<b>320</b>	<b>439</b>	<b>37%</b>
<b>Cost of raw materials</b>								
Natural gas and others	26	29	52	101%	81%	66	81	22%
<b>Total cost of raw materials</b>	<b>26</b>	<b>29</b>	<b>52</b>	<b>101%</b>	<b>81%</b>	<b>66</b>	<b>81</b>	<b>22%</b>
Maintenance cost	9	9	8	(12%)	(10%)	16	17	4%
Others (excluding depreciation and amortization)	17	15	9	(47%)	(40%)	32	24	(24%)
<b>Total cost of sales of goods and rendering of services</b>	<b>52</b>	<b>53</b>	<b>69</b>	<b>33%</b>	<b>31%</b>	<b>115</b>	<b>122</b>	<b>7%</b>
<b>Gross profit</b>	<b>129</b>	<b>72</b>	<b>245</b>	<b>89%</b>	<b>240%</b>	<b>206</b>	<b>317</b>	<b>54%</b>
<b>Gross profit margin</b>	<b>71%</b>	<b>58%</b>	<b>78%</b>	<b>7%</b>	<b>20%</b>	<b>64%</b>	<b>72%</b>	<b>8%</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	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			
<b>Electricity</b>								
Sales volume (GWh)	12	7	30	22%	314%	18	37	104%
Average selling price (THB/kWh)	10.63	9.82	7.98	7%	(19%)	10.32	8.34	(19%)
<b>Chilled water</b>								
Sales volume ('000 RT)	8,231	6,886	7,299	(11%)	6%	15,131	14,185	(6%)
Average selling price (THB/RT)	6.66	7.05	6.85	3%	(3%)	6.86	6.96	1%

Revenue from Very Small Power Producer (VSPP) and other businesses was THB 314 million in Q2/2020, increased by THB 133 million or 73% from Q2/2019 and increased by THB 189 million or 151% from Q1/2020 due to the following:

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

**yoy** Q2/2020 VS Q2/2019

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

- **Revenue from electricity sales** increased by THB 115 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 21 million primarily due to an increase in Engineering, Procurement and Construction service (EPC) income of Combine Heat and Power Producing Company Limited (CHPP) while revenue from chilled water sales slightly decreased by THB 5 million from lower sales volume.

**qoq** Q2/2020 VS Q1/2020

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

- **Revenue from electricity sales** increased by THB 168 million mainly due to recognition of revenue from Global Renewable Power Co., Ltd. (GRP) after an acquisition completion on 26 March 2020, together with increased revenue from electricity sales from Ichinoseki Solar Power 1 GK (ISP-1) due to higher light intensity resulting in higher generation of electricity.
- **Other income** increased due to an increase in EPC service income of Combine Heat and Power Producing Company Limited (CHPP).

## Half-year Comparison of VSPP's and Others' Revenue (6M/2020 VS 6M/2019)

Revenue from VSPP and other businesses increased by THB 119 million or 37% from 6M/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 electricity sales from Ichinoseki Solar Power 1 GK (ISP-1) due to the higher light intensity resulting in higher electricity generation and sales volume.

## 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 69 million, increased by THB 17 million or 33% from Q2/2019 and increased by THB 16 million or 31% from Q1/2020 primarily due to the following:

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

#### yoy Q2/2020 VS Q2/2019

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).

#### qoq Q2/2020 VS Q1/2020

Cost of sales of goods and rendering of services of VSPP and other businesses increased qoq 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 an increase in cost of raw materials from Combine Heat and Power Producing Company Limited (CHPP) due to higher sales volume of chilled water.

## Half-year Comparison of VSPP's Cost of Sales of Goods and Rendering of Services (6M/2020 VS 6M/2019)

Cost of sales of goods and rendering of services of VSPP and other businesses increased by THB 8 million or 7% from 6M/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.

## Gross Profit: VSPP and Others

Gross profit of VSPP and other businesses was THB 245 million in Q2/2020, increased by THB 115 million or 90% from Q2/2019 and increased by THB 173 million or 240% from Q1/2020 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) Increased revenue from electricity sales from Ichinoseki Solar Power 1 GK (ISP-1) due to higher light intensity in Q2/2020 resulting in higher generation of electricity; and
- 3) Increased revenue of Combine Heat and Power Producing Company Limited (CHPP) mainly from Engineering, Procurement and Construction services (EPC) in Q2/2020.

## Other Expenses

Other expenses (unit: THB million)	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-	
				YoY	QoQ			YoY	YoY
Selling and administrative expenses	606	418	437	(28%)	4%	975	855	(12%)	
Depreciation and amortization <sup>1</sup>	2,145	2,074	2,098	(2%)	1%	2,835	4,172	47%	
Finance costs	1,615	1,041	991	(39%)	(5%)	1,987	2,032	2%	
Income tax expense	30	254	284	851%	12%	76	537	611%	
Net foreign exchange losses (gain) <sup>2</sup>	(242)	30	5	(102%)	(83%)	(190)	35	(118%)	
<b>Total other expenses</b>	<b>4,155</b>	<b>3,817</b>	<b>3,815</b>	<b>(8%)</b>	<b>(0%)</b>	<b>5,682</b>	<b>7,632</b>	<b>34%</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 3,815 million in Q2/2020, dropped by THB 340 million or 8% from Q2/2019 and slightly dropped by THB 2 million from Q1/2020 mainly due to the following:

## Quarterly Comparison of Other Expenses

### yoy Q2/2020 VS Q1/2019

- **Selling and administrative expenses:** was THB 437 million in Q2/2020, decreased by THB 170 million or 28% from Q2/2019 mainly due to provision of employee's severance pay corresponding revision of the Labour Protection Act of GLOW and unwinding costs of FX forward contracts pf GLOW in Q2/2019.
- **Depreciation and amortization:** was THB 2,098 million in Q2/2020, decreased by THB 47 million or 2% from Q2/2019.
- **Finance costs:** was THB 991 million in Q2/2020, decreased by THB 624 million or 39% from Q2/2020 mainly due to partial repayment of bridge loan using proceeds from the Right Offering (RO) completed in Q4/2019
- **Income tax expenses:** was THB 284 million in Q2/2020, increased by THB 254 million or 851% from Q2/2019 mainly due to 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 losses:** was recorded at THB 5 million in Q2/2020 while in Q2/2019, there was a record of net FX gain of THB 242 million. This was due to record of (i) unrealized FX loss increased by THB 247 million; (ii) realized FX loss increased by THB 18 million; and (iii) gain from fair value valuation of derivatives instruments increased by THB 19 million.

### qoq Q2/2020 VS Q1/2020

- **Selling and administrative expenses:** was THB 437 million in Q2/2020, increased by THB 19 million or 4% from Q1/2020 mainly higher cost of employees
- **Depreciation and amortization:** was THB 2,098 million in Q2/2020, increased slightly by THB 24 million or 1% from Q1/2020.
- **Finance costs:** was THB 991 million in Q2/2020, decreased by THB 49 million or 5% from Q1/2019 mainly due to short-term loan repayment in Q1/2020.
- **Income tax expenses:** was THB 284 million in Q2/2020, increased by THB 30 million or 12% from Q1/2020 due to higher income before tax.
- **Net foreign exchange losses:** was recorded at THB 5 million in Q2/2020, decreased by THB 24 million or 83% from Q1/2020 primarily due to (i) unrealized FX loss increased by THB 90 million; (ii) realized FX gain increased THB 37 million; and (iii) gain from fair value valuation of derivatives instruments increased by THB 77 million.

## Shares of Profit of Associates and Joint Ventures

Shares of Profit (Loss) of Associates and Joint Ventures (unit: THB million)	Share-Holding %	Q2/19	Q1/20	Q2/20	change +/-		6M/19	6M/20	change +/-
					YoY	QoQ			YoY
<b>Independent Power Producer (IPP)</b>									
Xayaburi Power Company Limited (XPCL)	25%	(7)	(235)	(59)	(712%)	75%	(15)	(295)	(1,833%)
<b>Small Power Producer (SPP)</b>									
Bangka-in Cogeneration Company Limited (BIC)	25%	22	32	42	93%	33%	54	74	38%
Nava Nakorn Electricity Generating Company Limited (NNEG)	30%	(15)	30	11	173%	64%	(7)	41	656%
Nam Lik 1 Power Company Limited (NL1PC)	40%	17	16	14	(18%)	(13%)	31	29	(6%)
<b>Very Small Power Plant (VSPP)</b>									
Thai Solar Renewable Company Limited (TSR)	40%	92	88	89	(3%)	1%	176	177	1%
Eastern Seaboard Clean Energy Company Limited (ESCE)	33%	(2)	2	13	713%	531%	(2)	15	810%
<b>Total shares of profit (loss) of associates and joint ventures</b>		<b>106</b>	<b>(68)</b>	<b>110</b>	<b>3%</b>	<b>262%</b>	<b>236</b>	<b>42</b>	<b>(82%)</b>

Shares of profit of associates and joint ventures in Q2/2020 was THB 110 million, increased by 3% from shares of profit of THB 106 in Q2/2019 and increased by 262% from Q1/2020 in which shares of loss of THB 68 million was recorded.

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



**XAYABURI POWER**  
YOUR SENSE OF ENERGY

Shares of **loss** from XPCL decreased by THB 176 million from Q1/2020 due to higher electricity dispatch corresponding higher water level and rainy season approaching and lower financing costs from lower interest rate.

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



Shares of **profit** from NL1PC decreased by THB 2 million from Q1/2019 mainly due to royalty charges paid to the Laos Government in Q2/2020 despite higher capacity to generate electricity from seasonality advantage of this quarter.

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



Shares of **profit** from BIC increased by THB 20 million from Q2/2019 and by THB 11 million from Q1/2020 mainly due to increased electricity and steam sales volume in Q2/2020.

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



Shares of **profit** from TSR slightly increased by THB 1 million from Q1/2020 due to higher light intensity in Q2/2020.

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

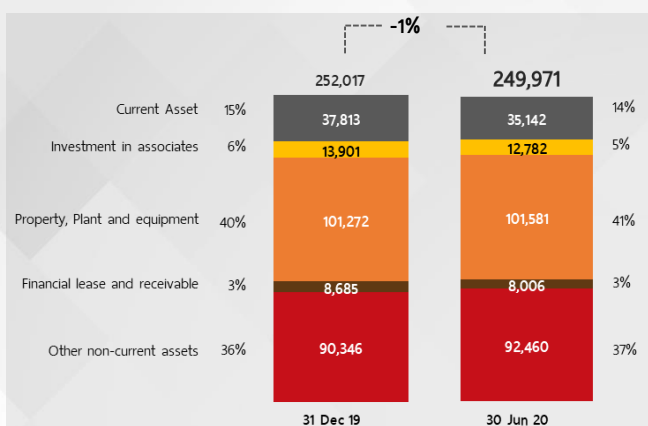


Shares of **profit** from NNEG decreased by THB 19 million from Q1/2020 mainly due to lower electricity and steam demands from industrial customers in Q2/2020.



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

### Total Asset (THB million, %)

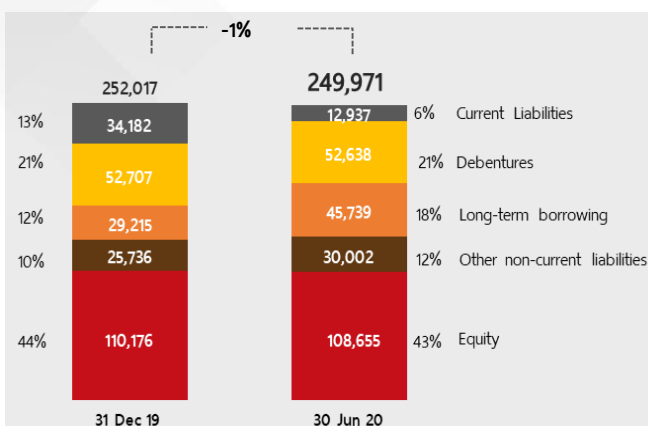


#### Total Assets

As of 30 June 2020, total assets of the Company and its subsidiaries was THB 249,971 million, decreased by THB 2,046 million or 1% from 31 December 2019 which was primarily as a result of the following:

- **Current assets:** decreased by THB 2,671 million or 7% mainly due to (i) a decrease in cash and cash equivalent of THB 1,145 million; and (ii) a decrease in short-term investment of GPSC group of THB 965 million.
- **Other non-current assets:** increased by THB 2,114 million or 2% mainly due to an increase in right of use of assets totaling THB 2,607 million.
- **Financial lease and receivable-net:** decreased by THB 679 million or 7% as a result of the implementation of Thai Financial Reporting Standard on the lease agreement No.16 (TFRS 16).

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



#### Total Liabilities

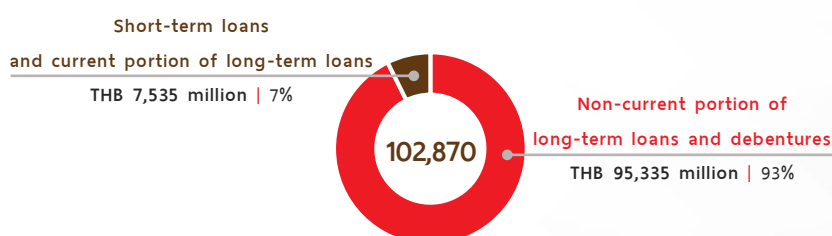
As of 30 June 2020, total liabilities of the Company and its subsidiaries was at THB 141,316 million, decreased by THB 525 million or 0.4% from 31 December 2019 which was primarily as a result of the following:

- **Current liabilities:** decreased by THB 21,245 million or 62% mainly from decreased short-term loans by THB 14,760 million, decreased account payable by THB 2,281 million, and decreased short-term loans from the Company's subsidiaries by THB 4,913 million.
- **Long-term borrowings and debentures:** increased by THB 16,455 million or 20% mainly from long-term loans with financial institutions to repay short-term loans.
- **Other non-current liabilities:** increased by THB 4,266 million or 17% mainly from recognition of long-term lease liabilities of THB 2,510 million and from recognition of derivatives liabilities of THB 2,215 million.

#### Total Equity

As of 30 June 2020, total shareholders' equity of the Company and its subsidiaries was at THB 108,655 million, decreased by THB 1,521 million or 1% from 31 December 2019 due to a decrease in other components of shareholders' equity of THB 1,790 million corresponding to the implementation of Thai Financial Reporting Standard No.9 (TFRS 9).

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



As of 30 June 2020, the Company and its subsidiaries has total interest-bearing debt (excluding lease liabilities) of THB 102,870 million which comprised of current liabilities totaling THB 7,535 million or 7% and non-current liabilities totaling THB 95,335 million or 93%.

Cash Flow (unit: THB million)	Q2/2020
Net cash flow from operating activities	10,447
Net cash used in investing activities	(2,239)
Net cash flow used in financing activities	(9,679)
<b>Net cash and cash equivalent (before exchange rate effect)</b>	<b>(1,471)</b>
Effect of exchange rate to cash and cash equivalent	25
<b>Net increase in cash and cash equivalents (after taken into account exchange rate)</b>	<b>(1,446)</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>17,393</b>

Note: 1. Including temporary investment

At the end of Q2/2020, the Company and its subsidiaries had a net decrease in cash and cash equivalent of THB 1,446 million from the end of 2019 which was primarily as a result of the following:

### Cash Flow from Operating Activities

For Q2/2020, the Company and its subsidiaries had net cash inflow from operating activities of THB 10,447 million, which was from cash received from operating activities of THB 10,686 million deducted by corporate income tax payment of THB 239 million.

### Cash Flow from Financing Activities

For Q2/2020, the Company and its subsidiaries had net cash used in financing activities of THB 9,679 million, which was from: (i) utilization of short-term loans from financial institutions and related parties of THB 28,129 million; (ii) loan repayment to financial institutions of THB 31,496 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 1,882 million; and (v) dividend paid and others of THB 3,305 million.

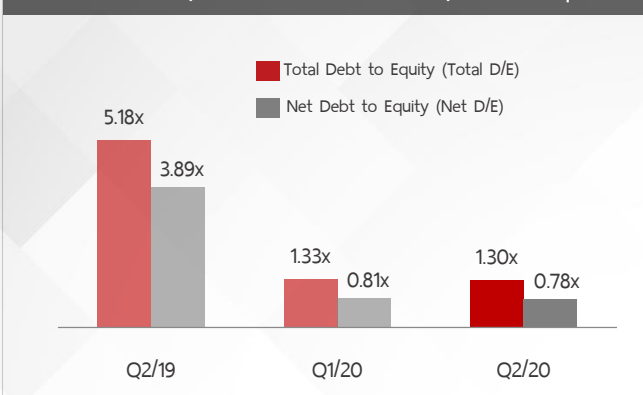
### Cash Flow from Investing Activities

Investment (unit: THB million)	Q2/2020
CAPEX and fixed assets	(1,516)
Cash paid for investments in associates and subsidiaries	(1,550)
Dividend received and others	826

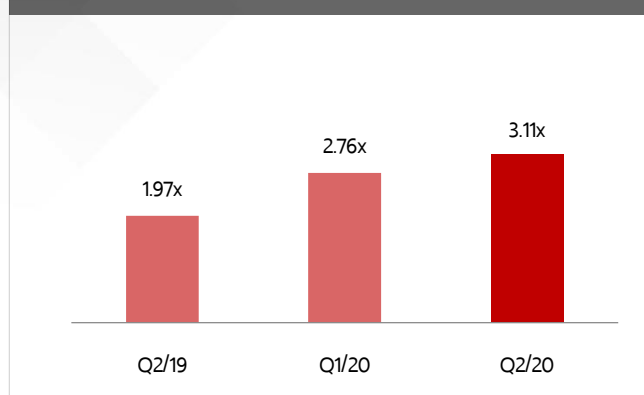
For Q2/2020, the Company and its subsidiaries had net cash used in investment activities of THB 2,239 million which was: (i) CAPEX of THB 1,516 million; (ii) cash paid for investments in associates and subsidiaries of THB 1,550 million; and (iii) dividend received of THB 826 million.

## Key Financial Ratios

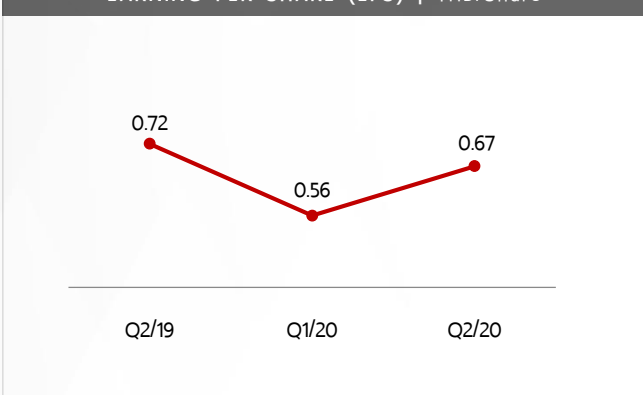
TOTAL DEBT TO EQUITY AND NET DEBT TO EQUITY RATIO | times



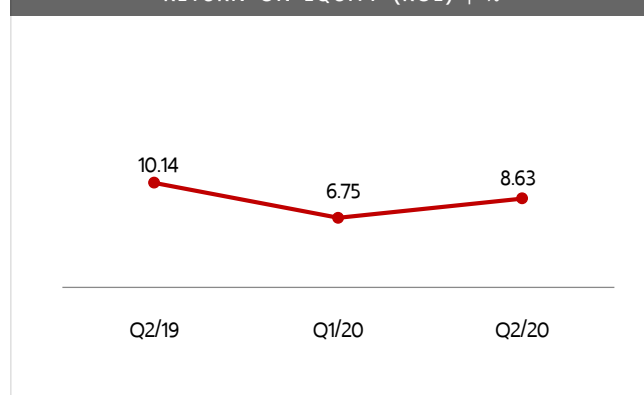
INTEREST COVERAGE RATIO | times



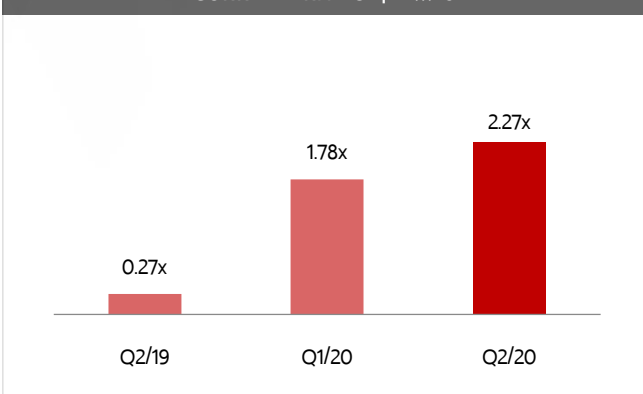
EARNING PER SHARE (EPS) | THB/Share



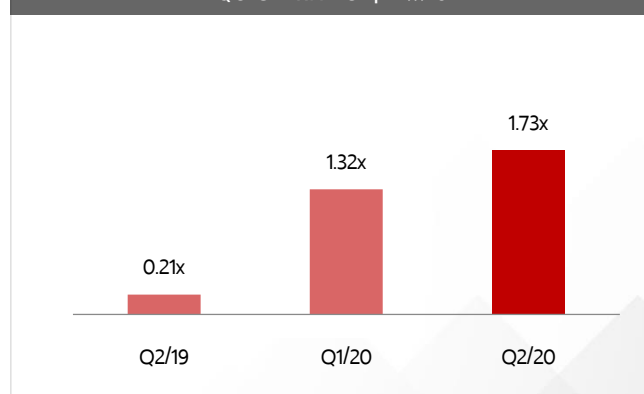
RETURN ON EQUITY (ROE) | %



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

SCOD | Q3/2020



SCOD | Q2/2021



SCOD | 2023



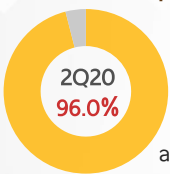
## Nava Nakorn Electricity Generating (NNEG Expansion)



Project updates:

The project progress has reached 96%. The procurement of machinery and equipment is completed.

The engineering design, construction and system testing are on schedule.

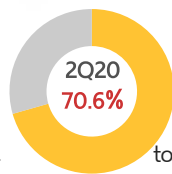


## Rayong Waste to Energy (WTE)



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 70.6% is on schedule for COD in Q2/2021.



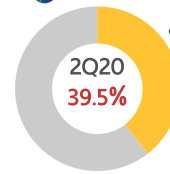
## Energy Recovery Unit (ERU)



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
- Offshore activities might be delayed due to COVID-19 impact



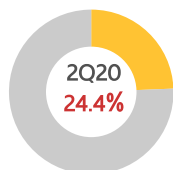
SCOD | DEC/2020

## 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.



SCOD | Q4/2022

## SPP Replacement - Stage 1 |



## Glow Energy Phase 2

Project updates:

Demolition work from 1 April – 31 July 2020 and construction of new plant in August 2020.

Projects	Electricity Capacity (MW)	Steam Production Capacity (TPH)	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 (Under construction)	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/ ผู้ประกอบการแจ้งวัฒนะ	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>			

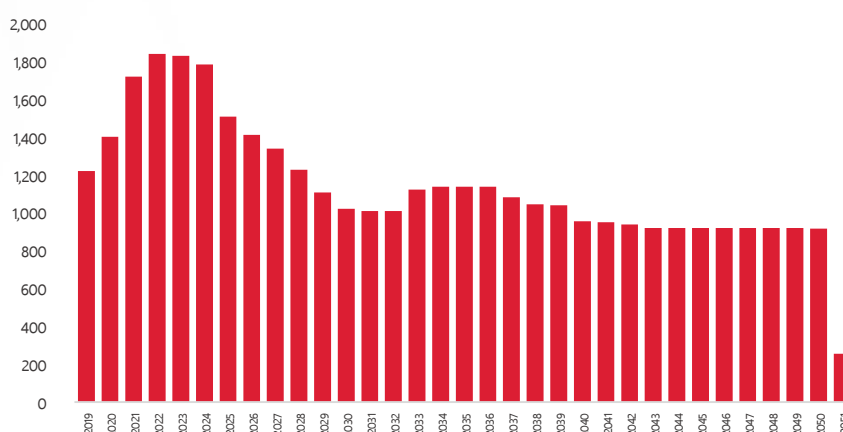
## Fair Value Assessment of Net Assets from the Acquisition of GLOW

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>		(32,092)	
<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 Q1/2020, such amortization expense added up to THB 368 million consisting of the amortization of assets acquired from the acquisition of GLOW amounting THB 499 million, non-controlling interest of THB 17 million deducted by the amortization of liabilities from the acquisition of GLOW amounting THB 148 million.

Adjusted Net Income (unit: THB million)	Q2/19	Q1/20	Q2/20	Change +/-		6M/19	6M/20	Change +/-
				YoY	QoQ			YoY
Net Profit for the Company	1,081	1,580	1,896	75%	20%	2,023	3,476	72%
<u>Add back:</u> Amortization of assets acquired from the acquisition of GLOW	360	368	368	2%	0%	360	736	104%
<b>Adjusted Net Income</b>	<b>1,441</b>	<b>1,948</b>	<b>2,264</b>	<b>57%</b>	<b>16%</b>	<b>2,383</b>	<b>4,212</b>	<b>77%</b>