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Management Discussion and Analysis



## Significant Events in Q2/2023 - Present

- The Energy Regulatory Commission (ERC) has announced a decrease in the Automatic Adjustment Mechanism (Ft) for the period between May August, 2023. The new Ft is THB 0.9119 per unit, down by THB 0.6373 per unit from the previous period. This reduction is as a results of the weakening natural gas cost, which is a key energy supply for electricity production, and the decision to reduce a loss of Electricity Generating Authority of Thailand (EGAT). The new Ft is expected to gradually reduce EGAT's loss and alleviate some of the impacts on households in terms of the cost of living. Moreover, the Company's margin in selling electricity to industrial customers is not significantly affected, since energy prices, including natural gas and coal prices, have decreased significantly from the previous quarter. The Company remains to closely monitor the natural gas and coal prices while optimizing the production process to ensure efficiency in its power plants. The Company also has generated electricity and steam from the lowest marginal costs of production first or a merit order and has focused on achieving synergy by connecting electricity and steam networks together with continuous enhancing other synergies to maximize returns.
- On June 14, 2023, GHECO-One Co., Ltd. ("GHECO-One"), subsidiary which GPSC holds 65 percent of shares, received a Request for Arbitration from the International Chamber of Commerce (ICC). The Claimant submitting the Request for Arbitration is a supplier of coal to GHECO-One under Coal Supply and Transportation Agreements (CTSAs), regarding GHECO-One's cancellation purchases of coal shipments according to Electricity Generating Authority of Thailand or EGAT's reserve shutdown instruction during March October, 2023. GHECO-One's made decisions based on consideration of terms and conditions in the CSTAs and the Power Purchase Agreement with EGAT and it is preparing its defense to the claims asserted in the Request for Arbitration. The Company will provide a further notice, If there are any significant developments.
- On June 27, 2023, the Company resolved to approve an inclusion of battery energy storage system (BESS) to India business operation and a capital increase in Avaada Energy Private Limited ("AEPL") amounted to 42.93 percent stake in accordance with its shareholding. The investment in AEPL will be made through Global Renewable Synergy Co., Ltd. ("GRSC"), which is a wholly owned subsidiary of GPSC. Total investment value is approximately INR 19,167 million or equivalent to about THB 8,625 million. Furthermore, the capital injection schedule is subject to potential development, with the first batch amounting to INR 8,649 million, approximately THB 3,892 million, increased on 25 July 2023. During the first half this year (January June, 2023), AEPL has already secured PPAs of 1,956 MW, winning the bidding from e-Reverse auction. The projects shall have been accomplished within 18 months.

## Q2/2023 Operating Summary

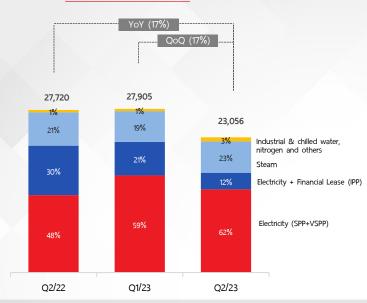
- Net profit for the Company in Q2/2023 was THB 309 million, decreased by THB 375 million or from Q2/2022 mainly due to lower contribution from its associates and joint ventures, namely Xayaburi hydro power plant (XPCL) and Changfang and Xidao (CFXD). XPCL's share of profits reduced by THB 477 million according to lower water levels compared to the same period of last year, which had higher than average water levels. In addition, CFXD contributed a higher share of loss of THB 132 million due to a scheduled shutdown of wind turbine generation to connect and test the system. Moreover, the Company's Other income and expenses and Others decreased by THB 276 million mainly because in Q2/2022, the Company recognized net profit (before tax and related expenses) of THB 388 million from selling battery-related assets to NUOVO PLUS. However, GHECO-One recorded higher Availability Payment (AP), thanks to no outage incidence in Q2/2023. SPP's operating performance increased significantly driven by an increased Automatic Adjustment Mechanism (Ft). This resulted in an improved electricity margin sold to industrial customers, despite having challenges from rising natural gas and coal prices and lower demand for electricity and steam from maintenance shutdown of some industrial customers in Q2/2023.
- When comparing to Q1/2023, net profit for the Company decreased by THB 808 million mainly due to the Ft decrease in May 2023, despite partially offsetting with decreasing energy prices. In addition, the planned maintenance of Glow Energy Phase 5 for 25 days and EGAT's instruction for dispatch and using diesel for operation at Sriracha Power Plant (SRC) and Glow IPP (GIPP), contributed to the decline. Moreover, an inventory adjustment item of THB 336 million was recognized due to GHECO-One's periodic coal inventory counting.

Overall operating results of the Company and its subsidiaries	Q2/22	Q1/23	Q2/23	Chang	e +/(-)	6M/22	6M/23	Change +/(-)
(unit: THB million)	(revised)			YoY	QoQ	(revised)		YoY
Operating revenue	27,720	27,905	23,056	(17%)	(17%)	54,980	50,962	(7%)
Cost of sales (excluding depreciation and amortization)	(23,961)	(23,052)	(18,945)	(21%)	(18%)	(48,318)	(41,997)	(13%)
Gross profit	3,759	4,854	4,111	9%	(15%)	6,662	8,965	35%
Selling and administrative expenses	(436)	(369)	(596)	37%	62%	(827)	(966)	17%
Other operating income	78	84	(19)	(125%)	(123%)	146	65	(56%)
EBITDA	3,401	4,568	3,496	3%	(23%)	5,981	8,064	35%
Depreciation and amortization	(2,296)	(2,206)	(2,357)	3%	7%	(4,519)	(4,563)	1%
EBIT	1,105	2,362	1,139	3%	(52%)	1,462	3,501	140%
Finance costs	(1,048)	(1,242)	(1,342)	28%	8%	(2,022)	(2,585)	28%
Other non-operating income and expenses	553	27	277	(50%)	908%	1,410	304	(78%)
Dividend received and shares of profit of associates and joint ventures	435	203	178	(59%)	(12%)	608	382	(37%)
Income tax expenses	(53)	(105)	233	(539%)	(321%)	(20)	128	(748%)
Profit before FX and extraordinary items	992	1,245	484	(51%)	(61%)	1,437	1,729	20%
Net foreign exchange gain (loss)	(184)	73	33	118%	55%	(252)	105	(142%)
Net profit	808	1,318	517	(36%)	(61%)	1,185	1,835	55%
Non-controlling interests	(124)	(201)	(207)	67%	3%	(188)	(408)	117%
Net profit for the Company	684	1,118	309	(55%)	(72%)	997	1,427	43%
Adjusted Net Income <sup>1</sup>	1,204	1,571	670	(44%)	(57%)	1,974	2,241	13%
Gross profit margin (%)	14%	17%	18%	4%	0.4%	12%	18%	5%
Net profit margin (%)	2%	4%	2%	(0.2%)	(2%)	2%	3%	1%
Adjusted Net Income margin (%)	4%	6%	3%	(1%)	(3%)	4%	4%	1%

Notes: 1. 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)

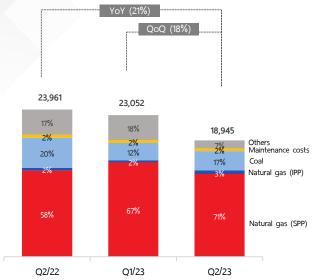
## Q2/2023 Operating Summary

Operating Revenue (THB million, %)



## **Executive Summary**

Cost of Sales (THB million, %)



## Quarterly Comparison of Company's Performance

#### Q2/2023 Gross Profit Breakdown (THB million, %)



Gross profit of Q2/2023 was THB 4,111 million, increased by THB 352 million or 9% from Q2/2022 but decreased by THB 742 million or 15% from Q1/2023.

## **YOY** Q2/2023 VS Q2/2022

- Gross profit of Independent Power Producer (IPP) decreased by THB 192 million or 11%, mainly due to a lower gross of profit from SRC and GIPP since the power plants had a lower margin from lower operation using diesel instead of natural gas caused by EGAT's dispatch instruction. However, GHECO-One earned a higher Availability Payment (AP) because there was no plant maintenance in Q2/2023.
- Gross profit of Small Power Producer (SPP) increased by THB 464 million or 24% mainly due to Ft increased which could help increasing the margin from electricity sales to industrial customers. Even though there were an increase in natural gas and coal prices and a decrease in the electricity and steam sales volume to industrial customers, because some industrial customers had maintenance shutdown.

## **QOQ** Q2/2023 VS Q1/2023

- Gross profit of Independent Power Producer (IPP)
  increased by THB 24 million or 2%, mainly due to
  a rise in AP of GHECO-One due to a planned
  maintenance in Q1/2023. However, gross profit of
  SRC decreased mainly due to a lower margin from
  lower operation using diesel instead of natural gas
  caused by EGAT's dispatch instruction.
- Gross profit of Small Power Producer (SPP) decreased by THB 789 million or 25% mainly due to a planned maintenance of Glow Energy Phase 5 and a lower margin from electricity sales revenue to industrial customers due to the Ft decreased to THB 0.9119 per unit in May 2023. Despite the total electricity and steam sales volume increased.

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

# **YOY** Q2/2023 VS Q2/2022

- Gross profit of Very Small Power Producer (VSPP)
  and others increased by THB 79 million or 196%
  mainly due to higher revenues from Engineering,
  Procurement and Construction services (EPC) and
  chilled water of Combine Heat and Power Producing
  Co., Ltd. (CHPP).
- Other income and expenses in Q2/2023, was THB 227 million, decreased by THB 276 million mainly due to the Company recognized a gain from selling shares in battery business to NUOVO PLUS amounting THB 388 million (before tax and related expenses).
- Others in Q2/2023, Other expenses was THB 4,030 million, increased by THB 13 million.
- Dividend received and shares of profit of associates and joint ventures in Q2/2023 was THB 178 million, decreased by THB 257 million or 59%, mainly from shares of profit from Xayaburi Power Co., Ltd. (XPCL) decreased by THB 477 million caused by lower water level resulting in lower electricity production. Meanwhile, share of profit from Avaada Energy Private Limited (AEPL) increase THB 299 million from additional COD projects.
- Non-controlling interests decreased by THB 83 million

## **qoq** q2/2

#### Q2/2023 VS Q1/2023

- Gross profit of Very Small Power Producer (VSPP) and others increased by THB 22 million or 23% mainly due to higher revenues from the Engineering, Procurement and Construction service (EPC) and chilled water of Combine Heat and Power Producing Co., Ltd. (CHPP).
- Other income and expenses and Others in Q2/2023, was THB 227 million, increased by THB 249 million mainly due to the Company recognized partial insurance claim of Sriracha power plant which compensated the unplanned maintenance in 2022 amounting THB 96 million and the write-off machines and equipment of GHECO-One amounting THB 114 million in Q1/2023 from the planned maintenance.
- Others in Q2/2023, Other expenses was THB 4,030 million, increased by THB 180 million, mainly from renewal insurance premium, adjustment of maintenance cost, and advisory fee for investment.
- Dividend received and shares of profit of associates and joint ventures in Q2/2023, was THB 178 million, decreased by THB 25 million or 12%, mainly from the decrease in dividend from Ratchaburi Power Co., Ltd. (RPCL) by THB 90 million and loss in share profit from CFXD increased by THB 90 million from Q1/2023 due to a scheduled shutdown of wind turbine generation to connect and test the system. While loss in share of profit from Xayaburi Power Co., Ltd. (XPCL) decreased by THB 85 million from Q1/2023 due to higher water volume as seasonality.
- Non-controlling interests decreased by THB 7 million.

## Half-year Comparison of Company's Performance (6M/2023 VS 6M/2022)

Net profit for the first half of 2023 was THB 1,427 million, increased by THB 430 million or 43% from the first half of 2022 which was mainly due to the following:

- Gross profit of SPP increased by THB 2,211 million due to increased fuel adjustment charge (Ft) in line with energy cost, resulting in higher margin in selling electricity to industrial customers, despite lower demand for electricity from industrial customers due to the maintenance shutdown.
- Other income and expenses and Others decreased by THB 1,106 million due to recognized gain from selling shares in Ichinoseki Solar Power 1 GK (ISP1) amounting THB 785 million (before tax) and gain from selling shares in battery business to NUOVO PLUS amounting THB 388 million (before tax and other expense).
- Shares of profit from Xayaburi Power Co., Ltd. (XPCL) decreased by THB 581 million due to lower water level compared to the same period of last year, which had higher than average water levels.

## Awards Received in Q2/2023 and 2023 Economic Outlook

#### Awards Received in Q2/2023 - Present

On 26 May 2023, the company received four awards from the 13<sup>th</sup> Asian Excellence Awards 2023 consist of 1. Asia's Best CEO presented to Mr. Worawat Pitayasiri, President and Chief Executive Officer, 2. Asia's Best CFO given to Mr. Thitipong Jurapornsiridee, Chief Financial Officer, 3. Best Investor Relations Professional given to Mrs. Sirobon Boontaworn, Senior Vice President Corporate Finance and Investor Relations and 4. Best Investor Relations Company. It organized by Corporate Governance Asia magazine, the leading financial magazine in Hong Kong and Asia. The said awards are presented to the leaders and the organizations with excellence in organizational management, corporate governance, financial management and investor relations, as well as social and environmental responsibility in the international level. GPSC received awards for the fourth consecutive year, representing the outstanding commitment to business development to become an energy innovation company based on corporate governance with the secured energy system of the country.

#### 2H2023 Economic Outlook

Thailand economic situation: The Bank of Thailand (BOT) predicts the GDP will be 3.6% in 2023 due to a broad-based recovery significantly due to tourism expansion than expected at the beginning of the year, which supports employment and labor income, sustaining private consumption. Meanwhile, the export sector shows signs of rebounding in line with prediction and continuous growth. BOT predicts the economy may grow better than the previous prediction cause the urge economy policy of the new government. However, BOT would monitor developed countries' global economic trends and monetary policy uncertainty.

Furthermore, the BOT predicts that inflation will be 2.5% in 2023 due to easing electricity and oil prices pressures. But the persistently high inflation remains a risk, as economic growth and producers could pass on higher cost absorbed, which supported new government policy. BOT should continuously follow prices goods adjustment of entrepreneurs.

Ft adjustment: on July 26, 2023, the Energy Regulatory Commission (ERC) passed a resolution concurring the Automatic Adjustment Mechanism (Ft) for the collection of electricity invoices during September – December 2023 at THB 0.6689 per unit. There was considered the impact on electricity users and the financial limitation of the Electricity Generating Authority of Thailand (EGAT) could operate stably and continuously consisting of (1) the Fuel Adjustment Cost (FAC) decrease to THB 0.2858 per unit cause the natural gas prices decline which is the primary fuel used to generate electricity. The average natural gas prices forecasted THB 346 per MMBTU from September to December 2023. (2) Accumulated Factor (AF) at THB 0.3831 per unit to repay debt to EGAT and receive full repayment within April 2025. However; EGAT would manage the burden cost remaining amount of THB 111,869 million. As a result, the Ft for the collection of average electricity charge (excluding VAT) decreased to THB 4.45 per unit from THB 4.70 per unit.

## Operating Results: Independent Power Producer (IPP)

Operating results	Q2/22 (revised)	Q1/23 (revised)	Q2/23	Change	e +/(-)	6M/22 (revised)	6M/23	Change +/(-)
(unit: THB million)	(1011304)	(.eviseu)		YoY	QoQ	(1011304)		YoY
Revenue from electricity sales								
- Availability Payment: AP	1,435	975	1,899	32%	95%	2,642	2,874	9%
- Energy Payment: EP	6,859	4,640	842	(88%)	(82%)	15,388	5,482	(64%)
- Money received to submit to Power Developments Funds	0	7	2	N/A	(69%)	0	9	N/A
Total revenue from electricity sales	8,294	5,622	2,743	(67%)	(51%)	18,030	8,365	(54%)
Revenue from finance lease agreement	160	106	96	(40%)	(9%)	320	202	(37%)
Other income	0	0	0	N/A	N/A	0	0	N/A
Total revenue	8,454	5,728	2,839	(66%)	(50%)	18,350	8,567	(53%)
Cost of raw materials						-	-	
- Natural gas <sup>1</sup>	475	367	568	20%	55%	926	935	1%
- Coal	3,033	648	336	(89%)	(48%)	5,173	984	(81%)
- Others	2,900	2,855	68	(98%)	(98%)	8,499	2,922	(66%)
Total cost of raw materials	6,408	3,870	971	(85%)	(75%)	14,598	4,842	(67%)
Maintenance cost	96	104	78	(19%)	(25%)	191	181	(5%)
Others (excluding depreciation and amortization)	184	204	216	17%	6%	370	420	14%
Total cost of sales of goods and rendering of services	6,688	4,178	1,265	(81%)	(70%)	15,159	5,443	(64%)
Gross profit	1,766	1,550	1,574	(11%)	2%	3,190	3,124	(2%)
Gross profit margin	21%	27%	55%	35%	28%	17%	36%	19%

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

## Revenue: IPP

	02/22	Q2/22 Q1/23		Chang	e +/(-)	cMaa	cM22	Change +/(-)
Key revenue drivers	QZIZZ	Q1/23	Q2/23	YoY	QoQ	6M/22	6M/23	YoY
Availability Rate (%)								
Sriracha Power Plant	90%	97%	100%	10%	3%	87%	99%	12%
GIPP	100%	89%	97%	(3%)	8%	100%	93%	(7%)
GHECO-One	84%	41%	100%	16%	59%	80%	71%	(10%)
Electricity dispatch (GWh)								
Sriracha Power Plant	390	467	0	(100%)	(100%)	1,179	467	(60%)
GIPP	32	76	116	263%	53%	125	192	54%
GHECO-One	1,214	202	0	(100%)	(100%)	2,299	202	(91%)
Houay Ho Power	138	92	131	(5%)	42%	245	223	(9%)
Total electricity dispatch	1,774	838	247	(86%)	(70%)	3,848	1,084	(72%)
Average selling price								
Average selling price (THB/kWh)	4.68	6.71	11.10	137%	65.4%	4.69	7.72	(65%)

## Quarterly Comparison of IPP's Revenue

## **YOY** Q2/2023 VS Q2/2022

Revenue from IPP business in Q2/2023 was THB 2,839 million, decreased by THB 5,615 million or 66% yoy mainly contributed by:

- Revenue from Sriracha Power Plant decreased by THB 2,893 million mainly from a lower Energy Payment (EP) resulted from a lower electricity dispatch instructed by EGAT.
- Revenue from IPP business of GLOW decreased by THB 2,722 million mainly due to a THB 2,672 million decease in revenue of GHECO-One. The decrease is resulted from a lowered EP following the reserve shutdown instructed by EGAT starting from March onwards.

## **QOQ** Q2/2023 VS Q1/2023

Revenue from IPP business in Q2/2023 was THB 2,839 million, decreased by THB 2,888 million or 50% qoq mainly contributed by:

- Revenue from Sriracha Power Plant decreased by THB 2,782 million mainly from a lower EP resulted from a lower electricity dispatch instructed by EGAT.
- Revenue from IPP business of GLOW decreased by THB 106 million mainly due to a THB 175 million decease in revenue of GHECO-One. The decrease is resulted from lowered EP following the reserve shutdown instructed by EGAT starting from March. Despite this, GHECO-One had a higher AP, due to zero maintenance in Q2/2023, while there were planned maintenance lasting 54 days in Q1/2023. Meanwhile, a revenue of HHPC increased by THB 76 million thanks to higher electricity dispatch (due to seasonality).

## Half-year Comparison of IPP's Revenue (6M/2023 VS 6M/2022)

Revenue from IPP business was THB 8,567 million, decreased by THB 9,783 million or 53% from 6M/2022 primarily due to:

- Revenue from Sriracha Power Plant decreased by THB 5,488 million mainly due to a lower EP, resulted from a lower electricity dispatch instructed by EGAT, despite a slight increase in its Availability Payment (AP).
- Revenue from IPP business of GLOW decreased by THB 4,295 million mainly for two main reasons: firstly, a decline in revenue from GHECO-One due to lowered EP caused by lower electricity dispatch, as instructed by EGAT. This dispatch reduction was a result of EGAT instructing the plant to be in reserve shutdown mode from March to November, 2023. Additionally, GHECO-One's AP also decreased due to an increase in planned maintenance shutdown, lasting 54 days in 6M/2023, compared to a total maintenance shutdown of 31 days in 6M/2022. Secondly, there was a decrease in revenue from GIPP due to lowered EP caused by lower natural gas cost, despite a higher electricity dispatch.

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

Key cost drivers	Q2/22 Q1/23 (		Q2/23	Change +/(-)		6M/22	6M/23	Change +/(-)
				YoY	QoQ			YoY
Natural Gas								
Natural gas consumption								
GPSC's natural gas consumption ('000 MMBTU)	25	0.7	0.05	(100%)	(93%)	50	1	(98%)
GLOW's natural gas consumption ('000 MMBTU)	242	255	820	239%	222%	908	1,075	18%
Coal								
Coal consumption (Ton JPU)	439,489	73,087	0	(100%)	(100%)	836,877	73,087	(91%)
Average coal cost (excluding freight) (USD/Ton JPU)	195.5	260.2	N/A	N/A	N/A	178.6	260.2	46%

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

## **YOY** Q2/2023 VS Q2/2022

Cost of sales of goods and rendering of services of IPP business in Q2/2023 was THB 1,265 million, decreased by THB 5,423 million or 81% yoy mainly due to:

- Cost of coal decreased by THB 2,697 million due to a decrease in coal consumption of GHECO-One from lower electricity dispatch as instructed by EGAT.
- Other raw materials decreased by THB 2,832 million mainly due to lower diesel consumption for electricity generation of SRC and GIPP as instructed by EGAT.

## **QOQ** Q2/2023 VS Q1/2023

Cost of sales of goods and rendering of services of IPP business in Q2/2023 was THB 1,265 million, decreased by THB 2,913 million or 70% goq mainly due to:

- Cost of coal decreased by THB 313 million due to GHECO-One's lowered coal consumption as instructed by EGAT. In addition, there was an inventory adjustment item of THB 336 million was recognized due to GHECO-One's periodic coal inventory counting.
- Other raw materials decreased by THB 2,787 million mainly due to a lower diesel consumption for electricity generation of SRC and GIPP as instructed by EGAT.

# Half-year Comparison of IPP's Cost of Sales of Goods and Rendering of Services (6M/2023 VS 6M/2022)

Cost of sales of goods and rendering of services of IPP business was THB 5,443 million, decreased by THB 9,717 million or 64% from 6M/2022. The decrease is mainly due to a THB 5,577 million decrease of other raw materials from lower diesel consumption for electricity generation of SRC and GIPP. Moreover, cost of coal of GHECO-One decreased by THB 4,189 million due to lower electricity dispatch as instructed by EGAT.

#### **Gross Profit: IPP**

Gross profit of IPP business in Q2/2023 was THB 1,574 million, decreased by THB 192 million or 11% from Q2/2022 primarily due to the following factors:

- Gross profit of Sriracha Power Plant decreased yoy mainly due to a lower margin from lower operation using diesel instead of natural gas caused by EGAT's dispatch instruction.
- Gross profit of IPP business of GLOW was stable yoy mainly due to an increase in AP of GHECO-One. However, this
  increase was offset by a lower margin contributed by GIPP from lower operation using diesel instead of natural gas
  caused by EGAT's dispatch instruction.

When comparing to Q1/2023, gross profit of IPP business increased by THB 24 million or 2% primarily due to:

- Gross profit of IPP business of GLOW increased qoq mainly due to a rise in AP of GHECO-One due to a planned maintenance in Q1/2023.
- Gross profit of Sriracha Power Plant decreased qoq mainly due to a lower margin from lower operation using diesel instead of natural gas caused by EGAT's dispatch instruction.

Gross profit of IPP business in 6M/2023 was THB 3,124 million, decreased by THB 67 million or 2% from 6M/2022 mainly due to a decreased margin caused by a lower diesel consumption, instead of natural gas as the primary fuel, for electricity generation by SRC and GIPP, as per EGAT's dispatch instruction.

## Operating Results: Small Power Producer (SPP)

Operating results (unit: THB million)	Q2/22 (revised)	Q1/23 (revised)	Q2/23	Change	e +/(-)	6M/22 (revised)	6M/23	Change +/(-)
	(,	(,		YoY	QoQ	(revised)		YoY
Revenue								
Revenue from electricity sales	13,084	16,432	14,177	8%	(14%)	24,693	30,609	24%
Revenue from steam sales	5,699	5,230	5,349	(6%)	2%	11,044	10,578	(4%)
Other income	225	210	279	24%	33%	472	488	3%
Total revenue	19,007	21,872	19,804	4%	(9%)	36,209	41,676	15%
Cost of raw materials								
Natural gas	13,811	15,162	13,157	(5%)	(13%)	26,816	28,319	6%
Coal	1,831	2,168	2,835	55%	31%	3,211	5,003	56%
Others	487	344	438	(10%)	27%	984	781	(21%)
Total cost of raw materials	16,129	17,673	16,430	2%	(7%)	31,012	34,103	10%
Maintenance cost	379	330	347	(8%)	5%	714	677	(5%)
Others (excluding depreciation and								
amortization)	546	663	609	12%	(8%)	1,072	1,272	19%
Total cost of sales of goods and	17,054	18,666	17,387	2%	(7%)	32,797	36,052	10%
rendering of services	17,034	10,000	17,307	270	(770)	32,131	30,032	1070
Gross profit	1,953	3,206	2,417	24%	(25%)	3,412	5,623	65%
Gross profit margin	10%	15%	12%	2%	(2%)	9%	13%	4%

## Revenue: SPP

Key revenue drivers	Q2/22 (revised)	Q1/23 (revised)	Q2/23	Change	e +/(-)	6M/22 (revised)	6M/23	Change +/(-)
	(Tevised)	(reviseu)		YoY	QoQ	(reviseu)		YoY
Electricity sales volume								
GPSC's electricity sales volume (GWh)	1,177	1,076	1,107	(6%)	3%	2,324	2,183	(6%)
GLOW's electricity sales volume (GWh)	2,303	2,274	2,222	(4%)	(2%)	4,294	4,496	5%
Total electricity sales volume (GWh)	3,480	3,350	3,329	(4%)	(1%)	6,618	6,679	1%
Electricity average selling price								
Weighted average selling price (THB/kWh)	3.76	4.91	4.26	13%	(13%)	3.73	4.58	23%
Steam sales volume								
GPSC's steam sales volume ('000 tons)	1,847	1,368	1,588	(14%)	16%	3,661	2,956	(19%)
GLOW's steam sales volume ('000 tons)	1,900	1,654	1,778	(6%)	7%	3,796	3,432	(10%)
Total steam sales volume ('000 tons)	3,747	3,022	3,366	(10%)	11%	7,457	6,419	(14%)
Steam average selling price								
Weighted average selling price (THB/ton)	1,521	1,730	1,589	4%	(8%)	1,481	1,656	12%

## Quarterly Comparison of SPP's Revenue

## **VOV** Q2/2023 VS Q2/2022

Revenue from SPP business in Q2/2023 was THB 19,804 million, increased by THB 796 million or 4% yoy mainly due to:

- Revenue from SPP business of GPSC increased by THB 35 million mainly from an increase of revenue of Rayong Central Utility Plant (CUP) by THB 96 million due to higher electricity average selling price, despite a lower electricity sales volume. However, revenue of IRPC-CP decreased by THB 61 million from lower electricity sales volume, despite an increase in average selling price of both electricity and steam, corresponding with rising natural gas price.
- Revenue from SPP business of GLOW increased by THB
   761 million mainly due to higher electricity average selling
   price and higher steam average selling price, despite a slight
   decrease in sales volume of both electricity and steam.

## **QOQ** Q2/2023 VS Q1/2023

Revenue from SPP business in Q2/2023 was THB 19,804 million, decreased by THB 2,068 million or 9% qoq mainly due to:

- Revenue from SPP business of GPSC decreased by THB 334 million mainly from a decrease of revenue of IRPC-CP by THB 377 million. The decreased revenue of IRPC-CP caused by a decrease in average selling price of electricity and steam, following the new Ft which was revised to reflect a decreasing natural gas price, and a lower steam sales volume to industrial customers. However, revenue of CUP increased by THB 43 million as a result of a higher electricity and steam sales volume to industrial customers.
- Revenue from SPP business of GLOW decreased by THB 1,734 million mainly due to a decrease in average selling price of electricity and steam, despite an increase in total sales volume of electricity and steam.

## Half-year Comparison of SPP's Revenue (6M/2023 VS 6M/2022)

Revenue from SPP from the first half of 2023 was THB 41,676 million, increased by THB 5,467 million or 15% from 6M/2022 primarily due to higher average selling price of electricity and steam, following new Ft and increasing natural gas price although the total electricity and steam sales volume to industrial customers decreased.

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

Key cost drivers	Q2/22 (rovised) Q1/23		Q2/23	Change +/(-)		6M/22 (revised) 6M/23	6M/23	Change +/(-)
	(revised)			YoY	QoQ	(revised)		YoY
Natural Gas								
Natural gas consumption								
GPSC's natural gas consumption ('000 MMBTU)	13,590	11,909	12,536	(8%)	5%	27,045	24,445	(10%)
GLOW's natural gas consumption ('000 MMBTU)	18,206	18,102	17,002	(7%)	(6%)	31,445	35,104	12%
Total natural gas consumption ('000 MMBTU)	31,796	30,011	29,537	(7%)	(2%)	58,490	59,548	2%
Average natural gas price								
Average natural gas price (THB/MMBTU)	434	505	445	3%	(12%)	458	476	4%
Coal								
GLOW's coal consumption (Ton JPU)	252,506	165,053	255,442	1%	55%	489,147	420,495	(14%)
Average coal cost (excluding freight)(USD/Ton JPU)	205.4	385.1	311.9	52%	(19%)	191.4	340.6	78%

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

## **VOV** Q2/2023 VS Q2/2022

Cost of sales of goods and rendering of services of SPP business in Q2/2023 was THB 17,387 million, increased by THB 332 million or 2% yoy mainly due to:

- Cost of natural gas decreased by THB 654 million (GLOW of THB 430 million and GPSC of THB 224 million) mainly from natural gas consumption decreased by 7%.
- Cost of coal increased by THB 1,004 million primarily due to average coal price increased together with a slight increase in coal consumption

# **QQ** Q2/2023 VS Q1/2023

Cost of sales of goods and rendering of services of SPP business in Q2/2023 was THB 17,387 million, decreased by THB 1,279 million or 7% goq mainly due to:

- Cost of natural gas decreased by THB 2,005 million (GLOW of THB 1,806 million and GPSC of THB 199 million) mainly due to lower natural gas consumption decreased by 2% while natural gas average price decreased by 12%.
- Cost of coal increased by THB 668 million mainly from coal consumption increased by 55% despite a coal average price decreased by 19%.

# Half-year Comparison of SPP's Cost of Sales of Goods and Rendering of Services (6M/2023 VS 6M/2022)

Cost of sales of good and rendering of services of SPP business was THB 36,052 million, increased by THB 3,255 million or 10% from 6M/2022 mainly due natural gas and coal average price increased by 4% and 78%, respectively, although coal consumption decreased by 14%.

#### **Gross Profit: SPP**

Gross profit of SPP business in Q2/2023 was THB 2,417 million, increased by THB 464 million or 24% from Q2/2022 mainly due to Ft increase which could help increasing the margin from electricity sales to industrial customers, despite an increase in natural gas and coal prices. However, the electricity and steam sales volume to industrial customers of SPP decreased slightly because some industrial customers had maintenance shutdown.

When comparing to gross profit of Q1/2023, gross profit of SPP business decreased by THB 789 million or 25% mainly due to the planned maintenance of Glow Energy Phase 5 and Ft revision to THB 0.9119 per unit in May, 2023. Despite an increase in electricity and steam sales volume (higher electricity dispatch to EGAT and higher steam sales volume to industrial customers).

Gross profit of SPP business in 6M/2023 was THB 5,623 million, increased by THB 2,211 million or 65% from 6M/2022 mainly due to increased fuel adjustment charge (Ft), resulting in an improved IU margin, despite rising natural gas and coal prices and lower demand for electricity and steam from industrial customers.



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

Operating results  (unit: THB million)	Q2/22 (revised)	Q1/23	Q2/23	Chang	Change +/(-)		6M/23	Change +/(-)
(				YoY	QoQ			YoY
Revenue								
Revenue from electricity sales	106	128	85	(19%)	(33%)	172	213	24%
Revenue from chilled water sales	52	53	63	20%	19%	98	115	17%
Other income	101	126	265	163%	110%	151	392	159%
Total revenue	259	306	414	60%	35%	421	720	71%
Cost of raw materials								
Natural gas and others	206	179	299	45%	67%	304	478	57%
Total cost of raw materials	206	179	299	45%	67%	304	478	57%
Maintenance cost	17	17	15	(13%)	(15%)	39	32	(17%)
Others (excluding depreciation and amortization)	(5)	12	(20)	339%	(267%)	19	(8)	(143%)
Total cost of sales of goods and rendering of	218	200	204	35%	41%	362	F02	39%
services	210	208	294	5570	41%	302	502	5970
Gross profit	40	98	120	196%	23%	59	92	54%
Gross profit margin	16%	32%	29%	13%	(3%)	14%	15%	9%

Note: VSPP and others include Combine Heat and Power Producing Co., Ltd. (CHPP) and Rayong Waste to Energy (WTE)

#### Revenue: VSPP and Others

Key revenue drivers	Q2/22 (revised)	Q1/23	Q2/23	Change +/(-)		6M/22 (revised)	6M/23	Change +/(-)
	(revised)			YoY	QoQ	(ICVISCA)		YoY
Electricity								
Sales volume (GWh)	11	20	14	32%	(26%)	19	34	79%
Average selling price (THB/kWh)	9.62	6.54	5.91	(39%)	(10%)	9.05	6.27	(31%)
Chilled water								
Sales volume ('000 RT-Hr)	6,647	5,537	7,654	15%	38%	12,327	13,191	7%
Average selling price (THB/RT-Hr)	7.83	9.49	8.19	5%	(14%)	7.96	8.73	10%

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

## **VOV** Q2/2023 VS Q2/2022

Revenue from VSPP and other businesses in Q2/2023 was THB 414 million, increased by THB 155 million or 60% yoy mainly due to:

- Other income increased by THB 165 million mainly due to increased revenue contributions from pontoons and Engineering, Procurement and Construction (EPC) services of Combine Heat and Power Producing Co., Ltd. (CHPP).
- Revenue from electricity sales decreased by THB 20 million mainly due to lower revenue contributions from CHPP and RDF power plant, according to lower average electricity selling price.

## **QOQ** Q2/2023 VS Q1/2023

Revenue from VSPP and other businesses in Q2/2023 was THB 414 million, increased by THB 107 million or 35% qoq mainly due to:

- Other income increased by THB 139 million mainly due to increased revenue contributions from pontoons and EPC services provided by CHPP.
- Revenue from electricity sales decreased by THB 42 million mainly from revenue from RDF power plant decreased from lower electricity sales volume and average selling price.

## Half-year Comparison of VSPP's and Others' Revenue (6M/2023 VS 6M/2022)

Revenue from VSPP and other business increased by THB 172 million or 41% from 6M/2022 mainly due to THB 328 million revenue increased from EPC services provided by CHPP.

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

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

## **YOY** Q2/2023 VS Q2/2022

Cost of sales of goods and rendering of services of VSPP and other businesses in Q2/2023 was THB 294 million, increased by 75 million or 35% yoy mainly due to:

 The cost of rendering of services increased due to an increase of cost associated with pontoons and EPC services of CHPP, corresponding with additional projects.

## **QOQ** Q2/2023 VS Q1/2023

Cost of sales of goods and rendering of services of VSPP and other businesses in Q2/2023 was THB 294 million, increased by 85 million or 41% qoq mainly due to:

 The cost of rendering of services increased due to an increase of cost associated with pontoons and EPC work of CHPP, corresponding with additional projects.

# Half-year Comparison of VSPP's Cost of Sales of Goods and Rendering of Services (6M/2023 VS 6M/2022)

Cost of sales of goods and rendering of services of VSPP and other businesses increased by THB 140 million or 39% from 6M/2022. The increase is mainly due to higher other cost item that increases from additional solar projects resulting in an increases EPC cost and the cost of providing solar cells installation services of CHPP. In addition, an increase in other costs also contributed by the RDF power plant due to increased electricity sales volume.

#### **Gross Profit: VSPP and Others**

Gross profit of VSPP and other businesses in Q2/2023 was THB 120 million, increased by THB 79 million yoy (+196%) and THB 22 million (+23%) mainly due to an increase in revenue from EPC services provided by CHPP from additional projects.

Gross profit of VSPP and other businesses in 6M/2023 was THB 92 million, increased by THB 32 million or 54% from 6M/2022 mainly due to an increase in revenue from EPC services of CHPP from additional projects.

## Other Expenses

Selling and administrative expenses and	Q2/22	01/23 02/23	Change	+/(-)	6M/22	6M/23	Change +/(-)	
Other expenses (unit: THB million)	(revised)	Q1/23	QZIZS	YoY	QoQ	(revised)	0141723	YoY
Selling and administrative expenses	436	369	596	37%	62%	827	966	17%
Depreciation and amortization	2,296	2,206	2,357	3%	7%	4,519	4,563	1%
Finance costs	1,047	1,242	1,342	28%	8%	2,022	2,585	28%
Income tax expense	53	105	(233)	(539%)	(321%)	20	(128)	(748%)
Net foreign exchange loss (gain)	184	(73)	(33)	(118%)	(55%)	252	(105)	(142%)
Total other expenses	4,017	3,850	4,030	0.3%	5%	7,640	7,880	3%

## Quarterly Comparison of Other Expenses

## **YOY** Q2/2023 VS Q2/2022

Other expenses was THB 4,030 million in Q2/2023, increased by THB 13 million or 0.3% mainly from the following:

- Selling and administrative expenses: was THB 596 million in Q2/2023, increased by THB 160 million or 37% from Q2/2022, mainly from renewal insurance premium raised.
- Depreciation and amortization: were THB 2,357 million in Q2/2023, increased by THB 61 million or 3% from Q2/2022, mainly from GHECO-One has scheduled maintenance and work on improving the power plant efficiency.
- Finance costs: was THB 1,342 million in Q2/2023, increased by THB 294 million or 28% from Q2/2022 due to the Company issued the debentures was THB 3,000 million in Q2/23 and higher long-term loans from financial institution.
- Income tax expenses: was THB -233 million in Q2/2023, decreased by THB 286 million or 539% from Q2/2022 due to the adjustment of deferred tax income.
- Net foreign exchange gain/loss: net gain of THB 33 million was recorded in Q2/2023, increased by THB 216 million from Q2/2022. This was due to record of
  - i. Increase in gain from fair value valuation of derivatives instruments of THB 407 million; and
  - ii. Increase in realized FX loss of THB 284 million;
  - iii. Decrease in unrealized FX loss of THB 94 million.

## **QOQ** Q2/2023 VS Q1/2023

Other expenses was THB 4,030 million in Q2/2023, increased by THB 180 million or 5% mainly from the following:

- Selling and administrative expenses: was THB 596 million in Q2/2023, increased by THB 227 million or 62% from Q1/2023, mainly from renewal insurance premium, maintenance cost adjustment, and investment advisory
- Depreciation and amortization: was THB 2,357 million in Q2/2023, increased by THB 151 million or 7% from Q1/2023 mainly from GHECO-One has scheduled maintenance and work on improving the power plant efficiency.
- Finance costs: was THB 1,342 million in Q2/2023, increased by THB 100 million or 8% from Q1/2023 due to the Company issued the debentures was THB 3,000 million in Q2/23 and higher long-term loans from financial institution.
- Income tax expenses: was THB -233 million in Q2/2023, decreased by THB 338 million or 321% from Q1/2023 due to lower operating results and the adjustment of deferred tax income.
- Net foreign exchange gain/loss: net gain of THB 33 million was recorded in Q2/2023, decreased by THB 40 million from Q1/2023. This was due to record of
  - Increase in gain from fair value valuation of derivatives instruments of THB 343 million; and
  - ii. Increase in realized FX loss of THB 380 million;
  - iii. Increase in unrealized FX loss of THB 3 million.

## Operating Results of the Company

#### Shares of Profit of Associates and Joint Ventures

Shares of Profit (Loss) of Associates and Joint Ventures	Share-	Q2/22	Q1/23	Q2/23	Change	· +/(-)	6M/22	6M/23	Change +/(-)
(unit: THB million)	holding %	QZIZZ	QIIZS	QZIZS	YoY	QoQ	OIVII ZZ	0141723	YoY
Independent Power Producer (IPP)									
Xayaburi Power Company Limited (XPCL)	25%	459	(103)	(18)	(82%)	(104%)	460	(121)	(126%)
Small Power Producer (SPP)									
Bangpa-in Cogeneration Company Limited (BIC)	25%	15	30	28	(8%)	85%	32	58	80%
Nava Nakorn Electricity Generating Company Limited (NNEG)	30%	(2)	13	35	169%	(1,627%)	(17)	48	(377%)
Nam Lik 1 Power Company Limited (NL1PC)	40%	14	4	2	(56%)	(86%)	34	6	(81%)
Very Small Power Plant (VSPP) and									
Others									
Thai Solar Renewable Company Limited (TSR)	40%	91	107	114	6%	26%	184	221	20%
Eastern Seaboard Clean Energy Company Limited (ESCE)	33%	7	9	9	4%	23%	15	18	22%
Avaada Energy Private Limited (AEPL)	42%	(154)	128	145	14%	(195%)	(155)	273	(276%)
Global Renewable Power Company Limited (GRP)	50%	12	(34)	(8)	(76%)	(168%)	34	(42)	(224%)
Nuovo Plus Company Limited (NUOVO PLUS)	49%	(10)	1	(0.4)	(142%)	(96%)	(11)	1	(105%)
CI Changfang Limited and CI Xidao Limited (CFXD)	25%	0	(42)	(132)	215%	N/A	0	(174)	N/A
Total shares of profit (loss) of associates and joint ventures		432	113	175	54%	(60%)	575	288	(50%)

Shares of profit of associates and joint ventures in Q2/2023 was THB 175 million, decreased by THB 257 million or 60% from Q2/2022 and increased by THB 61 million or 54% from Q1/2023.

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

XAYABURI POWER
WITH CENSE OF ENERGY
Share of profit from XPCL decreased by THB 477 million from Q2/2022 due to lower water level from the previous year and a loss in share profit decreased by THB 85 million from Q1/2023 due to seasonality and a gain in foreign exchange from Thai Baht depreciation.

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

Share of profit from NNEG increased by THB 38 million from Q2/2022 and THB 22 million from Q1/2023 due to natural gas prices decreased.

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

Share of profit from TSR increased by THB 23 million from Q2/2022 mainly from higher Ft rate and electricity demand and THB 7 million from Q1/2023 mainly from other revenue increased.

#### บริษัท Avaada Energy Private Limited (AEPL)



Share of profit from AEPL increased by THB 299 AVAADA million from Q2/2022 and THB 18 million from Q1/2023 mainly from additional COD projects.

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

Share of profit from BIC increased by THB 13 million from Q2/2022 due to the steam demand and electricity demand from EGAT increased including natural gas prices decreased. Meanwhile, share of profit decreased by THB 2 million from Q1/2023 cause from finance cost raised slightly.

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

NAMLIKI Share of profit from NL1PC decreased by THB 12 million from Q2/2022 and THB 3 million from Q1/2023 due to higher finance costs in line with floating interest rate.

#### Global Renewable Power Co., Ltd. (GRP)

Share of profit from GRP decreased by THB 20 million from Q2/2022 due to higher investment advisory fee. While the loss in share profit decreased by THB 26 million from Q1/2023 due to electricity sales of Sheng Yang Energy.

#### CI Changfang Limited and CI Xidao Limited (CFXD)

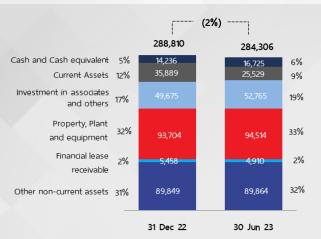


Share of loss from CFXD increased by THB 90 million from Q1/2023 due to a scheduled shutdown of wind turbine generation to connect and test the system.

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

Total Asset (THB million, %)

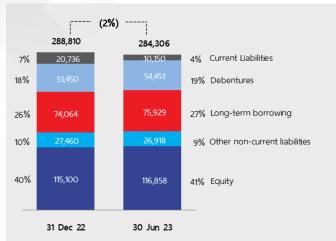
Total Liabilities and Equity (THB million, %)



#### **Total Assets**

As of 30 June 2023, total assets of the Company and its subsidiaries was THB 284,306 million, decreased by THB 4,505 million or 2% from 31 December 2022 which was primarily as a result of the following:

- Cash and cash equivalent increased by THB 2,489 million or 17%.
- Investments in associates increased by THB 3,090 million or 6% mainly due to capital increase in Avaada Energy Private Limited amount THB 2,336 million.
- Property, Plant and Equipment increased by THB 810 million or 1% due to the SPP replacement project and improvement of power plant efficiency
- Other current assets decreased by THB 10,360 million or 29%, mainly from the trade accounts receivable decrease by THB 9,124 million, resulting in lower energy payment of IPP from lower electricity dispatch instructed by EGAT.
- Financial lease receivable decreased by THB 548 million or 10%.
- Other non-current assets increased by THB 15 million or 0.02%.



#### **Total Liabilities**

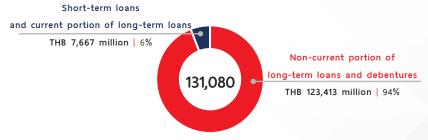
As of 30 June 2023, total liabilities of the Company and its subsidiaries was THB 167,448 million, decreased by THB 6,261 million or 4% from 31 December 2022 which was primarily as a result of the following:

- Current liabilities decreased by THB 10,586 million or 51% mainly trade account payable decreased by THB 6,440 million and short-term loan from financial institutions decreased by THB 2,671 million.
- Long-term borrowings and debentures increased by THB 4,866 million or 4% mainly from issued debenture was THB 3,000 million and long-term loan from financial institution.
- Other non-current liabilities decreased by THB 542 million or 2% due to defer tax liabilities.

#### **Total Equity**

As of 30 June 2023, total shareholders' equity of the Company and its subsidiaries were THB 116,858 million, increased by THB 1,757 million or 2% from 31 December 2022 due to an unappropriated retained earnings increased by THB 1,835 million and other comprehensive income including other components increased by THB 813 million. Moreover, In Q1/2023, dividend payout from operation results in 2022 by THB 891 million.

## Total Interest-Bearing Debt (THB million)



As of 30 June 2023, the Company and its subsidiaries has total interest-bearing debt (excluding lease liabilities) of THB 131,080 million which comprised of current liabilities totaling THB 7,667 million or 6% and non-current liabilities totaling THB 123,413 million or 94%.

Cash Flow (unit: THB million)	6M/2023
Net cash flow from operating activities	11,601
Net cash from investing activities	(7,660)
Net cash flow used in financing activities	(1,405)
Net cash and cash equivalent (before exchange rate effect)	2,536
Effect of exchange rate to cash and cash equivalent	(47)
Net increase in cash and cash equivalents (after taken into account exchange rate)	2,489
Cash and cash equivalents at the beginning of the period	14,236
Cash and cash equivalents at the end of the period	16,725

At the end of Q2/2023, the Company and its subsidiaries had a net increase in cash and cash equivalent of THB 2,489 million from the end of 2022 which was primarily as a result of the following:

#### Cash Flow from Operating Activities

At the end of Q2/2023, the Company and its subsidiaries had net cash inflow from operating activities of THB 11,601 million, which was from cash received from operating activities of THB 12,182 million deducted by corporate income tax payment of THB 581 million.

#### Cash Flow from Financing Activities

At the end of Q2/2023, the Company and its subsidiaries had net cash flow outflow in financing activities of THB 1,405 million, which was from:

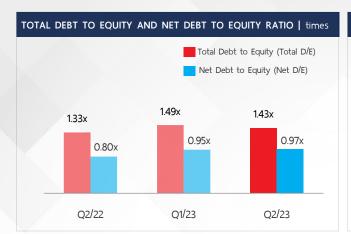
- i. Cash received from debentures for investing total amount THB 3,000 Million
- ii. Cash received from long-term from financial institutions total amount THB 1,861 million;
- iii. Cash received from other financing activities of THB 32 Million;
- iv. Short-term loan repayment to financial institutions of THB 2,671 million;
- Interest paid and financing fee to financial institutions of THB 2,677 million;
- vi. Dividend paid of THB 891 million; and
- vii. Financial lease repayment of THB 70 million;

#### Cash Flow from Investing Activities

At the end of Q2/2023, the Company and its subsidiaries had net cash outflow from investment activities of THB 7.658 million which was:

- i. Cash paid on CAPEX of THB 5,074 million;
- ii. Cash paid on capital increase of associates of THB 2,336 million;
- iii. Cash paid on loan to related parties of THB 915 million;
- iv. Dividend and interest received total amount THB 527 million; and
- v. Cash received from other financial assets of THB 138 million.

## **Key Financial Ratios**













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 )



## Energy Recovery Unit (ERU)



#### Project updates:

Overall, the project has reached 90.67% in detail; equipment work for steel structures. Circulating Fluidize Bed Boiler, Electrostatic Precipitator, SNOX Reactor and Wet Sulfuric Acid Condenser of boiler totally 3 units are installed. Meanwhile, the electric wire installed and equipment testing in Substation 119.

Note: 1. The project has been affected by the COVID-19 pandemic and is expected to start commercial operation in 2025.



#### **GLOW SPP2 Replacement**

Project updates:



# Q2/23 62.65%

The construction has reached 62.65% and the project is in the process of electrical control building and reinforced concrete of equipment and installed equipment, such as piping system, boilers, gas turbine, and power generation.

Projects	Electricity Capacity (MW)	Steam Production Capacity (t/h)	Contracted PPA with EGAT (MW)
GLOW SPP2 Replace	ment		
Glow SPP2	98	230	60

## **Update of Projects Under Construction**



#### Avaada Energy Private Limited (AEPL)

#### Project updates



- Total contracted capacity of 6,720 MW
- GPSC holds 42.93% of total AEPL shares

Project	Electricity Capacity (MW)	COD			
Operating	3,987	-			
(29 projects)	3,507				
Under construction	709	2023-2024			
(6 projects)	703	2023 2024			
Under development	2,024	2024-2025			
(8 projects)	2,024	2024-2025			



Changfang และ Xidao (CFXD)

#### Project updates:

The construction reached 72%, the first power started in November 2022, and it completed foundation installation in July 2023. The project expected to start full commercial operation in Q1/2024.



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

Power plant	Fuel Type	Location	Direct shareholding	Installed Power capacity (MW)	Equity Power capacity (MW)	Equity in operation (MW)	Steam equity capacity (t/h)	Customers	Commercial Operation Date (COD)
Independent Power Producer (IPP)									
Sriracha	Natural gas	Sriracha	GPSC (100%)	700	700	700	-	EGAT	2000
GIPP	Natural gas	WHA Chonburi Industrial Estate 1	GLOW (95%)	713	677	677	-	EGAT	2003
Houay Ho	Hydro	Attapeu Province, Lao PDR.	GLOW (67%)	152	102	102	-	EGAT / EDL	1999
GHECO-One	Coal	Map Ta Phut Industrial Estate	GLOW (65%)	660	429	429	-	EGAT	2012
XPCL	Hydro	Laos	GPSC (25%)	1,285	321	321	-	EGAT / EDL	2019
RPCL	Natural gas	Ratchaburi	GPSC (15%)	1,400	210	210	-	EGAT	2008
Total capacity of IPP				4,910	2,439	2,439			
Small Power Producer (	SPP)								
CUP-1	Natural gas	WHA eastern industrial estate	GPSC (100%)	226	226	226	890	EGAT / IU	2006
CUP-2	Natural gas	Rayong industrial land	GPSC (100%)	113	113	113	170	EGAT / IU	2008
CUP-3	Natural gas	WHA eastern industrial estate	GPSC (100%)	-	-	-	280	IU	2009
Rayong Expansion (CUP-3)	Natural gas	WHA eastern industrial estate	GPSC (100%)	15	15	15	-	IU	2019
CUP-4	Natural gas	Asia Industrial Estate	GPSC (100%)	49	49	49	140	IU	2019
GLOW Energy Phase 2 (SPP replacement)	Natural gas	Map ta phut Industrial Estate	GLOW (100%)	200	200	200	460	EGAT / IU	2022-23
GLOW Energy Phase 4	Natural gas	Map ta phut Industrial Estate	GLOW (100%)	77	77	77	137	EGAT / IU	2005
GLOW Energy Phase 5	Natural gas	Map ta phut Industrial Estate	GLOW (100%)	328	328	328	160	IU	2011
GLOW SPP 2	Natural gas	Map ta phut Industrial Estate	GLOW (100%)	213	213	213	190	EGAT / IU	1999 (Details on p.20)
GLOW SPP 3	Coal	Map ta phut Industrial Estate	GLOW (100%)	300	300	300	-	EGAT / IU	1999
GLOW SPP 11 Phase 1	Natural gas	Siam Eastern Industrial Park	GLOW (100%)	120	120	120	-	EGAT / IU	2000
GLOW SPP 11 Phase 3	Natural gas	Siam Eastern Industrial Park	GLOW (100%)	42	42	42	-	IU	2006
GLOW SPP 11 Phase 2	Natural gas	Siam Eastern Industrial Park	GLOW (100%)	110	110	110	-	EGAT / IU	2012
GLOW Energy CFB 3	Coal	Map ta phut Industrial Estate	GLOW (100%)	85	85	85	79	IU	2010



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

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Power plant	Fuel Type	Location	Direct shareholding	Installed Power capacity (MW)	Equity Power capacity (MW)	Equity in operation (MW)	Steam equity capacity (t/h)	Customers	Commercial Operation Date (COD)
IRPC-CP Phase 1 - 2	Natural gas	IRPC industrial Zone	GPSC (51%)	240	122.4	122.4	153	EGAT/ IU	2015, 2017
IRPC-CP Phase 3	Natural gas	IRPC industrial Zone	GPSC (51%)	70	35.7	-	-	IU	2024
NNEG Phase 1 - 2	Natural gas	Nava Nakorn industrial promotion Zone	GPSC (30%)	185	56	56	12	EGAT / IU	2016, 2020
NNEG Phase 3	Natural gas	Nava Nakorn industrial promotion Zone	GPSC (30%)	30	9	-	1.59	IU	2024
BIC-1	Natural gas	Bangpa-in industrial estate	GPSC (25%)	117	29.25	29.25	5	EGAT / IU	2013
BIC-2	Natural gas	Bangpa-in industrial estate	GPSC (25%)	117	29.25	29.25	5	EGAT / IU	2017
Total capacity of SPP				2,637	2,160	2,115	2,683		
Very Small Power Pro	ducer (VSPP	)							
Rayong Waste To Energy (WTE)	RDF	Rayong	GPSC (100%)	9.8	9.8	9.8	-	PEA	2021
CHPP	Natural gas	Government complex	GPSC (100%)	5	5	5	-	MEA / The Government Complex	2008
CHPP (Solar)	Solar	Chanthaburi	GPSC (100%)	5	5	5	-	PEA	2016
GRP (NPS,WXA,PPS)	Solar	Phichit, Suphan Buri, Lopburi, Khon Kaen	GPSC (50%)	39.5	19.75	19.75	-	PEA	2014-15
GRP1 (Sheng Yang)	Solar	Taiwan	GPSC (45%)	55.8	25.11	25.11	-	TaiPower	2016-21
AEPL (Solar Power Platform)	Solar	India	GPSC (43%)	6,720	2,885	1,712	-	Central and State Gov. and C&I	2018-25 (Details on p.20)
TSR (SSE1)	Solar	Suphanburi and Kanjanaburi	GPSC (40%)	80	32	32	-	PEA	2013
NL1PC	Hydro	Laos	GPSC (40%)	65	26	26	-	EDL	2019
Chonburi Clean Energy (CCE)	Industrial waste	WHA Chonburi Industrial Estate 1	GLOW (33%)	8.6	2.87	2.87	-	PEA/ IU	2019
CFXD (Offshore wind farm) (Under construction)	Wind	Taiwan	GPSC (25%)	595	149	-	- /	TaiPower	2022-24 (Details on p.20)
Helios 3 - 4	Solar	Nakhon Ratchasima	GPSC (50%)	16	8	-	-	PEA	2030
Private PPA (GPSC Group)	Solar	Various Areas	GPSC Gr. (100%)	43.24	43.24	22.18	-	IU	2012-24
Total capacity of VSP	Р			7,643	3,211	1,860	-		
Others									
ERU (Under construction)	Petroleum Pitch	Chonburi	GPSC (100%)	250	250	-	175	Thai Oil PLC	2025 (Details on p.20)
Total capacity of Oth	ers			250	250	-	175		
Total				15,440	8,060	6,414	2,858		

Note: - Total committed equity capacity as of June 30, 2023.

<sup>-</sup> Equity capacity includes 100% stake in GLOW, CFXD, Private PPA and ERU

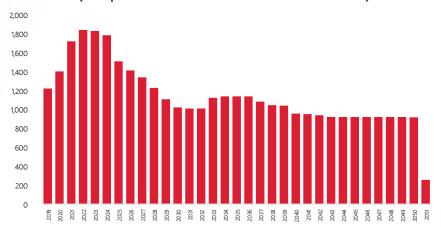
## Fair Value Assessment of Net Assets from the Acquisition of GLOW

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:

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

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 Q2/2023, such amortization expense added up to THB 361 million.

Adjusted Net Income (unit: THB million)	Q2/22	/22 Q1/23		Change +/(-)		6M/22	6M/23	Change +/(-)
				YoY	QoQ			YoY
Net Profit for the Company	684	1,118	309	(55%)	(72%)	997	1,427	43%
Add back: Amortization of assets acquired from the acquisition of GLOW	453	453	361	(31%)	(20%)	978	814	(17%)
Adjusted Net Income	1,137	1,571	670	(44%)	(57%)	1,974	2,241	13%



