



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

# MD&A

## Q1/2019

MANAGEMENT DISCUSSION  
& ANALYSIS

THE INNOVATIVE POWER  
FLAGSHIP OF PTT GROUP



# Executive Summary

Operating Highlights in Q1/2019 <sup>1</sup>	Q1/18	Q4/18	Q1/19	Changes +/-	
(Unit: Million Baht)				QoQ	YoY
Operating revenue	5,743	5,863	9,067	55%	58%
Gross Profit	1,648	1,265	2,493	97%	51%
EBITDA	1,483	975	2,129	118%	43%
Shares of profit of associates and joint ventures	152	157	130	(17%)	(14%)
<b>Net profit for the company</b>	<b>922</b>	<b>486</b>	<b>942</b>	<b>94%</b>	<b>2%</b>
<b>Normalized Net Profit</b>	<b>990</b>	<b>578</b>	<b>1,053</b>	<b>82%</b>	<b>6%</b>
<b>Gross profit margin* (%)</b>	<b>29%</b>	<b>22%</b>	<b>27%</b>	<b>5%</b>	<b>(2%)</b>
<b>Net profit margin (%)</b>	<b>16%</b>	<b>8%</b>	<b>10%</b>	<b>2%</b>	<b>(6%)</b>
<b>Normalized net profit margin (%)</b>	<b>17%</b>	<b>10%</b>	<b>12%</b>	<b>2%</b>	<b>(5%)</b>

Note: 1. In the first quarter of 2019, the company has changed the classification of operating income and cost of sales resulting in the operating income until the gross profit being reported differently from the previous periods



## GLOW Acquisition and Accounting Record

In Q1/2019, Global Power Synergy Public Company Limited (GPSC) ("The company") completed the acquisition of a portion of Glow Energy Public Company Limited ("GLOW"). The Company purchased 1,010,976,033 shares or 69.11% on 14 March 2019. **Consequently, the company has consolidated GLOW's operating results for 18 days after the acquisition into the consolidated financial statements of the company.**

For the preparation of the financial statements for the period ended 31 March 2019, the company is under the process of determining fair value for intangible assets resulting from the acquisition of the company. Therefore, the estimated goodwill may be subject to further adjustments depending on the determination of fair value, which is expected to be finalized within Q2/2019 and it is to be amortized over the estimated agreement periods that the company obtains the benefits.



## Q1/2019 Operating Highlights

For Q1/2019, the EBITDA of the company increased by Baht 1,154 million or 118% from Q4/2018 and increased by Baht 646 million or 43% from Q1/2018. The increase was mainly due to improved operating results of the Sriracha Power Plant and the acquisition of GLOW also contributed to an increase in EBITDA by Baht 751 million.

The net profit for the company in Q1/2019 increased by 456 million or 94% from Q4/2018 and by Baht 20 million or 2% from Q1/2018, mainly due to the improved operating results of Sriracha Power Plant, which its gross profit increased Baht 272 million from Q4/2018 and Baht 14 million from Q1/2018, as well as the acquisition of GLOW, which increased net profit by Baht 238 million. In addition, the company received dividend income from Ratchaburi Power Company Limited (RPCL) for Baht 72 million.

Normalized net profit (NNP) is the net profit attributable to the company adjusted to remove the effects of accounting standards about the "Determining whether an arrangement contains a lease" (TFRIC 4) and the "Revenue from contracts with customers" (TFRS 15), foreign exchange, and deferred tax asset. Normalized net profit clearly reflects the company's true earnings from its normal operations. In Q1/2019, the NNP was Baht 1,053 million, increased by Baht 475 million or 82% from Q4/2018, and NNP margin increased by 2% as there was a major overhaul of the Independent Power Producer (IPP) in Q4/2018 compared to Q1/2019. Also, NNP increased by Baht 63 million or 6% from Q1/2018. The increase in NNP was mainly due to improved performances of the company's Independent Power Producer (IPP), Small Power Producer (SPP) and Very Small Power Producer (VSPP), as well as the acquisition of GLOW that contributed to Baht 271 million in NNP. Also, the dividend income from Ratchaburi Power Company Limited (RPCL) for Baht 72 million. However, NNP margin decreased 5% from Q1/2018, because of the growth rate of natural gas price and the rise in finance cost from interest payment and short-term loan financing fee related to the acquisition of GLOW.

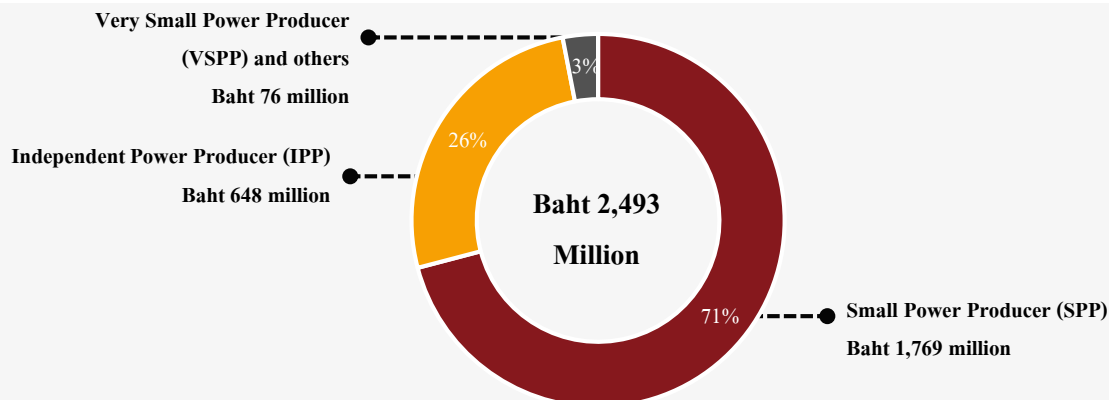


## Executive Summary



### Operating performance by plant in Q1/2019

#### The Proportion of Gross Profit in Q1/2019



The company's gross profit was at Baht 2,493 million in Q1/2019 which increased by 1,228 million or 97% from Q4/2018 and increased by Baht 845 million or 51% from Q1/2018, mainly because of the acquisition of GLOW at Baht 926 million



#### Comparing Q1/2019 vs Q4/2018

The gross profit of the company increased mainly due to:

- Independent Power Producer (IPP) (Sriracha Power Plant): The gross profit increased by Baht 272 million as a result of the increased revenue which followed the rise in availability rate from 40% in Q4/2018 to 99% in Q1/2019 due to no major overhaul. In addition, the cost of sales, however, increased at a lesser extent than the revenue due to the decrease in maintenance cost and other expenses.
- Small Power Producer (SPP): The gross profit increased by Baht 39 million due to the increase in electricity and steam average selling price from Rayong Central Utility Plants (CUP) and IRPC Clean Power (IRPC-CP) following the upward trend of natural gas price and Ft rate. Moreover, the maintenance cost of both plants decreased, even though there was a decrease in steam sales volume of both plants and electricity sales volume of CUP.
- Very Small Power Producer (VSPP): The gross profit decreased by Baht 9 million mainly due to the decrease in revenue from Engineering, Procurement and Construction contract service (EPC) of Combine Heat and Power Producing Company Limited (CHPP) along with the drop in the cost of raw materials of CHPP following the progress of EPC work. However, the proportion of revenue that decreased is larger than the decrease in cost of raw materials, resulting in a decrease in gross profit of VSPP and Others.



#### Comparing Q1/2019 vs Q1/2018

The gross profit of the company increased mainly due to:

- Small Power Producer (SPP): The gross profit decreased by Baht 128 million mainly due to the decrease in steam sales volume of Rayong Central Utility Plants (CUP) and IRPC Clean Power (IRPC-CP) decreased, even though the electricity sales volume of IRPC-CP has increased, and the increase in Ft rate which in line with rising trend of natural gas and oil prices. The Energy Regulatory Commission (ERC) increased Ft rate for January-April 2019 period by 4.30 Satang per unit up from the previous period, resulted in the increased average selling price of electricity and steam. Also, there was the increase in maintenance cost according to payment period of long term service agreement of IRPC-CP.
- Very Small Power Producer (VSPP): The gross profit increased by Baht 34 million mainly because of the increase in Engineering, Procurement and Construction contract service (EPC) income of Combine Heat and Power Producing Company Limited (CHPP) as well as the increase in selling electricity of Ichinoseki Solar Power 1 (ISP1). However, the cost of sales of goods and rendering of services of ISP1 significantly dropped.



## Executive Summary



## Q1/2019 Significant Events

### Progress Report on Acquisition of Glow Energy Public Company Limited (GLOW)

On 14 March 2019, the Company acquired both directly and indirectly the shares of Glow Energy Public Company Limited (“GLOW”) equivalent to 69.11% from ENGIE Global Developments B.V., which had been the major shareholders of GLOW. The company completed the payment at Baht 91.9906 per share, amounting to Baht 93,000 million in total.

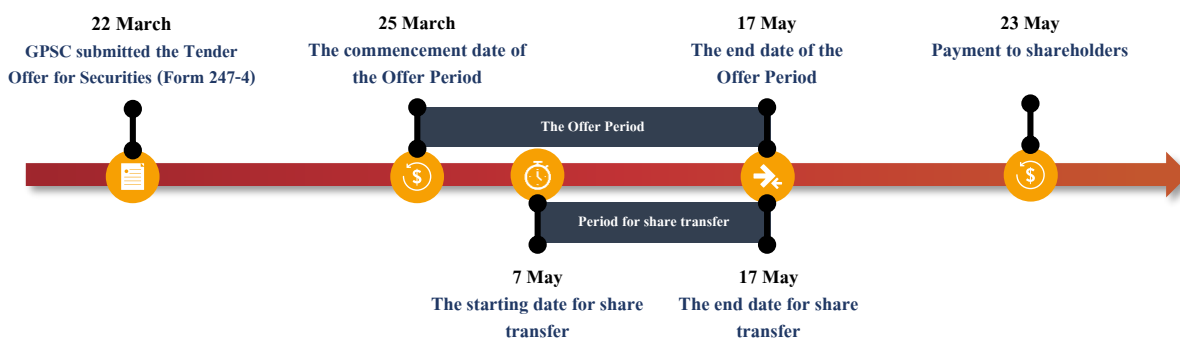
In entering into the acquisition, the company had obtained short-term loan from financial institutions and shareholders to make the payment to ENGIE Global Developments B.V., which were the major shareholders of GLOW and minority shareholders in tender offer. The loan resulted in the Debt-to-Equity ratio of the company to be equal to 2.7 times which might increase after completion of the tender offer.

Nevertheless, the company has a long-term financial plan by increasing capital, which will offer shareholders right offering proportionately to their shareholding (Right Offering: RO) or other suitable type, together with the financing from money market and/or issuing additional debenture. This long-term plan would result in an appropriate capital structure and financial ratio. The company expected the capital raising process to be completed within Q3/2019. The company expected to receive the capital of Baht 74,000 million.

### Tender Offer of GLOW's Shares

On 22 March 2019, the company has submitted the Tender Offer for Securities (Form 247-4) to make a tender offer for the remaining shares of GLOW, equivalent to 30.89%. However, the purchase price will be adjusted, because GLOW has declared the dividend payment at the rate of Baht 1.177 per share. Consequently, the purchase price after the dividend amount will be Baht 90.57067362 per share (net amount after deducting the brokerage fee and VAT). All shareholders of the GLOW can submit the Tender Offer Acceptance Form as from the commencement date of the Offer Period from 25 March 2019 to 17 May 2019. The Tender Offer Agent will accept and transfer the shares as from 7 May 2019 to 17 May 2019. All shareholders who submit the Tender Offer Acceptance Form will receive the payment on 23 May 2019.

The company might consider delisting GLOW shares from SET, if the company purchases more than 80% of the total issued shares of GLOW.



### Dividend Payment from GPSC's Operating Result for the Year 2018

In the Annual General Meeting (AGM) on 1 April 2019, following the performance of the company and its subsidiaries, the dividend payment has been approved for the year 2018 at Baht 1.25 per share amounting to Baht 1,872,876,000 or 56% of the net profit of the company. The dividend yield is 2.14% per share, compared to the share price Baht 58.50 at the end of the year. The dividend stated was distributed as interim dividends on 10 September 2018 of Baht 0.45 per share and the remaining Baht 0.80 per share, which is the dividend for the second half of the year, have been distributed on 18 April 2019.



## Executive Summary

### Approval to Invest in Energy Recovery Unit (ERU)

In the Annual General Meeting (AGM) on 1 April 2019, the investment in the Energy Recovery Unit Project (“ERU”) has been approved by more than 75% of the vote of the shareholders attending the meeting and casting their vote. The company plans to cooperate with Thai Oil Public Company Limited (“Thai Oil”) to expand business by making an investment in the ERU, by either the company or its subsidiary to be incorporated through the acquisition of the ERU, which is a part of the Clean Fuel Project (the “CFP”) of Thai Oil; to accept the transfer of ownership in the ERU from Thai Oil with a Thai Baht currency value of approximately Baht 24,113 million, which is equivalent to a total value of not exceeding USD 757 million, after the construction of the ERU is completed and the Provisional Acceptance Certificate (the “PAC”) is issued under the CFP. In this regard, the company expects that the construction of the ERU will be completed and the PAC will be issued in the Q3/2023.

### Received Two Awards from International Business Magazine

On 1 March 2019, the company was selected by the International Business Magazine, which is a leading business and finance magazine in the United Arab Emirates, as the Best Power Company Thailand 2019 and Best Investor Relations Company (Energy Sector). Both awards reflect that the company’s management has been internationally recognized in operations and disclosing information. Through best IR practice, the company gives high importance to accuracy, up-to-date, and sufficient information to investors fairly.

## Executive Summary



## Q1/2019 Outlook and Business Directions



### Synergy from the acquisition of GLOW

- From the acquisition of GLOW, there will be three main synergies that will occur including the cross utilization of infrastructure and power plant system, the diversification of investment in sources of energy and the growth with PTT Group
- After the acquisition, the company equity capacity increased by 2,771 MW aggregating to a total of 4,986 MW
- In addition, the synergies created has enhanced the innovation in the power business as the strengths of the two companies have been combined to generate not only growth synergies but operational synergies, allowing costs within the organization to be lower. This results in the company having higher abilities to grow significantly as well as having the capabilities to expand their industrial user customer base in the future.



### New projects in 2019-2020

- There are currently 4 main projects that are under construction including:
  - Xayaburi Power Company Limited (with 98.7% construction progress)
  - Nam Lik 1 Power Company Limited (100% completed, waiting for the certificate of COD)
  - Rayong Central Utility Plants Expansion Phase (CUP-4) (87.8% construction progress)
  - Nava Nakorn Electricity Generating Company Limited (NNEG) (28.3% construction progress)



### Demand for electricity in 2019

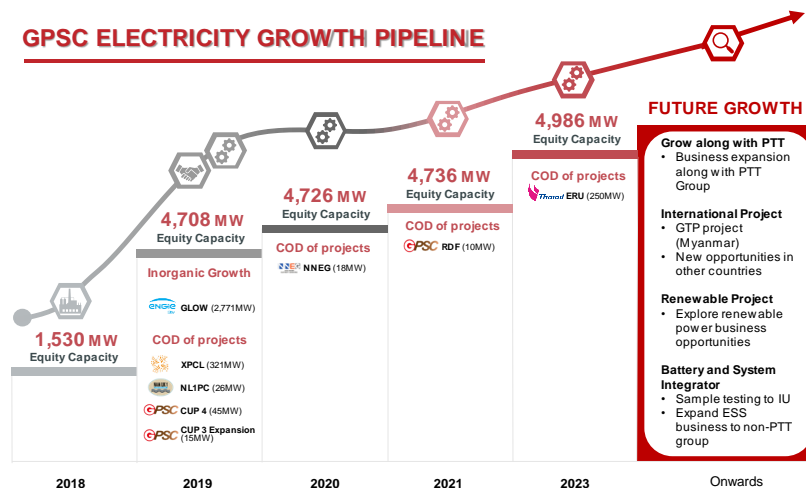
- The outlook of the country in 2019 forecasts the GDP to grow 3.5-4.5% mainly driven by the increase in income base, the higher value request support for investment from BOI, increase in measures to aid low income people, as well as the improvement in the tourism sector
- The consumption of electricity in 2019 is forecasted to increase by 2.6% following the improved economic conditions



### Growth with PDP and PTT Group

- The 2018-2037 PDP states that the power generating capacity will grow to 77,211 MW, in which in Q1/2019, the Ministry of Energy resolved to renew the contract of SPP Cogeneration power plants that will expire between 2016-2025 to be extended or allowing new power plants to be construct according to the same contract. This suggests that the power plants of the company and its subsidiaries contract will be extended, meaning that the PDP will facilitate the growth of the company
- The company is in the process of developing the energy storage system project together with the PTT Group by investing in the Smart Energy Storage System with GC, in which in the future, this project will be a large energy storage system to enhance reliability in the power system that supports the operation of the PTT Group

### GPSC ELECTRICITY GROWTH PIPELINE



Note: The diagram shows the power generation capacity growth after the acquisition of GLOW

# Operating Results

Overall Operating Results of the Company and its Subsidiaries <sup>1</sup>	Q1/18	Q4/18	Q1/19	Change +/-(-)	
(Unit: Million Baht)				QoQ	YoY
Operating revenue	5,743	5,863	9,067	55%	58%
Cost of sales (exclude depreciation and amortization)	(4,095)	(4,598)	(6,574)	43%	61%
<b>Gross profit</b>	<b>1,648</b>	<b>1,265</b>	<b>2,493</b>	<b>97%</b>	<b>51%</b>
Selling and administrative expenses	(168)	(296)	(367)	24%	118%
Other operating income	3	6	2.6	(57%)	(15%)
<b>EBITDA</b>	<b>1,483</b>	<b>975</b>	<b>2,129</b>	<b>118%</b>	<b>43%</b>
Depreciation and amortization	(415)	(469)	(707)	50%	70%
<b>EBIT</b>	<b>1,068</b>	<b>506</b>	<b>1,422</b>	<b>181%</b>	<b>33%</b>
Finance costs	(119)	(136)	(372)	173%	213%
Other non-operating income and expenses	63	72	168	134%	167%
Shares of profit of associates and joint ventures	152	157	130	(17%)	(14%)
Income tax expenses	(90)	8	(46)	646%	(49%)
<b>Profit before FX &amp; extraordinary items</b>	<b>1,074</b>	<b>607</b>	<b>1,302</b>	<b>114%</b>	<b>21%</b>
Net foreign exchange gains (losses)	(21)	(3)	(52)	n/a	146%
<b>Net profit</b>	<b>1,053</b>	<b>604</b>	<b>1,250</b>	<b>107%</b>	<b>19%</b>
Non-controlling interests	(131)	(118)	(308)	161%	135%
<b>Net profit for the company</b>	<b>922</b>	<b>486</b>	<b>942</b>	<b>94%</b>	<b>2%</b>
<b>Normalized Net Profit</b>	<b>990</b>	<b>578</b>	<b>1,053</b>	<b>82%</b>	<b>6%</b>
<b>Earning per share (Baht/share)</b>	<b>0.62</b>	<b>0.32</b>	<b>0.63</b>	<b>97%</b>	<b>2%</b>
<b>Weighted average number of common share (Million)</b>	<b>1,498</b>	<b>1,498</b>	<b>1,498</b>	<b>0%</b>	<b>0%</b>

Note: 1. In the first quarter of 2019, the company have changed the classification of operating income and cost of sales resulting in the operating income until the gross profit being reported differently from the previous period

## Normalized net profit (NNP)

Normalized net profit (NNP) is net profit adjusted to remove the effects of of accounting standards about the “Determining whether an arrangement contains a lease” (TFRIC 4) and the “Revenue from contracts with customers” (TFRS 15), foreign exchange and deferred tax asset effect. Normalized net profit clearly reflects the company's true earnings from its normal operations. In Q1/2019, the company had a NNP of Baht 1,053 million, which increased by Baht 475 million or 82% from Q4/2018, and increased Baht 63 million or 6% from Q1/2018, due to better performance of the company's Independent Power Producer (IPP), Small Power Producer (SPP) and Very Small Power Producer (VSPP) together with the acquisition of GLOW which accounted for Baht 271 million of NNP and dividend income from Ratchaburi Power Company Limited (RPCL) of Baht 72 million.

Normalized Net Profit (NNP)	Q1/18	Q4/18	Q1/19	Change +/-(-)	
(Unit: Million Baht)				QoQ	YoY
<b>Net profit-Owners of the company</b>	<b>922</b>	<b>486</b>	<b>942</b>	<b>94%</b>	<b>2%</b>
TFRIC 4 and TFRS 5 effect	38	50	75	50%	97%
Foreign exchange and deferred tax asset effect	30	42	36	(14%)	20%
<b>Normalized Net Profit</b>	<b>990</b>	<b>578</b>	<b>1,053</b>	<b>82%</b>	<b>6%</b>



### Comparing Q1/2019 vs Q4/2018

Normalized net profit (NNP) increased mainly due to:

- Better performance of Sriracha Power Plant and Small Power Producer (SPP) of the company resulting in the increase in gross profit of Baht 310 million. Moreover, the effect to the increase in the NNP was Baht 19 million due to the effect from TFRIC 4 and TFRS 15, whereas the foreign exchange and deferred tax asset effect decreased. As a result, NNP increased even when there is the rise in finance cost from interest payment and short-term loan financing fee related to the acquisition of GLOW.



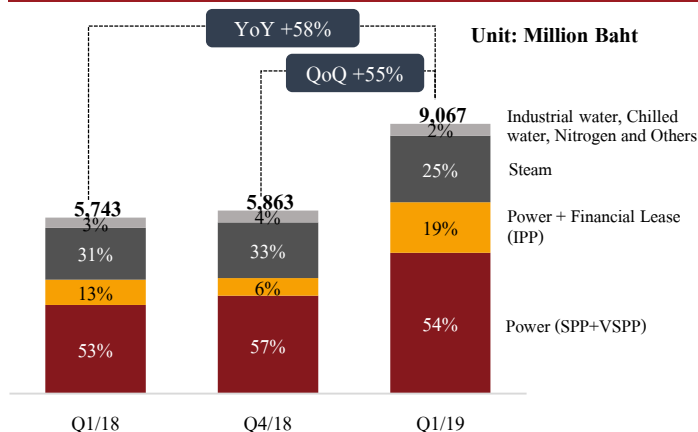
### Comparing Q1/2019 vs Q1/2018

Normalized net profit (NNP) increased mainly due to:

- Better performance of Sriracha Power Plant and Very Small Power Producer (VSPP) of the company resulted in the increase in gross profit of Baht 47 million. Moreover, the effect to NNP escalated from the TFRIC 4 and TFRS 15 equaled to Baht 43 million. As a result, NNP increased when there is a rise in finance cost from interest payment and short-term loan financing fee related to the acquisition of GLOW

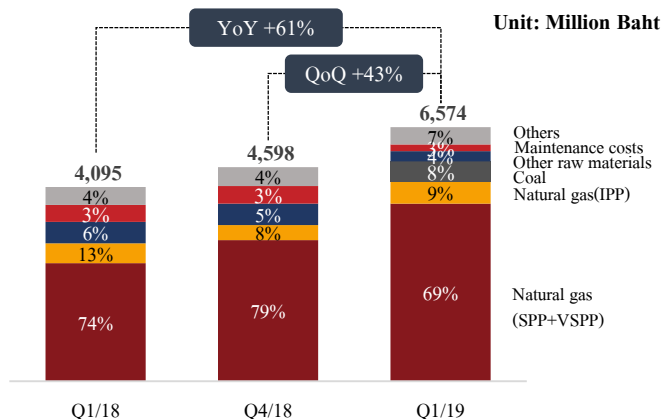
## Operating Results

### Operating Revenue



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

(Exclude depreciation and amortization)



### Analysis of Company Performance



Comparing  
Q1/2019 vs Q4/2018

#### Operating Revenue

Operating revenue in Q1/2019 was Baht 9,067 million which increased by Baht 3,204 million or 55% from Q4/2018. The increase was mainly due to the following reasons:

- The recognition of revenue from the acquisition of GLOW of Baht 2,768 million.
- Revenues of the company's Independent Power Producers (IPP) (Sriracha Power Plant) increased due to the increase in Availability Payment (AP) and Energy Payment (EP) as a result of having no major overhaul in Q1/2019.
- Revenue of the company's Small Power Producers (SPP) increased due to the increase in average electricity selling price, the increase in electricity sales volume of IRPC Clean Power (IRPC-CP) and the rise of average steam selling price of Rayong Central Utility Plants (CUP).
- Revenue of the company's Very Small Power Producers (VSPP) decreased due to the decrease in revenue from Engineering, Procurement and Construction contract service (EPC) of Combine Heat and Power Producing Company Limited (CHPP).

#### Cost of sales of goods and rendering of services

Cost of sales of goods and rendering services in Q1/2019 was Baht 6,574 million which increased by Baht 1,976 million or 43% from Q4/2018. The addition was mainly due to the recognition of cost of sales of goods and rendering of services from acquisition of GLOW and the increase in cost of sales of goods and rendering of services of the company's SPP power plants. The details are as follows:

- Cost of sales of goods and rendering services of IPP (Sriracha Power Plant) rose from the higher natural gas consumption corresponding to EGAT's dispatched instruction.
- Cost of sales of goods and rendering of service of SPP decreased following the lower natural gas cost and maintenance cost.



Comparing  
Q1/2019 vs Q1/2018

#### Operating Revenue

Operating revenue in Q1/2019 was Baht 9,067 million which increased by Baht 3,324 million or 58% from Q1/2018. The increase was mainly due to the following reasons:

- The recognition of revenues from the acquisition of GLOW of Baht 2,768 million.
- Revenues of the company's Independent Power Producers (IPP) (Sriracha Power Plant) increased due to the increase in Energy Payment (EP), resulting from the increase in electricity selling price corresponding to the rise in natural gas price.
- Revenue of company's Small Power Producers (SPP) rose due to the increase in sales of electricity and steam. This increase was mainly due to the increase in electricity sales volume of IRPC Clean Power (IRPC-CP) and the rise of average steam selling price corresponding to the rise in natural gas price.
- Revenue of the company's Very Small Power Producers (VSPP) rose due to the increase in revenue from Engineering, Procurement and Construction contract service (EPC) of Combine Heat and Power Producing Company Limited (CHPP) and the increase in the volume of electricity generated from Ichinoseki Solar Power 1 GK (ISP1) corresponding to better weather condition that there was no heavy snow fall in Q1/2019.

#### Cost of sales of goods and rendering of services

Cost of sales of goods and rendering services in Q1/2019 was Baht 6,574 million which increased by Baht 2,479 million or 61% from Q1/2018. The addition was mainly due to the recognition of cost of sales of goods and rendering of services from the acquisition of GLOW and the increase in cost of sales of goods and rendering of services of SPP power plants. The details are as follows:

- Cost of sales of goods and rendering service of IPP rose due to the rise in natural gas price.
- Cost of sales of goods and rendering service of SPP increased due to the rise in natural gas price.



## Operating Results



### 1. IPP Operating Performance



Operating Performance	Q1/18	Q4/18	Q1/19	Change +/-	
(Unit: Million Baht)				QoQ	YoY
<b>Revenue from Selling Electricity</b>					
Revenue from Selling Electricity (GPSC)					
- Availability Payment: AP	101	(119)	89	175%	(12%)
- Energy Payment: EP	520	368	574	56%	10%
- Received Money to Submit to Power Developments Funds	1.8	0.7	1.7	135%	(3%)
<b>Total Revenue from selling electricity (GPSC)</b>	<b>623</b>	<b>250</b>	<b>665</b>	<b>167%</b>	<b>7%</b>
Revenue from Selling Electricity (GLOW <sup>1</sup> )					
- Availability Payment: AP	-	-	409	n/a	n/a
- Energy Payment: EP	-	-	479	n/a	n/a
<b>Total Revenue from Selling Electricity (GLOW<sup>1</sup>)</b>	<b>-</b>	<b>-</b>	<b>888</b>	<b>n/a</b>	<b>n/a</b>
<b>Total Revenue from Selling Electricity</b>	<b>623</b>	<b>250</b>	<b>1,553</b>	<b>523%</b>	<b>149%</b>
<b>Other Income</b>					
Revenue from finance lease agreement	141	130	183	41%	30%
Other Income	1	-	4	n/a	300%
<b>Total Revenue</b>	<b>765</b>	<b>380</b>	<b>1,740</b>	<b>358%</b>	<b>127%</b>
<b>Cost of Raw Materials</b>					
- Natural Gas	515	387	616	59%	20%
- Coal	-	-	328	n/a	n/a
- Others	17	26	18	(31%)	3%
<b>Total Cost of Raw Materials</b>	<b>532</b>	<b>413</b>	<b>962</b>	<b>133%</b>	<b>81%</b>
Maintenance cost	35	19	20	4%	(44%)
Others (exclude depreciation and amortization)	44	52	110	110%	151%
<b>Total Cost of Sales of Goods and Rendering of Services</b>	<b>611</b>	<b>484</b>	<b>1,092</b>	<b>126%</b>	<b>79%</b>
<b>Gross Profit</b>	<b>154</b>	<b>(104)</b>	<b>648</b>	<b>723%</b>	<b>321%</b>
<b>Gross Profit Margin</b>	<b>20%</b>	<b>(27%)</b>	<b>37%</b>	<b>64%</b>	<b>17%</b>

Note: 1. All GLOW's revenues are 18-days revenue after the company's acquisition of GLOW

#### Gross Profit

An Independent Power Producer's (IPP) gross profit depends on Availability Payment (AP) of the power plant and having a structure to calculate the costs of selling electricity by the 'Pass Through' concept where the cost can be passed on to the Electricity Generating Authority of Thailand (EGAT). The gross profit of Independent Power Producer (IPP) was Baht 648 million in Q1/2019, which increased by Baht 752 million from Q4/2018 and increased Baht 494 million or 321% from Q1/2018, mainly due to the acquisition of GLOW which takes account for Baht 481 million.



**Comparing**  
**Q1/2019 vs Q4/2018**

The gross profit of Independent Power Producer (IPP) increased mainly due to:

- The gross profit of Sriracha Power Plant increased by Baht 272 million as a result of the increase in revenue by 109%, in which has resulted from the rebound of Availability Rate from 40% in Q4/2018 to 99% in Q1/2019 due to having no major overhaul in this quarter.



**Comparing**  
**Q1/2019 vs Q1/2018**

The gross profit of Independent Power Producer (IPP) increased mainly due to:

- The gross profit of Sriracha Power Plant increased by Baht 14 million or 9% mainly from the decrease in maintenance cost after the maintenance service agreement that varies by operating hour was expired so, the company planned on its own maintenance.



## Operating Results



Key revenue drivers	Q1/18	Q4/18	Q1/19	Change +/-(-)	
				QoQ	YoY
Availability Rate					
Availability Rate (%) – Sriracha Power Plant	99%	40%	99%	59%	0%
Availability Rate (%) – GIPP	-	-	100%	-	-
Availability Rate (%) – GHECO-One	-	-	100%	-	-
Dispatch					
Dispatch (GWh) – Sriracha Power Plant	180	74	175	135%	(3%)
Dispatch (GWh) – GIPP, GHECO-One, Houay Ho	-	-	322	n/a	n/a
Average Selling Price					
Average Selling Price (Baht/kWh) - Sriracha Power Plant	3.45	3.35	3.79	13%	10%
Average Selling Price (Baht/kWh) - GIPP, GHECO-One, Houay Ho	-	-	2.75	n/a	n/a

### Revenue

The revenue of Independent Power Producer (IPP) was at Baht 1,740 million in Q1/2019, which increased by Baht 1,360 million or 358% from Q4/2018, and increased by Baht 975 million or 127% from Q1/2018, mainly due to the acquisition of GLOW which takes account for Baht 945 million of the increase as well as the better performance of Sriracha Power Plant.



#### Comparing Q1/2019 vs Q4/2018

The revenue of Independent Power Producer (IPP) increased mainly due to:

- The revenue from Sriracha Power Plant has increased by Baht 415 million as a result of having no major overhaul in Q1/2019, causing the Energy Payment to increase by Baht 207 million or 56% following the increase in dispatch volume to The Electricity Generating Authority of Thailand (EGAT) and the increase in Availability Payment (AP) which increased by Baht 207 million. Also, the Weight factor which is seasonal factor increased.
- The average selling price of electricity has risen following the Weight Factor and the increase in price of natural gas.



#### Comparing Q1/2019 vs Q1/2018

The revenue of Independent Power Producer (IPP) increased mainly due to:

- The revenue from Sriracha Power Plant has increased by Baht 30 million due to the increase in Energy Payment (EP) by Baht 54 million or 10% followed higher natural gas price. Even though the dispatch volume slightly decreased.


**Operating Results**


Key cost drivers	Q1/18	Q4/18	Q1/19	Change +/-(-)	
				QoQ	YoY
Natural Gas					
Natural Gas Consumption					
Natural Gas Consumption (*000 MMBTU) – Sriracha Power Plant	1,420	612	1,381	126%	(3%)
Natural Gas Consumption (*000 MMBTU) – GIPP	-	-	2	n/a	n/a
Average Price of Natural Gas					
Average Price of Natural Gas (Baht/MMBTU) - Sriracha Power Plant	363	633	413	(35%)	14%
Average Price of Natural Gas (Baht/MMBTU) – GIPP	-	-	252	n/a	n/a
Coal					
Coal Consumption					
Coal Consumption (Ton JPU) - GHECO-One	-	-	99,754	n/a	n/a
Average Coal Cost (exclude transportation cost)					
Average Coal Cost (exclude transportation cost) (USD/Ton JPU) – GHECO-One	-	-	93.78	n/a	n/a

**Total Cost of Sales of Goods and Rendering of Services (exclude depreciation and amortization)**

The total cost of sales of goods and rendering services of Independent Power Producer (IPP) in Q1/2019 was Baht 1,092 million, which increased by Baht 608 million or 126% from Q4/2018, and increased by Baht 480 million or 79% from Q1/2018, mainly due to the acquisition of GLOW which takes account for Baht 464 million of the increase, together with the increase in cost of sales of goods and rendering of services of Sriracha Power Plant by Baht 143 million compared to Q4/2018.


**Comparing  
Q1/2019 vs Q4/2018**

- The cost of natural gas of Sriracha Power Plant has increased by Baht 184 million following the higher natural gas consumption and corresponding to EGAT's dispatched instruction. In addition, there were no major overhaul of Sriracha Power Plant in Q1/2019.
- The average price of natural gas of Sriracha Power Plant decreased by Baht 219 per MMBTU due to the lower natural gas consumption in Q4/2018, while there is a demand charge (fixed charge) causing the average price per unit to decrease.


**Comparing  
Q1/2019 vs Q1/2018**

- The cost of natural gas of Sriracha Power plant has increased by Baht 56 million mainly due to increase in average price of natural gas from Baht 363 per MMBTU to Baht 413 per MMBTU.
- The average price of natural gas of Sriracha Power Plant increased by Baht 50 per MMBTU as a result of a decrease in electricity dispatched, however, with the existence of demand charge (fixed charge), the overall average price of natural gas still experienced an increase.

## Operating Results



### 2. SPP Operating Performance



Operating Performance	Q1/18	Q4/18	Q1/19	Change +/-	
(Unit: Million Baht)				QoQ	YoY
<b>Revenue from Selling Electricity</b>					
Revenue from Selling Electricity (GPSC <sup>1</sup> )	3,008	3,300	3,319	1%	10%
Revenue from Selling Electricity (GLOW <sup>2</sup> )	-	-	1,457	n/a	n/a
<b>Total Revenue from Selling Electricity</b>	<b>3,008</b>	<b>3,300</b>	<b>4,776</b>	<b>45%</b>	<b>59%</b>
<b>Revenue from Selling Steam</b>					
Revenue from Selling Steam (GPSC <sup>1</sup> )	1,782	1,910	1,920	1%	8%
Revenue from Selling Steam (GLOW <sup>2</sup> )	-	-	366	n/a	n/a
<b>Total Revenue from Selling Steam</b>	<b>1,782</b>	<b>1,910</b>	<b>2,286</b>	<b>20%</b>	<b>28%</b>
<b>Other Income</b>					
Other Income <sup>1</sup>	102	109	127	16%	25%
<b>Total Revenue</b>	<b>4,892</b>	<b>5,319</b>	<b>7,189</b>	<b>35%</b>	<b>47%</b>
<b>Cost of Raw Materials<sup>1</sup></b>					
Natural Gas	3,032	3,628	4,562	26%	50%
Coal	-	-	190	n/a	n/a
Others	214	171	202	18%	(6%)
<b>Total Cost of Raw Materials</b>	<b>3,246</b>	<b>3,799</b>	<b>4,954</b>	<b>30%</b>	<b>53%</b>
Maintenance cost <sup>1</sup>	93	122	145	18%	55%
Others <sup>1</sup> (exclude depreciation and amortization)	101	114	321	181%	219%
<b>Total Cost of Sales of Goods and Rendering of Services</b>	<b>3,440</b>	<b>4,035</b>	<b>5,420</b>	<b>34%</b>	<b>58%</b>
<b>Gross Profit</b>	<b>1,452</b>	<b>1,284</b>	<b>1,769</b>	<b>38%</b>	<b>22%</b>
<b>Gross Profit Margin</b>	<b>30%</b>	<b>24%</b>	<b>25%</b>	<b>1%</b>	<b>(5%)</b>

Note: 1. In the first quarter of 2019, the company have changed the classification of operating income and cost of sales resulting in the operating income until the gross profit being reported differently from the previous period.

2. All GLOW's revenues are 18-days revenue after the company's acquisition of GLOW. GLOW SPP consists of GLOW Energy Phase 1,2,4,5, GLOW SPP 2-3, GLOW Energy CFP3 and GLOW SPP11 Phase 1-3.

#### Gross Profit

Gross profit of Small Power Producer (SPP) in Q1/2019 is Baht 1,769 million, which increased from Q4/2018 by Baht 485 million or 38%, and increased from Q1/2018 by Baht 317 million or 22%, in which Baht 445 million was the effect from combining co-generation power plants into the portfolio after the acquisition with GLOW. The acquisition will enhance the diversity of power plant for the company.



#### Comparing Q1/2019 vs Q4/2018

Gross profit of Small Power Producer (SPP) increased mainly from the following reasons:

- The acquisition of GLOW contributed to the rise in gross profit by Baht 445 million.
- Electricity and steam average selling price of Rayong Central Utility Plants (CUP) and IRPC-CP increased from higher natural gas price and the increase in Ft rate by 4.3 Satang per unit.



#### Comparing Q1/2019 vs Q1/2018

Gross profit of Small Power Producer (SPP) increased from the acquisition of GLOW whereas there is the decrease in gross profit of Rayong Central Utility Plant (CUP) and IRPC Clean Power (IRPC-CP). The details are as follow:

- Steam sales volume of Rayong Central Utility Plants (CUP) decreased.
- Revenue and cost of electricity and steam accelerated in parallel to the increase in natural gas price, where Ft rate slightly increased. Also, there is the increase in maintenance cost according to payment period of long term service agreement of IRPC-CP.



## Operating Results



Key revenue drivers	Q1/18	Q4/18	Q1/19	Change +/(-)	
				QoQ	YoY
Power Sales Volume					
Sales Volume - GPSC (GWh)	1,023	1,069	1,056	(1%)	3%
Sales Volume - GLOW (GWh)	-	-	479	n/a	n/a
Power Average Selling Price					
Average Selling Price - GPSC (Baht/kWh)	2.94	3.09	3.14	2%	7%
Average Selling Price - GLOW (Baht/kWh)	-	-	3.04	n/a	n/a
Steam Sales Volume					
Sales Volume - GPSC (Thousand tons)	1,692	1,636	1,587	(3%)	(6%)
Sales Volume - GLOW (Thousand tons)	-	-	374	n/a	n/a
Steam Average Selling Price					
Average Selling Price - GPSC (Baht/ton)	1,053	1,167	1,210	4%	15%
Average Selling Price - GLOW (Baht/ton)	-	-	979	n/a	n/a
Chilled Water Sales Volume					
Sales Volume - GLOW (Thousand RT)	-	-	781	n/a	n/a
Chilled Water Average Selling Price					
Average Selling Price - GLOW (Baht/RT)	-	-	2.29	n/a	n/a

### Revenue

Revenue from Small Power Producer (SPP) in Q1/2019 is Baht 7,189 million, which increased from Q4/2018 by Baht 1,870 million or 35% and from Q1/2018 by Baht 2,297 million or 47%, due to the rise in the company's Small Power Producer's revenue from electricity, steam and other products, and revenue from acquisition of GLOW of Baht 1,846 million including electricity, steam, industrial water and chilled water revenues.



#### Comparing Q1/2019 vs Q4/2018

Total revenue of Small Power Producer (SPP) of the company increased mainly due to:

- The increase in electricity sales of the company's Small Power Producer (SPP) by Baht 19 million since electricity average selling price rose, in line with the increasing trend of natural gas price and Ft rate. Moreover, the escalation of total revenue was also caused by the increase in electricity sales volume of IRPC Clean Power (IRPC-CP), while Rayong Central Utility Plants (CUP) has shown a decrease due to a planned maintenance shutdown of Gas Turbine Generator (GTG) and Heat Recovery Steam Generator (HRSG) in January 2019 for 14 days.
- The increase in steam sales of Baht 10 million was a result of an increase in steam average selling price of Rayong Central Utility Plant (CUP), even though there was the decrease in steam sales volume due to Rayong Central Utility Plant's industrial user planned shutdown during February 2019, together with IRPC Clean Power (IRPC-CP)'s lower steam supply.



#### Comparing Q1/2019 vs Q1/2018

Total revenue of Small Power Producer (SPP) of the company increased mainly due to:

- The increase in electricity sales of the company's Small Power Producer (SPP) of Baht 311 million was from the increase in electricity sales volume of IRPC Clean Power (IRPC-CP) as in Q1/2018, there was a planned maintenance shutdown of Gas Turbine Generator (GTG) and Heat Recovery Steam Generator (HRSG) for 20 days. In addition, there was an increase in electricity average selling price of the company's Small Power Producer (SPP) following the upward trend of natural gas price and Ft rate.
- The increase in steam sales of the company was Baht 138 million due to the increase in steam average selling price of both Rayong Central Utility Plants (CUP) and IRPC-CP, following the upward trend of natural gas price. Even though the steam sales volume of Rayong Central Utility Plants (CUP) and IRPC-CP have declined as explained previously.



## Operating Results



Key cost drivers	Q1/18	Q4/18	Q1/19	Change +/-(-)	
				QoQ	YoY
Natural Gas					
Natural Gas Consumption					
Natural Gas Consumption (*'000 MMBTU) – GPSC	12,179	12,467	12,183	(2%)	0%
Natural Gas Consumption (*'000 MMBTU) – GLOW	-	-	3,501	n/a	n/a
Average Price of Natural Gas					
Average Price of Natural Gas (Baht/MMBTU) - GPSC	249	291	294	1%	18%
Average Price of Natural Gas (Baht/MMBTU) - GLOW	-	-	282	n/a	n/a
Coal					
Coal Consumption					
Coal Consumption (Ton JPU) - GLOW	-	-	58,843	n/a	n/a
Average Coal Cost (exclude transportation cost)					
Average Coal Cost (exclude transportation cost) (USD/Ton JPU) - GLOW	-	-	92.42	n/a	n/a

### Total Cost of Sales of Goods and Rendering of Services (exclude depreciation and amortization)

Total cost of sales of goods and rendering of services (exclude depreciation and amortization) of Small Power Producer (SPP) in Q1/2019 was Baht 5,420 million in which the company's cost of sales of goods and rendering of services increased from Q4/2018 by Baht 1,385 million or 34% and from Q1/2018 by Baht 1,980 million or 58%. Also, the acquisition of GLOW raised the cost of sales of goods and rendering of services by Baht 1,400 million including the costs of natural gas, coal, maintenance and others.



#### Comparing Q1/2019 vs Q4/2018

- The company's cost of sales of goods and rendering of services slightly increased even though the natural gas price decreased by Baht 52 million following the decrease in steam sales volume of IRPC Clean Power (IRPC-CP).
- Maintenance cost decreased by Baht 28 million or 23% due to no major maintenance shutdown of IRPC-CP.
- Other expenses increased by Baht 33 million or 29% since IRPC-CP begins to pay Emission Quota to IRPC Public Company Limited.



#### Comparing Q1/2019 vs Q1/2018

- The company's cost of sales of goods and rendering of services increased due to the increase of natural gas cost by Baht 544 million following the rise in average price of natural gas which in line with the upward trend of crude oil price, whereas there was no significant change in maintenance cost.



## Operating Results



### 3. VSPP and Others Operating Performance



Operating Performance	Q1/18	Q4/18	Q1/19	Change +/(-)	
(Unit: Million Baht)				QoQ	YoY
<b>Revenue</b>					
Revenue from Selling Electricity	44	65	65	0%	48%
Revenue from Selling Chilled Water	42	49	49	0%	17%
Other income	-	50	24	(52%)	n/a
<b>Total Revenue</b>	<b>86</b>	<b>164</b>	<b>138</b>	<b>(16%)</b>	<b>60%</b>
<b>Cost of Raw Materials</b>					
Natural gas and Others	18	57	40	(30%)	122%
<b>Total Cost of Raw Materials</b>	<b>18</b>	<b>57</b>	<b>40</b>	<b>(30%)</b>	<b>122%</b>
Maintenance cost	8	8	7	(13%)	(13%)
Others (exclude depreciation and amortization)	18	14	15	7%	(17%)
<b>Total Cost of Sales of Goods and Rendering of Services</b>	<b>44</b>	<b>79</b>	<b>62</b>	<b>(22%)</b>	<b>41%</b>
<b>Gross Profit</b>	<b>42</b>	<b>85</b>	<b>76</b>	<b>(11%)</b>	<b>81%</b>
<b>Gross Profit Margin</b>	<b>49%</b>	<b>52%</b>	<b>55%</b>	<b>3%</b>	<b>6%</b>

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

#### Gross Profit

The gross profit of Very Small Power Producer (VSPP) and others was Baht 76 million in Q1/2019, which decreased by Baht 9 million or 11% from Q4/2018 and increased by Baht 34 million or 81% from Q1/2018. The details are as follows.



#### Comparing Q1/2019 vs Q4/2018

The gross profit of Very Small Power Producer (VSPP) and others decreased mainly due to:

- The revenue significantly decreased because of Engineering, Procurement and Construction service (EPC) income of Combine Heat and Power Producing Company Limited (CHPP), even though there was no change in the revenue from selling electricity and chilled water as well as revenue from selling electricity of Ichinoseki Solar Power 1 GK (ISP1). The cost of raw materials of CHPP dropped following the progress of EPC work. However, the revenue decreased in a larger portion than the fall in cost of raw materials, resulting in a decrease in gross profit of VSPP and others.



#### Comparing Q1/2019 vs Q1/2018

The gross profit of Very Small Power Producer (VSPP) and others increased mainly due to:

- The revenue increased due to Engineering, Procurement and Construction service (EPC) income of Combine Heat and Power Producing Company Limited (CHPP) as well as the increase in revenue from selling electricity of Ichinoseki Solar Power 1 GK (ISP1) due to less snowfall compared to Q1/2018, which led to higher power generation. The cost of sales of goods and rendering of services of ISP1 significantly dropped, but cost of raw materials of CHPP increased due to EPC work. However, the increase of cost of raw materials of CHPP was in a less proportion than the increase in total revenue, causing the overall gross profit margin of VSPP and others to increase.



## Operating Results


 VSPP

Key revenue drivers	Q1/18	Q4/18	Q1/19	Change +/(-)	
				QoQ	YoY
Power					
Sales volume (GWh)	5	7	7	0%	40%
Average selling price (Baht/kWh)	9.30	9.85	9.78	(1%)	5%
Chilled water					
Sales volume (Thousand RT)	6,194	6,940	6,900	(1%)	11%
Average selling price (Baht/RT)	6.87	7.04	7.09	1%	3%

### Revenue

The revenue of Very Small Power Producer (VSPP) and others was at Baht 138 million in Q1/2019, which decreased by Baht 26 million or 16% from Q4/2018, and increased by Baht 52 million or 60% from Q1/2018. The details are as follows.



#### Comparing Q1/2019 vs Q4/2018

The revenue of Very Small Power Producer (VSPP) and others decreased mainly due to:

- The revenue from VSPP and others was at Baht 138 million in Q1/2019, which decreased by Baht 26 million or 16% from Q4/2018 mainly due to the decrease in revenue from Engineering, Procurement and Construction service (EPC) of Combine Heat and Power Producing Company Limited (CHPP).



#### Comparing Q1/2019 vs Q1/2018

The revenue of Very Small Power Producer (VSPP) and others increased mainly due to:

- The revenue from VSPP and others was at Baht 138 million in Q1/2019, which increased by Baht 52 million or 60% from Q1/2018 mainly due to the increase in EPC service income of Combine Heat and Power Producing Company Limited (CHPP) as well as the increase in electricity generation of Ichinoseki Solar Power 1 GK (ISP1) in Q1/2019 due to less snowfall compared to Q1/2018.

### Total Cost of Sales of Goods and Rendering of Services (exclude depreciation and amortization)

The cost of sales of goods and rendering of services of Very Small Power Producer (VSPP) and others was Baht 62 million, which decreased by Baht 17 million or 22% from Q4/2018, and increased by Baht 18 million or 41% from Q1/2018. The details are as follows.



#### Comparing Q1/2019 vs Q4/2018

The total cost of sales of goods and rendering of services of Very Small Power Producer (VSPP) and others decreased mainly due to:

- The total cost of sales of goods and rendering of services from VSPP and others was at Baht 62 million in Q1/2019, which decreased by Baht 17 million or 22% from Q4/2018 mainly due to other cost of raw materials of Combine Heat and Power Producing Company Limited (CHPP) which dropped by Baht 20 million following the progress of EPC work.



#### Comparing Q1/2019 vs Q1/2018

The total cost of sales of goods and rendering of services of Very Small Power Producer (VSPP) and others increased mainly due to:

- The total cost of sales of goods and rendering of services from VSPP and others was at Baht 62 million in Q1/2019, which increased by Baht 18 million or 41% from Q1/2018 because of the increase in other cost of raw material of Combine Heat and Power Producing Company Limited (CHPP) which rose by Baht 21 million due to EPC work occurring after Q1/2018.



## Operating Results



### 4. Other Expenses

Other Expenses	Q1/18	Q4/18	Q1/19	Change +/-(-)	
(Unit: Million Baht)				QoQ	YoY
Selling and Administrative Expenses	168	296	367	24%	119%
Depreciation and Amortization	415	469	707	50%	70%
Finance Costs	119	136	372	173%	213%
Income Tax Expense	90	(8)	46	646%	(49%)
Net Foreign Exchange Losses	21	3	52	n/a	146%
<b>Total Other Expenses</b>	<b>813</b>	<b>896</b>	<b>1,544</b>	<b>72%</b>	<b>90%</b>

Other expenses in Q1/2019 was at Baht 1,544 million, which increased by Baht 648 million or 72% from Q4/2018 and increased by Baht 731 million or 90% from Q1/2018. The increase was mainly due to the recognition of other expenses from the acquisition of GLOW which takes account for Baht 533 million of other expenses, including Selling and Administrative Expenses of Baht 175 million, Depreciation and Amortization of Baht 229 million, Finance Costs of Baht 94 million, Income Tax Expenses of Baht 3 million and Net Foreign Exchange Losses of Baht 32 million.



#### Comparing Q1/2019 vs Q4/2018

- **Selling and Administrative Expenses:** Selling and Administrative expenses was Baht 367 million in Q1/2019, which increased Baht 71 million or 24% from Q4/2018. However, selling and administrative expenses of the company, excluding GLOW, decreased by Baht 104 million mainly due to the expenses that was used to support business expansion in Q4/2018.
- **Depreciation and Amortization:** Depreciation and Amortization costs was Baht 707 million in Q1/2019, which increased by 238 million or 51% from Q4/2018. The increase in depreciation and amortization costs of the company, excluding GLOW, accounted for Baht 9 million, mainly due to the increase in assets that is used for supporting business expansion.
- **Finance Costs:** Finance costs was Baht 372 million in Q1/2019, which increased Baht 236 million or 174% from Q4/2018. The rise in finance costs of the company was due to the increase in interest expenses and financing fee of short-term loan for acquisition of GLOW which accounted for Baht 142 million.
- **Income Tax Expenses:** Income tax expenses was Baht 46 million in Q1/2019, which increased by Baht 54 million or 646% from Q4/2018. The increase in income tax expenses of the company, excluding GLOW, accounted for Baht 51 million mainly due to better financial performance of the company.
- **Net Foreign Exchange Losses:** Net foreign exchange losses was Baht 52 million in Q1/2019, which consisted of net foreign exchange losses of the company excluding GLOW of Baht 20 million, and the net foreign exchange losses from acquisition of GLOW of Baht 32 million, which is the recognition of the difference of foreign exchange rate on 14 March 2019 and 31 March 2019. The net foreign exchange losses in Q1/2019 increased from Q4/2018 by Baht 49 million.



#### Comparing Q1/2019 vs Q1/2018

- **Selling and Administrative Expenses:** Selling and Administrative expenses was Baht 367 million in Q1/2019, which increased Baht 199 million or 119% from Q1/2018. The selling and administration expenses of the company, excluding GLOW, increased by Baht 24 million mainly due to the rise in administrative expenses that was used to support business expansion.
- **Depreciation and Amortization:** Depreciation and Amortization costs was at Baht 707 million in Q1/2019, which increased by 292 million or 70% from Q1/2018. The increase in depreciation and amortization costs of the company, excluding GLOW, accounted for Baht 63 million mainly due to the increase in assets that is used for supporting business expansion.
- **Finance Costs:** Finance costs was at Baht 372 million in Q1/2019, which increased by Baht 253 million or 213% from Q1/2018. The rise in finance costs of the company, excluding GLOW, accounted for Baht 159 million due to the increase in interest expenses and financing fee of short-term loan for acquisition of GLOW.
- **Income Tax Expenses:** Income tax expenses was Baht 46 million in Q1/2019, which decreased by Baht 44 million or 49% from Q1/2018. The decrease in income tax expenses of the company, excluding GLOW, accounted for Baht 47 million due to lower financial performance of the company.
- **Net Foreign Exchange Losses:** Net foreign exchange losses was Baht 52 million in Q1/2019 as explained previously, which increased by Baht 31 million or 148% from Q1/2018.


**Operating Results**


## Shares of Profit of Associates and Joint Ventures

Shares of Profit of Associates and Joint Ventures	% of shareholding	Q1/18	Q4/18	Q1/19	Change +/-	
(Million Baht)					QoQ	YoY
<b>Independent Power Producer (IPP)</b>						
Xayaburi Power Company Limited (XPCL)	25%	(7)	(6)	(8)	(33%)	(14%)
<b>Small Power Producer (SPP)</b>						
Bangpa-in Cogeneration Company Limited (BIC)	25%	35	34	32	(6%)	(9%)
Nava Nakorn Electricity Generating Company Limited (NNEG)	30%	36	28	7	(75%)	(81%)
Nam Lik 1 Power Company Limited (NL1PC)	40%	10	19	15	(21%)	50%
<b>Total Small Power Producer</b>		<b>81</b>	<b>81</b>	<b>54</b>	<b>(33%)</b>	<b>(33%)</b>
<b>Very Small Power Plant (VSPP)</b>						
Thai Solar Renewable Company Limited (TSR)	40%	78	82	84	2%	8%
<b>Total shares of profit of associates and joint ventures</b>		<b>152</b>	<b>157</b>	<b>130</b>	<b>(17%)</b>	<b>(14%)</b>

Shares of profit of associates and joint ventures in Q1/2019 decreased by Baht 27 million or 17% from Q4/2018, and decreased by Baht 22 million or 14% from Q1/2018 due to the following reasons:


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**(XPCL):** Shares of profit from XPCL decreased by Baht 2 million from Q4/2018 because of the increase in operating expenses from testing power generating system during unit operation period (UOP), as well as an increase in depreciation. While compared to Q1/2018, shares of profit decreased by Baht 1 million due to the increase in operating expenses and depreciation.


**Bangpa-In Cogeneration Company Limited (BIC):**

Shares of profit from BIC dropped by Baht 2 million from Q4/2018, and dropped by Baht 3 million from Q1/2018 due to the rise in natural gas price which led to higher electricity cost in this quarter.


**Nava Nakorn Electricity Generating Company**

**Limited (NNEG):** Shares of profit from NNEG decreased by Baht 21 million from Q4/2018 due to loss in exchange rate and planned maintenance shutdown. While comparing to Q1/2018, the shares of profit decreased by Baht 29 million resulted from higher cost of natural gas and steam that caused the decrease in gross profit, and loss in exchange rate.


**Nam Lik 1 Power Company Limited (NL1PC):**

Shares of profit from Nam Lik 1 (NL1PC) dropped by Baht 4 million from Q4/2018, but increased by Baht 5 million from Q1/2018 from the accounting adjustment.


**Thai Solar Renewable Company Limited (TSR):** Shares of profit from Thai Solar Renewable Company Limited (TSR) rose by

Baht 2 million from Q4/2018 and increased by Baht 6 million from Q1/2018 due to the decrease in selling and administration expenses as well as lower interest expenses.

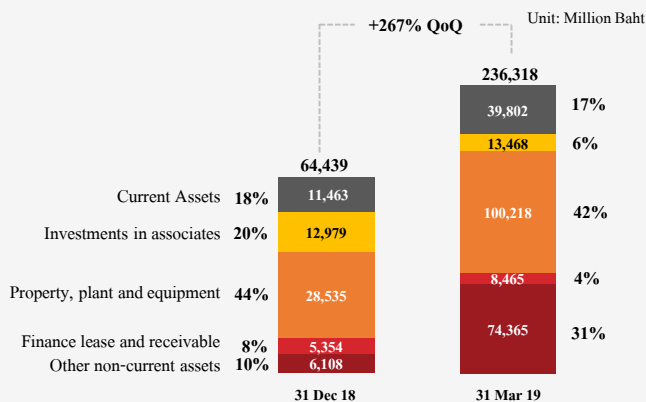


## Operating Results



# Summary of Financial Position of the Company and its Subsidiaries

### Total Assets

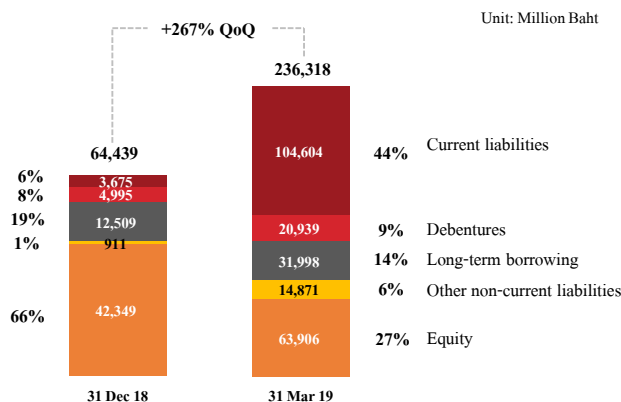


#### Total Assets

As of 31 March 2019, the total assets of the company and its subsidiaries were at Baht 236,318 million, increased by Baht 171,879 million or 267% from 31 December 2018. The gain resulted mainly from the acquisition of GLOW. The details of significant changes are as follows:

- **Current Assets** increased by Baht 28,339 million or 247%
- **Property, Plant and Equipment** increased by Baht 71,683 million or 251%
- **Other non-current assets** increased by Baht 68,257 million due to the increase in Goodwill from acquiring GLOW. The company is under the process of determining fair value of the acquired net assets and reviewing purchase price allocation ("PPA"), therefore, the estimated goodwill may be subject to further adjustments depending on the determination of fair value and the result of the PPA, which is expected to be finalized within 12 months from the date which the Company has control.

### Total Liabilities and Equity



#### Total Liabilities

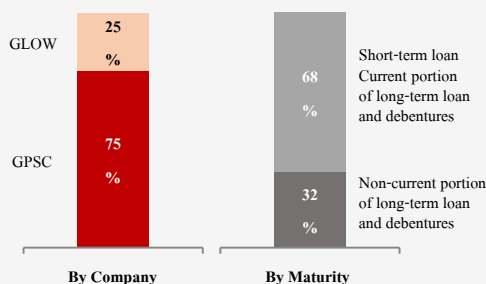
As of 31 March 2019, total liabilities of the company and its subsidiaries were Baht 172,412 million, increased by Baht 150,322 million or 680% from 31 December 2018. This was mainly due to the following factors:

- **Current liabilities** increased by Baht 100,929 million mainly resulted from:
  - An increase in short-term loan from financial institution and shareholders amounting to Baht 93,000 million for the purpose of GLOW's share acquisition.
- **Long-term borrowing and debentures** increased by Baht 35,433 million.
- **Other non-current liabilities** increased by Baht 13,960 million mainly resulted from consolidating financial statement with GLOW.

#### Total Equity

As of 31 March 2019, the total shareholders' equity of the company and its subsidiaries was at Baht 63,906 million, which increased by Baht 21,557 million or 51% from 31 December 2018. This was mainly due to the increase in non-controlling interest from acquisition of GLOW.

### Total Interest-Bearing Debt: Baht 146,160 million



#### Debt Profile

- As of 31 March 2019, the company and its subsidiaries has total interest-bearing debt of Baht 146,160 million which comprised of current liabilities amounting to Baht 99,080 million or 68% and non-current liabilities amounting to Baht 47,080 million or 32%.



## Operating Results



### Cash Flow Analysis

Cash Flow	Q1/ 2019
(Unit: Million Baht)	
Net cash flow from operating activities	1,728
Net cash used in investing activities	(79,259)
Net cash flow from financing activities	92,324
<b>Net cash and cash equivalent (before exchange rate effect)</b>	<b>14,793</b>
Effect of exchange rate to cash and cash equivalent	(28)
<b>Net increase in cash and cash equivalents (after taken into account exchange rate)</b>	<b>14,765</b>
Cash and cash equivalents at the beginning of the period*	6,009
<b>Cash and cash equivalents at the end of the period*</b>	<b>20,774</b>

\*Included restricted cash and temporary investment

For Q1/2019, the company and its subsidiaries has a net increase in cash and cash equivalents increased by Baht 14,765 million from Q4/2018, primarily resulting from the increase in financing activities.



#### Cash Flow from Operating Activities

In Q1/2019, the company and its subsidiaries had net cash inflow from operating activities of Baht 1,728 million, which increased from cash received from operating activities for Baht 1,744 million net with the corporate income tax payments of Baht 16 million.



#### Cash Flow from Financing Activities

In Q1/2019, the company and its subsidiaries had net cash received from financing activities of Baht 92,324 million, which cash received is mainly from the additional drawdown of short-term loans from financial institutions and related parties of Baht 93,000 million and also the cash to pay interest and fees to financial institutions of Baht 676 million.



#### Cash Flow from Investing Activities

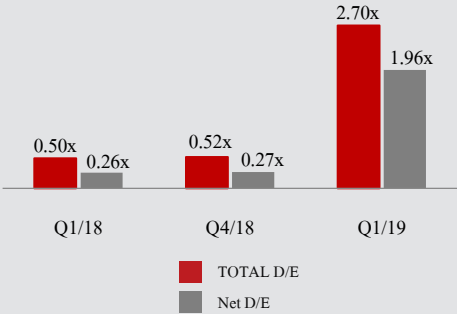
Investment	Q1/ 2019
(Unit: Million Baht)	
CAPEX and Fixed Assets	702
Cash Paid for Investments in Associates and Subsidiaries	78,898
Dividend and Others	341

In Q1/2019, the company and its subsidiaries has total net cash to be used in investing activities of Baht 79,259 million due to land and construction payment as well as additional investments from the company and its subsidiaries of Baht 702 million. In addition, the company also paid Baht 78,898 million to invests in its associates and subsidiaries. On the other hand, the company had received dividend from its related companies of Baht 158 million and others of Baht 183 million.

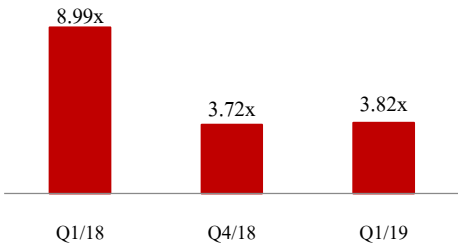


## Key Financial Ratios

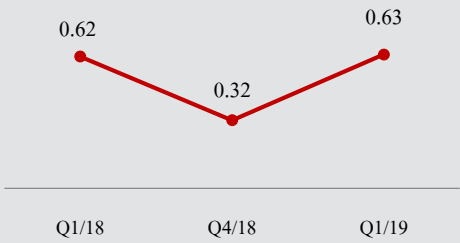
Total D/E and Net D/E Ratios  
(Times)



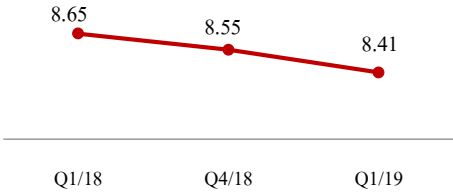
Interest Coverage Ratio  
(Times)



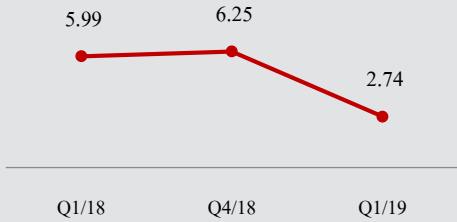
Earning per share (EPS)  
(Baht/share)



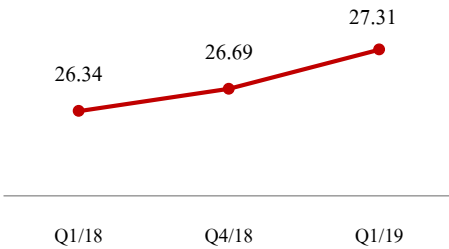
ROE  
(%)



ROA  
(%)

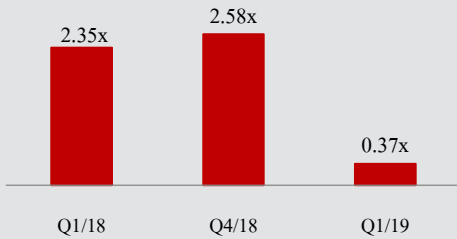


Book Value per Share (BVPS)  
(Baht/share)

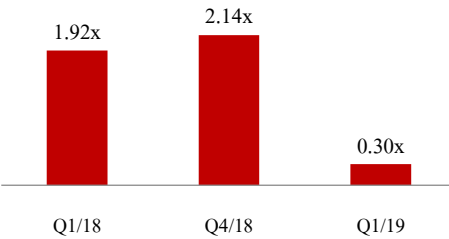


Note: ROA has decreased since the company realized operating performance of GLOW for 18 days, while realized full amount of total assets

Current Ratio  
(Times)



Quick Ratio  
(Times)





# Update of Projects Under Construction



Xayaburi Power Company Limited (XPCL) is a Run-of-River Hydropower Plant located on Khong River, in Lao PDR

### Project summary

- **Capacity:** Electricity 1,285 Megawatts
- **Customers:** Power Purchase Agreement (PPA) with EGAT 1,220 Megawatts and Electricite Du Laos (EDL) 60 Megawatts, for a period of 31 years.
- **GPSC holding:** 25% of total shares
- **Project updates:** At the end of March 2019, the construction progress of XPCL was at 98.7%. The main construction tasks, such as power house, intermediate block, fish ladder and 500 kV transmission line were mostly completed. The commissioning test of each unit has been in progress in order to sell electricity to EGAT during the Unit Operation Period (UOP).



Nam Lik 1 Power Company Limited (NL1PC) is a Run-of-River Hydropower Plant located in the Northern of Vientiane, Capital City of Lao PDR

### Project summary

- **Capacity:** Electricity 64.7 Megawatts
- **Customers:** Power Purchase Agreement (PPA) with Electricite Du Laos (EDL) 63.8 Megawatts, for a period of 30 years.
- **GPSC holding:** 40% of total shares
- **Project updates:** Overall construction and commissioning test was completed. EDL Team joined the commissioning test during 5-24 February 2019 to witness and approve such test of 2 generation units and distribution to EDL grid system. NL1PC has operated continuously since 25 February 2019 while certificate of COD is being considered by EDL.

Xayaburi Power Company Limited  
(XPCL)

1Q19

98.7%

SCOD: Q4/2019

Nam Lik 1 Power Company Limited  
(NL1PC)

1Q19

100%

SCOD: 2019

## Update of Projects Under Construction

### Rayong Central Utility Plant 4 (CUP-4)



1Q19

87.8%

SCOD: Q3/2019



Rayong Central Utility Plant 4 (CUP-4) is a gas-fired cogeneration power plant located in Asia Industrial Estate, Rayong Province

#### Project summary

- **Capacity:** Electricity 45 Megawatts  
Stream 70 Tons per hour
- **Customers:** Industrial users in Asia Industrial Estate and neighboring industrial estate
- **GPSC holding:** 100% of total shares
- **Project updates:** At the end of March 2019, the progress was around 87.8%. Main installations and erections have been completed, to prepare for the following unit test and commissioning. The progress of the inter-connection of power and steam pipeline has been achieved over 80%. Next activity will be integration test and commissioning. The commercial operation is targeted to be in Q3/2019.



### Nava Nakorn Electricity Generating (NNEG) Expansion Phase



1Q19

28.3%

SCOD: Q3/2020

Nava Nakorn Electricity Generating Company Limited (NNEG) is a gas-fired SPP cogeneration located in Nava Nakorn Industrial Promotion Zone, Pathumthani Province. NNEG is expanding its capacity further by 60 Megawatts and 10 Tons per hour of steam to serve the increasing demand from industrial users

#### Project summary

- **Total Capacity of NNEG:** Electricity 185 Megawatts  
Steam 40 Tons per hour
- **Customers:** EGAT (SPP Firm) for 90 Megawatts for 25 years and industrial users in Nava Nakorn Industrial Promotion Zone
- **GPSC holding:** 30% of total shares
- **Project updates:** At the end of March 2019, the project progress has reached 28.3%. Piling work was completed while main tasks such as engineering, foundation and procurement work for machines and equipment were executed as planned.



# Appendix



## Plan of the company, its subsidiaries, associates and joint venture

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
<b>Total capacity of IPP</b>			<b>3,625</b>	<b>2,118</b>	<b>2,118</b>	<b>-</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
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
GLOW Energy CFB 3	Coal	Map ta phut Industrial Estate	85	85	85	79	IU	GLOW (100%)	2010
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



# Appendix

Power plant	Fuel Type	Location	Installed	Equity Power	Equity in	Steam equity	Customers	Company	Commercial
			Power capacity	capacity	oepration	capacity			Operation
			(MW)	(MW)	(MW)	(t/h)			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/ 2020
NNEG Expansion	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	-	-	IU	GPSC (100%)	2019
Rayong Expansion (CUP-4)	Natural gas	Hemaraj eastern industrial estate	45	45	-	70	IU	GPSC (100%)	2019
Total capacity of SPP			2,614	2,191.90	2,113.90	2,701			
Very Small Power Producer (VSPP)									
CHPP	Natural gas	Government complex	5	5	5	-	MEA/ Government complex	GPSC (100%)	2008
CHPP (Solar)	Solar	Chanthaburi	5	5	5	-	PEA	GPSC (100%)	2016
Glow Energy Solar Plant	Solar	Asia Industrial Estate	1.55	1.55	1.55	-	EGAT	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
Chonburi Clean Energy (CCE)	Industrial waste	Hemaraj Chonburi Industrial Estate	8.6	2.87	-	-	PEA/ IU	GLOW (33%)	2019
Rayong WTE	RDF	Rayong	9.8	9.8	-	-	PEA	GPSC (100%)	2021
Total capacity of VSPP			111.82	58.09	45.42	-			
Others									
ISP1	Solar	Japan	20.8	20.59	20.59	-	IU	GPSC (99%)	2017
NL1PC	Hydro	Loas	65	26	-	-	EDL	GPSC (40%)	2019
XPCL	Hydro	Loas	1,285	321	-	-	EGAT/ EDL	GPSC (25%)	2019
ERU	Petroleum Pitch	Chonburi	250	250	-	175	Thai Oil PLC	GPSC (100%)	2023
Total capacity of Others			1,620.90	617.59	20.59	175			
Total			7,971.62	4,985.58	4,297.91	2,876			

Note:  
IU : Industrial User  
EGAT : Electricity Generating Authority of Thailand  
MEA : Metropolitan Electricity Authority  
PEA : Provincial Electricity Authority  
EDL : Electricite du Laos