# MD84 Q3/2022



Management Discussion and Analysis 3<sup>nd</sup> Quarter of 2022



### Significant Events in Q3/2022 - Present

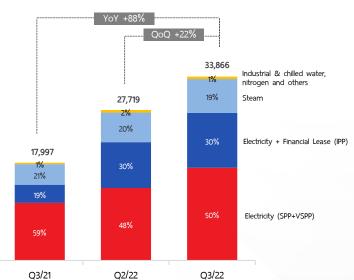
- After the spread of COVID-19 situation in Thailand has been improved, the Centre for COVID-19 Situation Administration
  (CCSA) has eased the level of COVID-19 restrictions since the beginning of July. However, the Company continues to monitor
  the situation closely and gives importance to the control measures to ensure the safety of employees and counterparties
  and also the stability and continuity of our electricity and utilities supply system.
- The ongoing tension between Russia-Ukraine together with the energy demand recovery after countries reopening significantly drove up energy prices, including crude oil and other commodities in the first nine months of 2022. Consequently, the Company's performance has impacted from higher cost of natural gas and coal especially for electricity selling to industrial customers. However, the Energy Regulatory Commission (ERC) has announced to increase the Automatic Adjustment Mechanism Formula (Ft) from 24.77 to 93.43 Satang per unit in September 2022 which has partially mitigated the impact of higher fuel costs on the Company's performance. Moreover, the Company has closely monitored natural gas and coal prices and managed the production process optimization to ensure efficiency of its power plants by generating the electricity and steam from the lowest marginal costs of production first or merit order, as well as focusing on synergy from connecting electricity and steam networks together with continuous enhancing other synergies to achieve the highest returns.
- On August 15, 2022, the Company has been qualified for the ERC Sandbox Phase 2 Project of the ERC. The Project focuses
  on green innovation and enables operators to test technology-related energy innovations in a limited area in order to serve
  consumers' needs and the stability of electricity system. The details of qualified projects of the Company and partners are
  as follows:
  - A project to study and develop green energy trading platform and Renewable Energy Certificate (REC).
  - · A project to study the business model of electricity trading under the new PPA with the Third Party Access (TPA).
  - A pilot project for the development of energy management innovation in the smart city.
- On September 2, 2022, the Company, PTT Public Company Limited (PTT) and Western Digital Storage Technology (Thailand) Limited (WD) have announced their cooperation in studying renewable energy development for using in the production processes of WD factories in Thailand. This collaborative initiative consists of an evaluation of opportunities for procurement of renewable energy from many sources for WD through new electricity purchase contracts under the ERC Sandbox Phase 2 Project, and the development of renewable energy trading through the Third Party Access (TPA) Project which will grant the permission to third parties to use or connect as well as sell or buy electricity through the electricity network systems.
- On September 13, 2022, GPSC Treasury Center Company Limited (GPSC TC), a wholly owned subsidiary of GPSC, entered into an agreement with Sumitomo Mitsui Banking Corporation (SMBC) for Green Loan of USD 185 million with 10-year contract term designated for the implementation of clean energy projects. This will support to scale-up green energy to over 50% of its total capacity by the year 2030, aligning with the 4S strategy for the development of future energy projects for sustainable growth.
- On September 15, 2022, the Company, SANY Heavy Industry Thailand (SANY), LEADWAY Heavy Machinery Company Limited (LEADWAY), and ROOTCLOUD Technology (Singapore) Company Limited (ROOTCLOUD) signed a memorandum of understanding (MOU) to study the feasibility to develop battery swapping services and battery-as-a-service business for electric commercial vehicles (eCV) along with the development of monitoring and operational management software for the batteries and swapping stations. The aim of the project is to support the need of commercial fleet to go green.

# Q3/2022 Operating Results

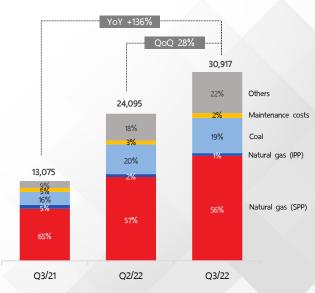
Overall operating results of the Company and its subsidiaries	Q3/21	Q2/22	Q3/22	change	+/(-)	9M/21	9M/22	change +/(-)
(unit: THB million)				YoY	QoQ			YoY
Operating revenue	17,997	27,719	33,866	88%	22%	52,855	88,846	68%
Cost of sales (excluding depreciation and amortization)	(13,075)	(24,095)	(30,917)	136%	28%	(37,108)	(79,459)	114%
Gross profit	4,922	3,625	2,949	(40%)	(19%)	15,747	9,387	(40%)
Selling and administrative expenses	(431)	(436)	(401)	(7%)	(8%)	(1,381)	(1,228)	(11%)
Other operating income	5	6	6	10%	(12%)	15	17	18%
EBITDA	4,496	3,195	2,554	(43%)	(20%)	14,381	8,177	(43%)
Depreciation and amortization	(2,205)	(2,157)	(2,150)	(2%)	(0.3%)	(6,431)	(6,443)	0.2%
ЕВІТ	2,291	1,037	404	(82%)	(61%)	7,950	1,733	(78%)
Finance costs	(998)	(1,046)	(1,068)	7%	2%	(2,959)	(3,089)	4%
Other non-operating income and expenses	262	619	205	(22%)	(67%)	1,037	1,745	68%
Dividend received and shares of profit of associates and joint ventures	772	435	764	(1%)	75%	1,591	1,372	(14%)
Income tax expenses	(295)	(53)	158	(154%)	(398%)	(1,095)	139	(113%)
Profit before FX and extraordinary items	2,033	992	462	(77%)	(53%)	6,525	1,899	(71%)
Net foreign exchange gain (loss)	(95)	(184)	(61)	36%	67%	(161)	(314)	95%
Net profit	1,938	808	401	(79%)	(50%)	6,363	1,586	(75%)
Non-controlling interests	(63)	(124)	(70)	11%	(44%)	(213)	(258)	21%
Net profit for the Company	1,875	684	331	(82%)	(52%)	6,150	1,328	(78%)
Adjusted Net Income <sup>1</sup>	2,256	1,204	784	(65%)	(35%)	7,335	2,759	-62%
Gross profit margin (%)	27%	13%	9%	(19%)	(4%)	30%	11%	(19%)
Net profit margin (%)	10%	2%	1%	(9%)	(1%)	12%	1%	(10%)
Adjusted Net Income margin (%)	13%	4%	2%	(10%)	(2%)	14%	3%	(11%)

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 24)

### Operating Revenue (THB million, %)



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



### Q3/2022 Operating Summary

- Net profit for the Company in Q3/2022 was THB 331 million, decreased by THB 1,544 million or 82% from Q3/2021 which was mainly due to significantly higher natural gas and coal price, resulting in lower margin in selling electricity to industrial customers, and the electricity and steam sales volume to industrial customers decreased slightly. However, IPP's operating results were higher due to an increase in electricity sales volume corresponding to higher dispatch instructed by EGAT and the generations using diesel instead of natural gas, resulting in higher margin from electricity sales. In addition, there was an increased in shares of profit from Xayaburi hydro power plant according to higher water level.
- When comparing to Q2/2022, net profit for the Company decreased by THB 353 million or 52% mainly due to natural gas and coal price increased continuously, resulting in lower margin in selling electricity to industrial customers. Even though, Ft increased from 24.77 to 93.43 Satang per unit started from September 2022. Meanwhile, electricity sales volume to EGAT and steam sales volume to industrial customers increased slightly. Shares of profit from Xayaburi hydro power plant increased according to seasonality and higher water level.
- The Company recognized synergy value from the acquisition of GLOW amounting THB 595 million (after tax) in Q3/2022, mainly from power and steam network integration, commercial activities especially cost optimization, production and expanding customers base, production costs management and debentures management.

### Quarterly Comparison of Company's Performance

### Q3/2022 Gross Profit Breakdown (THB million, %)



Gross profit of Q3/2022 was THB 2,949 million, decreased by THB 1,973 million or 40% from Q3/2021 and decreased by THB 676 million or 19% from Q2/2022.

# **VOV** Q3/2022 VS Q3/2021

- Gross profit of Independent Power Producer (IPP) increased by THB 470 million or 43%, mainly due to the following:
  - Higher Energy Payment (EP) of Sriracha Power Plant and GIPP corresponding to higher dispatch instructed by EGAT and the generations using diesel instead of natural gas, resulting in higher margin from electricity sales.
  - Higher Availability Payment (AP) from GIPP and GHECO-One as USD-linked portion of the AP increased due to THB depreciation against USD.
  - Higher gross profit of HHPC due to higher electricity dispatch.
- Gross profit of Small Power Producer (SPP) decreased by THB 2,346 million or 63% mainly due to significantly higher natural gas and coal price, resulting in lower margin in selling electricity to industrial customers. However, total electricity sales volume increased due to higher energy dispatch to EGAT. Meanwhile, steam sales volume to industrial customers decreased slightly.

# **QOQ** Q3/2022 VS Q2/2022

- Gross profit of Independent Power Producer (IPP) decreased by THB 100 million or 6%, mainly due to the following:
  - Lower Availability Payment (AP) of Sriracha Power Plant due to planned and unplanned maintenance in Q3/2022.
  - Lower Availability Payment (AP) of GHECO-One from lower availability rate due to higher outages in Q3/2022.
  - Lower gross profit of HHPC due to lower electricity dispatch.
- Gross profit of Small Power Producer (SPP)
  decreased by THB 554 million or 29% mainly due to
  higher natural gas and coal price, resulting in lower
  margin in selling electricity to industrial customers.
  However, total electricity sales volume increased slightly
  due to higher energy dispatch to EGAT. Moreover,
  steam sales volume to industrial customers increased.

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

# yoy

### Q3/2022 VS Q3/2021

- Gross profit of Very Small Power Producer (VSPP) and others decreased by THB 97 million or 86% mainly due to the Company has divested all shares in Ichinoseki Solar Power 1 GK (ISP1) to CES Iwate Taiyoko Hatsydensho GK on March 18, 2022.
- Other income and expenses and Others in Q3/2022, other income was THB 211 million, decreased by THB 74 million mainly due to the Company received income from Central Utility Plant 4 (CUP-4) construction delay penalty amounting THB 137 million in Q3/2021. On the other hand, expenses were THB 3,523 million, decreased by THB 501 million, mainly due to lower tax expense due to lower operating results.
- Dividend received and shares of profit of associates and joint ventures was THB 764 million in Q3/2022, decreased slightly by THB 8 million, mainly from the Company recognized amortization of the rights in the long-term power purchase agreement of AEPL amounting THB 79 million in Q3/2022. Moreover, shares of profit from Nava Nakorn Electricity Generating Company Limited (NNEG) decreased by THB 79 million due to higher natural gas price. However, shares of profit from Xayaburi Power Co., Ltd. (XPCL) increased by THB 150 million comparing to last year.
- Non-controlling interests increased by THB 7 million.

# qoq

### Q3/2022 VS Q2/2022

- Gross profit of Very Small Power Producer (VSPP) and others decreased by THB 21 million or 58% mainly due to lower income from RDF power plant corresponding to lower electricity sales volume and electricity average selling price.
- Other income and expenses and Others in Q3/2022, other income was THB 211 million, decreased by THB 414 million mainly due to in Q2/2022, the Company recognized net gain (before tax and related expenses) amounting THB 388 million from selling battery-related assets to NUOVO PLUS. On the other hand, expenses were THB 3,523 million, decreased by THB 355 million, mainly from lower tax expense due to lower operating results and lower net loss from foreign exchange.
- Dividend received and shares of profit of associates and joint ventures was THB 764 million, increased by THB 328 million, in Q3/2022 mainly from an increase of shares of profit from Xayaburi Power Co., Ltd. (XPCL) by THB 282 million due to higher water level during rainy season resulting in higher electricity production. Moreover, the Company received THB 81 million dividend from Ratchaburi Power Company Limited (RPCL).
- Non-controlling interests decreased by THB 54 million mainly due to lower net profit of GHECO-One.

# 9 months Comparison of Company's Performance (9M/2022 VS 9M/2021)

Net profit for the first nine months of 2022 was THB 1,328 million, decreased by THB 4,822 million or 78% from the first nine months of 2021 which was mainly due to the following:

- Gross profit of SPP decreased by THB 7,235 million due to significantly higher natural gas and coal price, resulting in lower margin in selling electricity to industrial customers.
- Gross profit of IPP increased by THB 1,082 million due to higher Energy Payment (EP) corresponding to higher dispatch
  instructed by EGAT and the generations using diesel instead of natural gas, resulting in higher margin from electricity
  sales.
- Shares of profit from Xayaburi Power Co., Ltd. (XPCL) increased by THB 294 million as a result of higher water level than
  the same period of last year.

### Economic outlook for the second half of 2022

Thailand's economic situation: the Bank of Thailand (BOT) maintained its 2022 GDP forecast from the previous forecast in June 2022 at 3.3% as the tourism recovery by the relaxation measures to open the country for foreign tourists, However, the BOT slightly lowered 2023 GDP forecast in June 2022 from 4.2% to 3.8% due to pressure from the world's economic due to financial conditions intense and a decline in global demand as a result of tighter monetary policy by the Federal Reserve (Fed), the European Central Bank (ECB), and the central banks in Asia.

In addition, Thailand economic outlook is in initial stage of recovery from the COVID-19 pandemic, along with the declining trend of energy and goods prices such as metal and food. Therefore, BOT increased its headline inflation forecast 2022 from 6.2%, forecasted in June 2022, to 6.3% even though natural gas prices remains high and the inflation is partially driven by an increasing Ft. The BOT estimated that the headline inflation would be higher than the target range between 1-3%, with a peak in Q3/2022, and it would gradually decline.

**Ft adjustment**: On July 27, 2022, the Energy Regulatory Commission (ERC) approved an official Ft increase to 93.43 Satang per unit from 68.66 Satang per unit for the collection of electricity invoices during September – December 2022. The increase was mainly due to higher fuel cost in electricity generation from the rising global energy prices, especially a larger share and higher prices of Spot LNG imports, along with Baht depreciation trend.

Although fuel prices and exchange rate have caused the cost of electricity to rise significantly, the ERC has considered the impact on electricity users from the global energy crisis and economic uncertainty and determines not increase the Ft as actually calculated for this period, during September – December 2022, to minimizes the impact to electricity users. In addition, the government has prepared several plans and measures to manage the energy prices including the freeze on the electricity price for the first period of 2023 to lower the citizens' cost of living together with other energy prices as well as to promote energy saving, energy efficiency awareness and accelerate the scale-up of renewable energy in power generation.

# Operating Results: Independent Power Producer (IPP)

Operating results	Q3/21	Q2/22	Q3/22	Change	· +/(-)	9M/21	9M/22	Change +/(-)
(unit: THB million)				YoY	QoQ			YoY
Revenue from electricity sales								
- Availability Payment: AP	1,378	1,441	1,189	(14%)	(17%)	3,865	3,840	(1%)
- Energy Payment: EP	1,769	6,848	8,752	395%	28%	6,650	24,116	263%
- Money received to submit to Power  Developments Funds	1	6	7	N/A	27%	8	25	197%
Total revenue from electricity sales	3,148	8,294	9,948	216%	20%	10,523	27,981	166%
Revenue from finance lease agreement	187	160	148	(21%)	(7%)	510	468	(8%)
Other income	0	0	0	N/A	N/A	0	(2)	N/A
Total revenue	3,335	8,454	10,097	203%	19%	11,033	28,446	158%
Cost of raw materials								
- Natural gas <sup>1</sup>	647	475	442	(32%)	(7%)	3,454	1,369	(60%)
- Coal	1,097	3,033	2,613	138%	(14%)	2,802	7,786	178%
- Others	118	2,907	4,998	N/A	72%	297	13,511	N/A
Total cost of raw materials	1,862	6,415	8,053	332%	26%	6,553	22,666	246%
Maintenance cost	199	193	206	4%	7%	504	586	16%
Others (excluding depreciation and amortization)	185	188	279	51%	48%	510	646	27%
Total cost of sales of goods and rendering of services	2,246	6,796	8,538	280%	26%	7,566	23,897	216%
Gross profit	1,089	1,658	1,558	43%	(6%)	3,467	4,549	31%
Gross profit margin	33%	20%	15%	(17%)	(4%)	31%	16%	(15%)

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

### Revenue: IPP

Key revenue drivers	Q3/21	Q2/22	Q3/22	Change	e +/(-)	9M/21	9M/22	Change +/(-)
				YoY QoQ				YoY
Availability Rate (%)								
Sriracha Power Plant	100%	90%	45%	(55%)	(45%)	100%	73%	(27%)
GIPP	98%	100%	96%	(2%)	(4%)	91%	98%	7%
GHECO-One	69%	84%	78%	9%	(6%)	68%	79%	11%
Electricity dispatch (GWh)								
Sriracha Power Plant	58	390	496	761%	27%	844	1,675	98%
GIPP	44	32	244	461%	663%	549	369	(33%)
GHECO-One	1,006	1,214	1,138	13%	(6%)	2,964	3,437	16%
Houay Ho Power	97	138	104	7%	(25%)	320	348	9%
Total electricity dispatch	1,204	1,774	1,982	65%	12%	4,677	5,830	25%
Average selling price								
Average selling price (THB/kWh)	2.77	4.68	5.02	81%	7%	2.36	4.80	103%

### Quarterly Comparison of IPP's Revenue

# **YOY** Q3/2022 VS Q3/2021

Revenue from IPP business in Q3/2022 was THB 10,097 million, increased by THB 6,762 million or 203% yoy mainly due to the following contributing factors:

- Revenue from Sriracha Power Plant increased by THB 3,419 million mainly from higher Energy Payment (EP) corresponding higher electricity dispatch instructed by EGAT, while Availability Payment (AP) decreased in Q3/2022 due to the planned and unplanned outages.
- Revenue from IPP business of GLOW increased by THB 3,343 million mainly due to GHECO-One and GIPP's higher revenue by THB 1,935 million and THB 1,450 million, respectively, from GIPP's higher EP corresponding to higher electricity dispatch to EGAT and GHECO-One's higher EP from higher coal price. Meanwhile, revenue of HHPC increased due to higher electricity dispatch.

# **QOQ** Q3/2022 VS Q2/2022

Revenue from IPP business in Q3/2022 was THB 10,097 million, increased by THB 1,643 million or 19% qoq mainly due to the following contributing factors:

- Revenue from Sriracha Power Plant increased by THB 747 million mainly from higher Energy Payment (EP) corresponding to higher electricity dispatch instructed by EGAT, while Availability Payment (AP) decreased in Q3/2022 due to the planned and unplanned outages.
- Revenue from IPP business of GLOW increased by THB 896 million mainly due to GIPP's higher revenue by THB 1,286 million from higher EP corresponding to higher electricity dispatch instructed by EGAT. Meanwhile, GHECO-One's revenue decreased due to lower EP corresponding to lower electricity dispatch instructed by EGAT and lower AP from unplanned outages of 17 days in Q3/2022. Revenue of HHPC decreased slightly due to lower electricity dispatch.

### 9 months Comparison of IPP's Revenue (9M/2022 VS 9M/2021)

Revenue from IPP business from the first nine months of 2022 increased by THB 17,413 million or 158% from the first nine months of 2021 primarily due to the following:

- Revenue from Sriracha Power Plant increased by THB 10,304 million mainly due to higher Energy Payment (EP)
  according to an increase of electricity dispatch to EGAT and higher fuel prices. Meanwhile, Availability Payment (AP)
  decreased as there were the planned and unplanned outages in 9M/2022 while there was zero unplanned outage in 9M/2021.
- Revenue from IPP business of GLOW increased THB 7,109 million mainly due to (1) higher revenue from GHECO-One due to higher EP corresponding to higher coal price and higher electricity sales volume due to higher electricity dispatch instructed by EGAT, as well as higher Availability Payment (AP) due to lower planned and unplanned outages in 9M/2022 (2) revenue of GIPP increased as a result of higher EP corresponding to higher cost of raw materials, as well as higher AP from higher availability rate and THB depreciation against USD for USD-linked portion of the AP and (3) revenue from sales of HHPC increased due to higher electricity dispatch.

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

Key cost drivers	Q3/21	Q3/21 Q2/22 (revised)		Change +/(-)		9M/21	9M/22	Change +/(-)
		(Tevised)		YoY	QoQ			YoY
Natural Gas								
Natural gas consumption								
GPSC's natural gas consumption ('000 MMBTU)	473	25	30	(94%)	18%	6,645	80	(99%)
GLOW's natural gas consumption ('000 MMBTU)	311	32	250	(20%)	688%	3,875	283	(93%)
Coal								
Coal consumption (Ton JPU)	361,030	439,489	409,193	13%	(7%)	1,058,949	1,246,070	18%
Average coal cost (excluding freight) (USD/Ton JPU)	89.6	195.5	168.5	88%	(14%)	73.8	175.2	137%

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

# **YOY** Q3/2022 VS Q3/2021

Cost of sales of goods and rendering of services of IPP business in Q3/2022 was THB 8,538 million, increased by THB 6,292 million or 280% yoy mainly due to the following:

- Cost of natural gas decreased by THB 204 million mainly due to using diesel instead of natural gas of Sriracha Power Plant and GIPP, resulting in lower natural gas consumption.
- Cost of coal increased by THB 1,516 million due to an increase of average coal price by 88% while consumption of coal of GHECO-One increased by 13%.
- Other raw materials increased by THB 4,880 million mainly due to using diesel instead of natural gas of Sriracha Power Plant and GIPP and higher electricity sales volume as instructed by EGAT.

# **QOQ** Q3/2022 VS Q2/2022

Cost of sales of goods and rendering of services of IPP business in Q3/2022 was THB 8,538 million, increased by THB 1,743 million or 26% goq mainly due to the following:

- Cost of natural gas decreased by THB 33 million mainly due to lower average natural gas price from lower demand charge of Sriracha Power Plant and GIPP, although natural gas consumption increased.
- Cost of coal decreased by THB 420 million due to a decrease of average coal price by 14% together with GHECO-One decreased coal consumption by 7% corresponding to lower electricity dispatch.
- Other raw materials increased by THB 2,091 million mainly due to using diesel instead of natural gas of Sriracha Power Plant and GIPP and higher electricity sales volume as instructed by EGAT.

# 9 months Comparison of IPP's Cost of Sales of Goods and Rendering of Services (9M/2022 VS 9M/2021)

Cost of sales of goods and rendering of services of IPP business increased THB 16,331 million or 216% from the first nine months of 2021 primarily due to cost of other raw materials increased by THB 13,276 million from using diesel instead of natural gas of Sriracha Power Plant and GIPP and higher electricity dispatch of Sriracha Power Plant. Moreover, cost of coal of GHECO-One increased THB 4,984 million due to average coal price increased by 137% and coal consumption of GHECO-One increased by 18%. Meanwhile, cost of natural gas decreased THB 2,086 million from lower natural gas consumption.

### **Gross Profit: IPP**

Gross profit of IPP business in Q3/2022 was THB 1,558 million, increased by THB 470 million or 43% from Q3/2021 primarily due to the following:

- Gross profit of Sriracha Power Plant increased due to higher Energy Payment (EP) corresponding to higher dispatch instructed by EGAT and the generations using diesel instead of natural gas, resulting in higher margin from electricity sales.
- Gross profit of IPP business of GLOW increased mainly due to higher Availability Payment (AP) of GIPP and GHECO-One due to USD-linked portion of the AP increased due to THB depreciation against USD, as well as higher margin from electricity sales of GIPP from using diesel instead of natural gas and higher dispatch instructed by EGAT.

Gross profit of IPP business in Q3/2022 decreased by THB 100 million or 6% from Q2/2022 primarily due to the following:

- Gross profit of Sriracha Power Plant decreased mainly due to lower AP due to the planned and unplanned outages in Q3/2022.
- Gross profit of IPP business of GLOW decreased mainly due to revenue of HHPC decreased due to lower electricity dispatch, as well as slightly lower GHECO-One's AP from higher maintenance shutdown.

Gross profit of IPP business in 9M/2022 was THB 4,549 million, increased by THB 1,082 million or 31% from 9M/2021 mainly from using diesel instead of natural gas of Sriracha Power Plant and GIPP, resulting in higher margin from electricity sales. In addition, Sriracha Power Plant has higher electricity dispatch corresponding to instruction by EGAT.

# Operating Results: Small Power Producer (SPP)

Operating results (unit: THB million)	Q3/21	Q2/22	Q3/22	Change	+/(-)	9M/21	9M/22	Change +/(-)
				YoY	QoQ			YoY
Revenue								
Revenue from electricity sales	10,482	13,253	17,028	62%	28%	29,923	42,133	41%
Revenue from steam sales	3,789	5,452	6,254	65%	15%	10,721	16,821	57%
Other income	214	320	250	17%	(22%)	667	821	23%
Total revenue	14,485	19,025	23,532	62%	24%	41,312	59,775	45%
Cost of raw materials								
Natural gas	8,527	13,727	17,196	102%	25%	22,872	43,928	92%
Coal	1,017	1,831	3,160	211%	73%	2,378	6,382	168%
Others	79	725	656	727%	(10%)	514	2,141	317%
Total cost of raw materials	9,623	16,283	21,012	118%	29%	25,764	52,452	104%
Maintenance cost	432	413	531	23%	28%	1,437	1,298	(10%)
Others (excluding depreciation and amortization)	709	399	615	(13%)	54%	2,125	1,275	(40%)
Total cost of sales of goods and rendering of services	10,764	17,096	22,157	106%	30%	29,326	55,025	88%
Gross profit	3,721	1,930	1,375	(63%)	(29%)	11,986	4,750	(60%)
Gross profit margin	26%	10%	6%	(20%)	(4%)	29%	8%	(21%)

# Revenue: SPP

Key revenue drivers	Q3/21	Q2/22	Q3/22	Change	+/(-)	9M/21	9M/22	Change +/(-)
				YoY	QoQ			YoY
Electricity sales volume								
GPSC's electricity sales volume (GWh)	1,165	1,177	1,189	2%	1%	3,447	3,513	2%
GLOW's electricity sales volume (GWh)	2,275	2,303	2,313	2%	0.4%	6,695	6,607	(1%)
Total electricity sales volume (GWh)	3,440	3,480	3,502	2%	1%	10,142	10,121	(0.2%)
Electricity average selling price								
Weighted average selling price (THB/kWh)	3.05	3.81	4.86	60%	28%	2.95	4.16	41%
Steam sales volume								
GPSC's steam sales volume ('000 tons)	1,836	1,847	1,943	6%	5%	5,283	5,604	6%
GLOW's steam sales volume ('000 tons)	2,030	1,900	1,888	(7%)	(1%)	6,066	5,684	(6%)
Total steam sales volume ('000 tons)	3,865	3,746	3,831	(1%)	2%	11,349	11,288	(1%)
Steam average selling price								
Weighted average selling price (THB/ton)	980	1,455	1,633	67%	12%	945	1,490	58%

### Quarterly Comparison of SPP's Revenue

# **VOV** Q3/2022 VS Q3/2021

Revenue from SPP business in Q3/2022 was THB 23,533 million, increased by THB 9,048 million or 62% yoy mainly due to the following:

- Revenue from SPP business of GPSC increased by THB 3,280 million mainly from an increase of revenue of Rayong Central Utility Plant (CUP) by THB 2,087 million due to higher electricity and steam average selling prices, as well as higher steam sales volume to industrial customers and a slight increase in total electricity sales volume. Moreover, revenue of IRPC-CP increased by THB 1,193 million from higher electricity and steam average selling prices due to higher natural gas price, although steam sales volume to industrial customers decreased.
- Revenue from SPP business of GLOW increased by THB 5,697 million mainly due to higher electricity and steam average selling prices due to higher natural gas price. Moreover, total electricity sales volume increased although steam sales volume decreased.

# **QOQ** Q3/2022 VS Q2/2022

Revenue from SPP business in Q3/2022 was THB 23,533 million, increased by THB 4,508 million or 24% qoq mainly due to the following:

- Revenue from SPP business of GPSC increased by THB
  1,434 million mainly from an increase of revenue of Rayong
  Central Utility Plant (CUP) by THB 822 million from higher
  electricity and steam average selling prices. Total electricity
  sales volume and steam sales volume to industrial customers
  increased slightly. Moreover, revenue of IRPC-CP increased by
  THB 612 million as a result of higher steam sales volume to
  industrial customers as well as higher electricity and steam
  average selling prices due to higher natural gas price.
- Revenue from SPP business of GLOW increased by THB 3,147 million mainly due to higher electricity and steam average selling prices due to higher natural gas price.

# 9 months Comparison of SPP's Revenue (9M/2022 VS 9M/2021)

Revenue from SPP from the first nine months of 2022 increased by THB 18,463 million or 45% primarily due to electricity and steam average selling prices increased by 41% and 58% respectively due to higher natural gas price.

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

Key cost drivers	Q3/21	Q2/22	Q3/22	Change +/(-)		9M/21 9M/2		Change +/(-)
				YoY	QoQ			YoY
Natural Gas								
Natural gas consumption								
GPSC's natural gas consumption ('000 MMBTU)	13,562	13,590	14,191	5%	4%	39,950	41,236	3%
GLOW's natural gas consumption ('000 MMBTU)	17,851	18,206	19,300	8%	6%	53,542	53,976	1%
Total natural gas consumption ('000 MMBTU)	31,413	31,796	33,492	7%	5%	93,492	95,212	2%
Average natural gas price								
Average natural gas price (THB/MMBTU)	271	432	513	89%	19%	245	461	89%
Coal								
GLOW's coal consumption (Ton JPU)	284,752	252,506	234,507	(18%)	(7%)	788,787	723,654	(8%)
Average coal cost (excluding freight)(USD/Ton JPU)	105.7	205.4	355.5	236%	73%	87.6	245.8	181%

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

# **VOV** Q3/2022 VS Q3/2021

Cost of sales of goods and rendering of services of SPP business in Q3/2022 was THB 22,157 million, increased by THB 11,393 million or 106% yoy mainly due to the following:

- Cost of natural gas increased by THB 8,669 million (GPSC of THB 3,530 million and GLOW of THB 5,139 million) mainly from average natural gas price increased by 89% and natural gas consumption increased by 7%.
- Cost of coal increased by THB 2,143 million primarily due to average coal price increased by 236% although coal consumption decreased by 18%.

# **QOQ** Q3/2022 VS Q2/2022

Cost of sales of goods and rendering of services of SPP business in Q3/2022 was THB 22,157 million, increased by THB 5,062 million or 30% goq mainly due to the following:

- Cost of natural gas increased by THB 3,469 million (GPSC of THB 1,233 million and GLOW of THB 2,236 million) mainly due to natural gas average price increased by 19% and natural gas consumption increased by 5%.
- Cost of coal increased by THB 1,329 million mainly from coal average price increased by 73% although coal consumption decreased by 7%.

# 9 months Comparison of SPP's Cost of Sales of Goods and Rendering of Services (9M/2022 VS 9M/2021)

Cost of sales of good and rendering of services of SPP business increased by THB 25,698 million or 88% mainly due to natural gas and coal average price increased by 89% and 181%, respectively, and natural gas consumption increased slightly by 2% while coal consumption decreased by 8%.

### **Gross Profit: SPP**

Gross profit of SPP business in Q3/2022 was THB 1,375 million, decreased by THB 2,346 million or 63% from Q3/2021 mainly due to significantly higher natural gas and coal price, resulting in lower margin in selling electricity to industrial customers. Although, total electricity sales volume of SPP increased slightly due to higher energy dispatch to EGAT. Meanwhile, electricity and steam sales volume to industrial customers decreased slightly.

When comparing to gross profit of Q2/2022, gross profit of SPP business decreased by THB 554 million or 29% mainly due to significantly higher natural gas and coal price, resulting in lower margin in selling electricity to industrial customers. Although, total electricity sales volume of SPP increased slightly from higher energy dispatch to EGAT. Meanwhile, electricity sales volume to industrial customers was constant and steam sales volume to industrial customers increased slightly.

Gross profit of SPP business in 9M/2022 was THB 4,750 million, decreased by THB 7,235 million or 60% from 9M/2021 mainly due to significantly higher natural gas and coal price, resulting in lower margin in selling electricity to industrial customers.

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

Operating results (unit: THB million)	Q3/21	Q2/22	Q3/22	Change +/(-)		9M/21	9M/22	Change +/(-)
(driic. 1116 Hilliott)				YoY	QoQ			YoY
Revenue								
Revenue from electricity sales	129	67	52	(59%)	(23%)	315	173	(45%)
Revenue from chilled water sales	48	52	54	12%	3%	139	152	9%
Other income	1	121	131	N/A	8%	56	299	439%
Total revenue	177	240	237	34%	(1%)	510	624	22%
Cost of raw materials								
Natural gas and others	43	186	186	338%	(0.03%)	146	461	215%
Total cost of raw materials	43	186	186	338%	(0.03%)	146	461	215%
Maintenance cost	8	16	32	327%	98%	33	70	111%
Others (excluding depreciation and amortization)	15	1	3	(79%)	146%	36	6	(83%)
Total cost of sales of goods and rendering of	65	204	221	242%	9%	216	537	149%
services	65	204	221	24270	970	210	557	149 /0
Gross profit	112	37	16	(86%)	(58%)	294	88	(70%)
Gross profit margin	63%	15%	7%	(57%)	(9%)	58%	14%	(76%)

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	Q3/21 (revised)	Q2/22	Q3/22	Change +/(-)		9M/21 (revised)	uk////	Change +/(-)
	(revised)			YoY QoQ		(Teviseu)		YoY
Electricity								
Sales volume (GWh)	15	11	10	(37%)	(15%)	33	29	12%
Average selling price (THB/kWh)	8.74	6.03	5.49	(37%)	(9%)	9.49	5.94	(37%)
Chilled water								
Sales volume ('000 RT-Hr)	6,807	6,647	6,534	(4%)	(2%)	19,577	18,861	(4%)
Average selling price (THB/RT-Hr)	7.03	7.83	8.21	17%	5%	7.10	8.05	13%

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

# **VOV** Q3/2022 VS Q3/2021

Revenue from VSPP and other businesses in Q3/2022 was THB 237 million, increased by THB 60 million or 34% yoy mainly due to the following:

- Revenue from electricity sales decreased by THB 76
  million mainly due to the Company has divested 100%
  shares held in ISP1 on March 18, 2022. Although, revenue
  from RDF power plant increased from higher electricity
  sales volume.
- Other income increased by THB 130 million mainly due to revenue from pontoons and Engineering, Procurement and Construction services (EPC) of Combine Heat and Power Producing Co., Ltd. (CHPP).

# **QQQ** Q3/2022 VS Q2/2022

Revenue from VSPP and other businesses in Q3/2022 was THB 237 million, decreased by THB 3 million or 1% qoq mainly due to the following:

- Revenue from electricity sales decreased by THB 15
  million mainly from lower revenue from Combine Heat
  and Power Producing Co., Ltd. (CHPP) and RDF power
  plant due to lower electricity sales volume and average
  selling price.
- Other income increased by THB 10 million mainly due to revenue from pontoons and Engineering, Procurement and Construction services (EPC) of Combine Heat and Power Producing Co., Ltd. (CHPP).

### 9 months Comparison of VSPP's and Others' Revenue (9M/2022 VS 9M/2021)

Revenue from VSPP and other business increased by THB 115 million or 22% from the first nine months of 2021 mainly due to revenue from Combine Heat and Power Producing Co., Ltd. (CHPP) increased by THB 294 million from pontoons and Engineering, Procurement and Construction services (EPC), as well as revenue from RDF power plant increased THB 85 million. Meanwhile, revenue from ISP1 decreased THB 229 million as the Company has completely divested 100% shares in ISP1 on March 18, 2022.

### 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** Q3/2022 VS Q3/2021

Cost of sales of goods and rendering of services of VSPP and other businesses in Q3/2022 was THB 221 million, increased by 157 million or 242% yoy mainly due to the following:

 The cost of rendering of services increased mainly due to an increase of cost associated with pontoons and EPC works of Combine Heat and Power Producing Co., Ltd. (CHPP) corresponding to higher number of projects.

# **QOQ** Q3/2022 VS Q2/2022

Cost of sales of goods and rendering of services of VSPP and other businesses in Q3/2022 was THB 221 million, increased by 18 million or 9% qoq mainly due to the following:

 The cost of rendering of services increased mainly due to an increase of cost associated with pontoons and EPC works of Combine Heat and Power Producing Co., Ltd. (CHPP) corresponding to higher number of projects.

# 9 months Comparison of VSPP's Cost of Sales of Goods and Rendering of Services (9M/2022 VS 9M/2021)

Cost of sales of goods and rendering of services of VSPP and other businesses increased by THB 321 million or 149% from the first nine months of 2021 mainly due to an increase in other costs from an increase of cost following to pontoons and EPC works of Combine Heat and Power Producing Co., Ltd. (CHPP) corresponding to higher number of projects, as well as an increase of RDF power plant after commenced the Commercial Operation Date on May 28, 2021.

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

Gross profit of VSPP and other businesses in Q3/2022 was THB 16 million, decreased by THB 96 million or 86% from Q3/2021 mainly due to the Company has completely divested 100% shares in ISP1 to CES Iwate Taiyoko Hatsydensho GK on March 18, 2022.

When comparing to Q2/2022, gross profit of VSPP decreased by THB 21 million or 58% mainly due to lower revenue from RDF power plant due to lower electricity sales volume and electricity average selling price.

Gross profit of VSPP and other businesses in 9M/2022 was THB 88 million, decreased by THB 206 million or 70% from 9M/2021 mainly due to the Company has completely divested 100% shares in ISP1 to CES Iwate Taiyoko Hatsydensho GK on March 18, 2022.

### Other Expenses

Selling and administrative expenses and	O3/21 O2/22		Q3/22	Change	+/(-)	9M/21	9M/22	Change +/(-)
Other expenses (unit: THB million)	Q3/Z1	YoY QoQ		31411.22	YoY			
Selling and administrative expenses	431	436	401	(7%)	(8%)	1,381	1,228	(11%)
Depreciation and amortization	2,205	2,157	2,150	(2%)	(0.3%)	6,431	6,443	0.2%
Finance costs	998	1,047	1,068	7%	2%	2,959	3,089	4%
Income tax expense	295	53	(158)	(154%)	(398%)	1,095	(139)	(113%)
Net foreign exchange loss (gain)	95	184	61	(36%)	(67%)	161	314	95%
Total other expenses	4,023	3,877	3,523	(12%)	(9%)	12,027	10,935	(9%)

### Quarterly Comparison of Other Expenses

# **YOY** Q3/2022 VS Q3/2021

Other expenses was THB 3,523 million in Q3/2022, decreased by THB 501 million or 12% mainly from the following:

- Selling and administrative expenses: was THB 401 million in Q3/2022, decreased by THB 30 million or 7% from Q3/2021, mainly from the advisory fee.
- Depreciation and amortization: was THB 2,150 million in Q3/2022, decreased by THB 54 million or 2% from Q3/2021.
- Finance costs: was THB 1,068 million in Q2/2022, increased by THB 71 million or 7% from Q3/2021, mainly issued the green debentures.
- Income tax expenses: was THB -158 million in Q3/2022, decreased by THB 453 million or 154% from Q3/2021 from lower operating results.
- Net foreign exchange gain/loss: net loss of THB 61 million was recorded in Q3/2022, decreased by THB 34 million or 36% from Q3/2021. This was due to record of
  - i. Increase in gain from fair value valuation of derivatives instruments of THB 107 million;
  - ii. Increase in unrealized FX loss of THB 45 million; and
  - iii. Increase in realized FX loss by THB 28 million.

# **QOQ** Q3/2022 VS Q2/2022

Other expenses was THB 3,523 million in Q3/2022, decreased by THB 355 million or 9% mainly from the following:

- Selling and administrative expenses: was THB 401 million in Q3/2022, decreased by THB 35 million or 8% from Q2/2022 mainly from the advisory fee for investment and business development expenses.
- Depreciation and amortization: was THB 2,150 million in Q3/2022, decreased by THB 7 million or 0.3% from Q2/2022.
- Finance costs: was THB 1,068 million in Q3/2022, increased by THB 22 million or 2% from Q2/2022, mainly the green debentures and the floating interest rate increased.
- Income tax expenses: was THB -158 million in Q3/2022, decreased by THB 211 million or 398% from Q2/2022 from lower operating results.
- Net foreign exchange gain/loss: net loss of THB 61 million was recorded in Q3/2022, decreased by THB 123 million or 67% from Q2/2022. This was due to record of
  - i. Increase in gain from fair value valuation of derivatives instruments of THB 124 million;
  - ii. Decrease in unrealized FX loss of THB 52 million; and
  - iii. Increase in realized FX loss by THB 52 million.

### Operating Results of the Company

### Shares of Profit of Associates and Joint Ventures

Shares of Profit (Loss) of Associates and	Share-	Q3/21	Q2/22	Q3/22	Change	+/(-)	9M/21	9M/22	Change +/(-)
Joint Ventures (unit: THB million)	holding %	QSIZI	QZIZZ	QSIZZ	YoY	QoQ	9141/21	91VII 22	YoY
Independent Power Producer (IPP)									
Xayaburi Power Company Limited (XPCL)	25%	592	459	741	25%	61%	907	1,201	32%
Small Power Producer (SPP)									
Bangpa-in Cogeneration Company Limited (BIC)	25%	34	15	5	(85%)	(66%)	100	38	(62%)
Nava Nakorn Electricity Generating Company Limited (NNEG)	30%	31	(2)	(48)	(256%)	1,970%	112	(65)	(159%)
Nam Lik 1 Power Company Limited (NL1PC)	40%	18	14	14	(20%)	(1%)	46	48	4%
Very Small Power Plant (VSPP) and Others									
Thai Solar Renewable Company Limited (TSR)	40%	79	91	77	(2%)	(15%)	270	261	(3%)
Eastern Seaboard Clean Energy Company Limited (ESCE)	33%	7	7	6	(14%)	(16%)	21	21	(3%)
Avaada Energy Private Limited (AEPL)	42%	(31)	(154)	(110)	251%	(28%)	(31)	(290)	827%
Global Renewable Power Company Limited (GRP)	50%	(39)	12	10	(125%)	(19%)	(9)	44	(610%)
Nuovo Plus Company Limited (NUOVO PLUS)	49%	N/A	(10)	(13)	N/A	29%	N/A	(24)	N/A
Total shares of profit (loss) of associates and joint ventures		690	432	683	(1%)	58%	1,416	1,258	(11%)

Shares of profit of associates and joint ventures in Q3/2022 was THB 683 million, decreased by THB 7 million or 1% from Q3/2021 and increased by THB 250 million or 58% from Q2/2022.

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



Share of profit from XPCL increased by THB 150 million compared to Q3/2021, and THB 282 million compared to Q2/2022 due to the rainy season and higher water level than the same period of last year resulting in higher electricity production.

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



Share of profit from BIC decreased by THB 29 million from Q3/2021 and THB 10 million from Q2/2022 mainly due to higher natural gas cost.

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

Share of profit from TSR slightly decreased by THB 2 million from Q3/2021 due to higher tax expenses from some power plant expired BOI's investment privileges and THB 13 million from Q2/2022 due to lower electricity production affected by rainy season.

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



Share of profit from NNEG decreased by THB 79 million from Q3/2021, and THB 49 million from Q2/2022 mainly due to higher natural gas cost.

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

Share of profit from GRP increased by THB 49 million from Q3/2021 due to lower selling and administrative expenses and loss from fair value valuation of derivatives instruments. However, it decreased by THB 2 million from Q2/2022 due to higher cost of goods sold and financial cost.

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



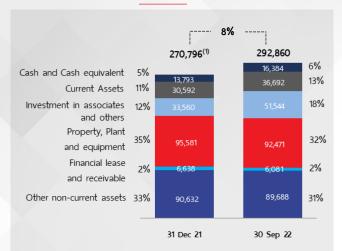
Share of profit from NL1PC slightly decreased by THB 3 million from Q3/2021 mainly due to higher interest expense and THB 0.1 million from Q2/2022.

### Avaada Energy Private Limited (AEPL)

Share of profit from AEPL decreased by THB AVAADA 79 million from Q3/2021 due to higher depreciation and interest expense. Furthermore, there was amortization of the rights in the long-term PPA of THB 48 million. However, it increased by THB 44 million from Q2/2022 due to lower amortization of the rights in the long-term PPA.

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

Total Asset (THB million, %)



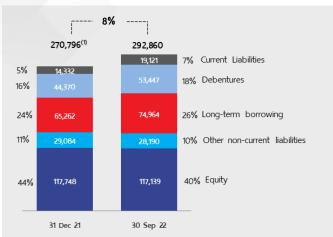
Remark: (1) Reclassify the statement of financial position for December 31, 2021, as other receivables, other current assets, other payables, and other current liabilities.

#### **Total Assets**

As of September 30, 2022, the total assets of the Company and its subsidiaries were THB 292,860 million, increased by THB 22,064 million or 8% from December 31, 2021, mainly as a result of the following:

- Cash and cash equivalent increased by THB 2,592 million or 19%.
- Investments in associates and others increased by THB 17,984 million or 54%, due to capital injection for operation in Avaada Energy Private Limited (AEPL) and Nuovo Plus Company Limited, furthermore purchased shares of CI Changfang Limited and CI Xidao (CFXD).
- Property, Plant and Equipment decreased by THB 3,110 million or 3% from depreciation and amortization.
- Financial lease receivable decreased by THB 557 million or 8%.
- Other current assets increased by THB 6,099 million or 20%, mainly due to account receivable and inventories.
- Other non-current assets decreased by THB 944 million or 1% due to intangible asset decreased by THB 1,381 million.

Total Liabilities and Equity (THB million, %)



Remark: (1) Reclassify the statement of financial position for December 31, 2021, as other receivables, other current assets, other payables, and other current liabilities.

#### **Total Liabilities**

As of September 30, 2022, total liabilities of the Company and its subsidiaries were at THB 175,722 million, increased by THB 22,673 million or 15% from December 31, 2021, mainly as a result of the following:

- Current liabilities increased by THB 4,788 million or 33% mainly account payable increased by THB 6,693 million.
- Long-term borrowings and debentures increased by THB 18,780 million or 17% mainly due to issued green debentures and long-term loan from related parties increased by THB 7,500 million.
- Other non-current liabilities decreased by THB 895 million or 3% mainly from non-current derivatives liabilities decreased by THB 745 million.

#### **Total Equity**

As of September 30, 2022, total shareholders' equity of the Company and its subsidiaries were at THB 117,139 million, decreased by THB 609 million or 1% from 31 December 2021 due to an unappropriated retained earnings increased by THB 1,586 million, other comprehensive income increased by THB 1,329 million and dividend payout from operation results in the nine months of 2021 by THB 3,524 million.

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

Short-term loans
and current portion of long-term loans
THB 13,761 million | 11%

Non-current portion of long-term loans and debentures
THB 114,801 million | 89%

As of 30 September 2022, the Company and its subsidiaries has total interest-bearing debt (excluding lease liabilities) of THB 128,562 million which comprised of current liabilities totaling THB 13,761 million or 11% and non-current liabilities totaling THB 114,801 million or 89%.

Cash Flow (unit: THB million)	9M/2022
Net cash flow from operating activities	4,443
Net cash from investing activities	(12,968)
Net cash flow used in financing activities	11,225
Net cash and cash equivalent (before exchange rate effect)	2,700
Effect of exchange rate to cash and cash equivalent	(108)
Net increase in cash and cash equivalents (after taken into account exchange rate)	2,591
Cash and cash equivalents at the beginning of the period	13,793
Cash and cash equivalents at the end of the period	16,384

At the end of Q3/2022, the Company and its subsidiaries had a net increase in cash and cash equivalent of THB 2,591 million from the end of 2021 which was primarily as a result of the following:

### Cash Flow from Operating Activities

At the end of Q3/2022, the Company and its subsidiaries had net cash inflow from operating activities of THB 4,443 million, which was from cash received from operating activities of THB 5,651 million deducted by corporate income tax payment of THB 1,208 million.

### Cash Flow from Financing Activities

At the end of Q3/2022, the Company and its subsidiaries had net cash inflow from financing activities of THB 11,225 million, which was from:

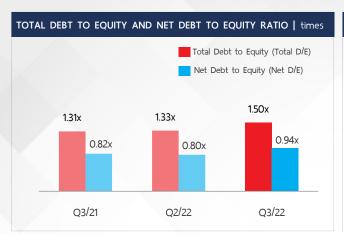
- i. Cash received from issued the green debentures, the long-term Green loans and long-term loans from related parties total amount THB 27,069 million;
- ii. Cash received from long-term loans financial institutions and debentures of THB 9,543 million;
- iii. Dividend payout of THB 3,524 million;
- iv. Interest and fees paid to financial institutions of THB 2,643 million;
- v. Financial lease repayment of THB 97 million; and
- vi. Cash paid for other financing activities of THB 37 million.

### Cash Flow from Investing Activities

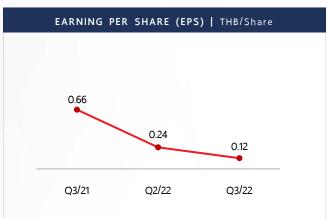
At the end of Q3/2022, the Company and its subsidiaries had net cash outflow of THB 12,968 million from investment activities, which was from:

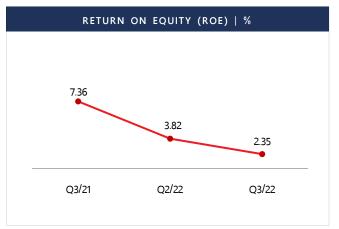
- i. Cash paid for investment in associates of THB 13,625 million;
- ii. CAPEX of THB 3,949 million;
- iii. Cash received from held-to-maturity financial assets of THB 2,039 million;
- iv. Cash received on loans to related parties net of THB 1,728 million; and
- v. Dividend received and others of THB 840 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 )

# Update of Projects Under Construction

### **Energy Recovery Unit (ERU)**



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

### **SERU**



### Project updates:

Overall, the project has reached 83.79% in detail; the concrete foundation of Electrostatic precipitator equipment 3 units and shelter of steam turbine were done. However, the construction of foundation, including equipment work for steel structures and Circulating Fluidize Bed Boiler 3 units, the Electrostatic Precipitator structure unit 1 and 2, boiler of SNOX Wet Sulfuric Acid Condenser unit 1 and 3, equipment of cooling tower unit 2, shelter of steam turbine, and equipment work on Electrical equipment for the building Substation 119.

### SPP Replacement | Glow Energy Phase 2





#### Project updates:



The construction has reached 91.67%, and the project is in the process of testing machines and equipment according to power purchase agreement and construction agreement.

Projects	Electricity Capacity (MW)	Steam Production Capacity (t/h)	Contracted PPA with EGAT (MW)	
SPP Replacement Pr	oject Stage 1			
• Glow Energy Phase 2	200	300	60 (2 PPAs)	

### GLOW SPP2 Replacement | Glow SPP2





19.99%

### Project updates:

The project approved a construction permit. The project is under construction as piling unit 1 and 2 and the concrete foundation. The construction has reached 19.99%.

	Projects	Electricity Capacity (MW)	Steam Production Capacity (t/h)	Contracted PPA with EGAT (MW)
GLOV	V SPP2 Replace	ement		
• G	low SPP2	98	230	60 (2 PPAs)

# **Update of Projects Under Construction**

### Avaada Energy Private Limited (AEPL)



### Project updates



- Total contracted capacity of 4,634 MW
- GPSC holds 42.93% of total AEPL shares

Project	Electricity Capacity (MW)	COD
Operating	3,681	-
(27 projects)		
Under construction	953	2022 - 2024
(8 projects)		

# Offshore Wind Power Plant in Taiwan Changfang Project and Xidao Project (CFXD)



### Project updates:

The construction has reached 49.60%, the project is in the process installed turbines and installed turbine 5 units. 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 (S	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 1	Natural gas	Map ta phut Industrial Estate	GLOW (100%)	-	-	-	250	IU	1994
GLOW Energy Phase 2	Natural gas	Map ta phut Industrial Estate	GLOW (100%)	281	281	281	300	EGAT / IU	1996 (Details on p.20)
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	EGAT / IU	2011
GLOW SPP 2 / GLOW SPP 3	Natural gas and coal	Map ta phut Industrial Estate	GLOW (100%)	513	513	513	190	EGAT / IU	1999 (Details on p.20)
GLOW SPP 11 Phase 1	Natural gas	Siam Eastern Industrial Park	GLOW (100%)	120	120	120	<u>-</u>	EGAT / IU	2000
GLOW SPP 11 Phase 3	Natural gas	Siam Eastern Industrial Park	GLOW (100%)	42	42	42	<u>-</u>	EGAT / 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	-	2010



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

Power plant	Fuel Type	Location	Direct shareholding	Installed Power capacity (MW)	Equity Power capacity (MW)	Equity Power 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				2,718	2,241	2,196	2,948		
Very Small Power Pro	ducer (VSPP	)							
Rayong Waste To Energy (WTE)	RDF	Rayong	GPSC (100%)	9.8	9.8	9.8	-	PEA	2021
Glow Energy Solar Plant	Solar	Asia Industrial Estate	GLOW (100%)	1.55	1.55	1.55	-	PEA	2012
СНРР	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	-	-	TaiPower	2016-21
AEPL (Solar Power Platform)	Solar	India	GPSC (43%)	4,634	1,990	1,580	-	Central and State Gov. and C&I	2018-24 (Details on p.21)
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	-	<u>-</u>	TaiPower	2022-24 (Details on p.21)
Private PPA (GPSC Group)	Solar	Various Areas	GPSC Gr. (100%)	40.39	40.39	14.46	-	IU	2018-24
Total capacity of VSP	Р			5,540	2,306	1,722	-		
Others									
ERU (Under construction)	Petroleum Pitch	Chonburi	GPSC (100%)	250	250	-	175	Thai Oil PLC	2025 (Details on p.20)
Total capacity of Othe	ers			250	250	-	175		
Total				13,418	7,236	6,357	2,948		

Note: - Total committed equity capacity as of September 30, 2022.

<sup>-</sup> Equity capacity includes 100% stake in GLOW.

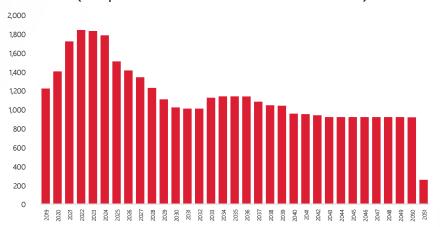
### Fair Value Assessment of Net Assets from the Acquisition of GLOW

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
Home	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 Q3/2022, such amortization expense added up to THB 453 million.

Adjusted Net Income (unit: THB million)	Q3/21	Q2/22	Q3/22	Change +/(-)		9M/21	9M/22	Change +/(-)
				YoY	QoQ			YoY
Net Profit for the Company	1,875	684	331	(82%)	(52%)	6,150	1,328	(78%)
<u>Add back</u> : Amortization of assets acquired from the acquisition of GLOW	382	520	453	19%	(13%)	1,186	1,430	21%
Adjusted Net Income	2,256	1,204	784	(65%)	(35%)	7,336	2,758	(62%)



### IR Contact:

